IDinsight

DREAMS Ethiopia RCT

Pre-Analysis Plan

22 October 2025

Summary

This Pre-Analysis Plan (PAP) outlines the analytical strategy for the impact evaluation of the **Delivering Resilient Enterprises and Market Systems (DREAMS)** program in **Dollo Ado, Ethiopia**. DREAMS, a collaboration between Village Enterprise, Mercy Corps, and IDinsight, integrates **poverty graduation** and **market systems development (MSD)** to help vulnerable refugee and host community households achieve sustainable livelihoods.

The evaluation employs a household-level **Randomized Controlled Trial (RCT)** with three arms to isolate the effects of the program's components:

1. **DREAMS (Full Intervention):** Poverty Graduation + Direct Market Linkages + Market Actor Support.
2. **Poverty Graduation Only:** The 'push' component without the specific MSD linkages and subsidies.
3. **Pure Control:** Status quo.

The evaluation also includes a qualitative study to understand the *how* and *why* behind the quantitative results. This PAP is being registered before the Endline 1 data collection, which is scheduled to start on October 27, 2025. Follow-up data collection for Endline 2 is expected to take place in Q4 2026.

A similar but distinct RCT of the DREAMS program is being conducted in West Nile, Uganda, and was registered separately on the American Economic Association's RCT registry, ID AEARCTR-0015497.

The DREAMS Program

Ethiopia is estimated to host 785,322 registered refugees and asylum-seekers (UNHCR, 2021). Many of these people will remain in Ethiopia in the long-term, given the protracted nature of today's conflicts. Such refugees need not only short-term humanitarian assistance, but long-term solutions that assist them to rebuild their lives. The humanitarian system that was initially designed to provide urgent life-saving assistance in response to short-term displacement has struggled to find durable solutions for the 76% of refugees living in protracted displacement globally (UNHCR,

2021). Refugees are instead trapped in limbo - their skills, dreams, and aspirations on hold – with minimal options to simply earn a living and provide for their families.

Delivering Resilient Enterprises and Market Systems (DREAMS) for refugees provides an innovative solution that is expected to drive refugee self-reliance by integrating two models – poverty graduation and market systems development (MSD). In DREAMS, the innovation is to deliberately integrate poverty graduation with market system development – by supporting the most vulnerable refugees in Ethiopia with a 'push' to make them 'market-ready,' and then a 'pull' from the market to make them profitable market contributors.

The first component of DREAMS (poverty graduation) provides the supportive 'push' to refugee and host community households. The project started with a rigorous, participatory targeting process to ensure that the most vulnerable households are selected. These target households were living in extreme poverty and often have additional vulnerabilities (e.g. a member living with a disability). After targeting, households were grouped into 30-people business savings groups (BSGs). BSGs contained households that were randomly assigned to the DREAMS treatment arm or to the graduation-only treatment arm; BSGs never contained both types of households. Each savings group received training from a 'Business Mentor.' The Business Mentor, a fellow refugee/host community household from their own community recruited and trained by Village Enterprise, taught the group how to save together, provide loans to each other, and set up a successful microbusiness.

Participants then chose two other people in their savings group they would like to work with, and together, they formed a business group. Business groups that were in the DREAMS treatment arm were encouraged to start businesses in specific value chains that Mercy Corps determined were among the most promising value chains for graduation participants in these camps to enter. Households received value chain vouchers and other support that helped them link to and take advantage of goods and services from the market actors. The new business group received a seed capital grant ($500/group) and ongoing mentoring and support from the Business Mentor.

The second component of DREAMS worked with private sector actors to strengthen the overall market ecosystem in the refugee camps and surrounding communities, providing a market 'pull' to drive economic growth. DREAMS aimed to strengthen long-term economic incentives for collaboration between private sector actors – including input suppliers, traders, agro-processors, financial service providers, transporters, and energy providers – and refugees. This 'market systems development' (MSD) component was intended to lead to greater availability of goods and services in the refugee and host areas and new market outlets for at least 25,000 refugees to grow their businesses. The first step in the MSD model was to understand the barriers preventing private sector actors from working with refugees. Through in-depth market analysis, implementors would understand the market potential that refugees represent and further identify refugees' unmet needs in the identified value chains. Mercy Corps and Village Enterprise then co-designed solutions that would be profitable for both refugees and private sector actors, using a combination of business advisory services and financial incentives to buy down risk, connecting market actors

to value chains and building technical capacity. For more information on existing studies of poverty graduation and MSD programs, please see the literature review in the appendix.

Evaluation Overview

The evaluation studies the effectiveness of the three components that comprise DREAMS: 1) Poverty graduation; 2) Direct market linkages through "smart subsidies" which gives a household a discount on their purchases of products or services offered by the private sector; 3) market actor support.

This study applies a mixed-method research strategy using two study components to ensure the study team can tell a comprehensive and nuanced story of the impact of the DREAMS project on both refugee and host communities. These two study components include:

1. **A quantitative impact evaluation**, i.e. an RCT, which will answer "what happened?", and provide rigorous, causal evidence about the impact of poverty graduation alone and the full DREAMS project on refugees' and host communities' households on a range of outcomes.

2. **A qualitative study,** which will help answer the "how?" and "why?" underlying the effects observed in the impact evaluation. This component will also help to develop a richer picture of the needs of the target population and the ways in which the DREAMS approach serves those needs. To complement this qualitative study, we will conduct a gender study to understand the impact of the DREAMS program on women who participate in the program.

We have obtained ethical approval for this study from the Ethiopian Society of Sociologists, Social Workers, and Anthropologists (ESSSWA) Institutional Review Board (Reference No. ESSSWA/L/AA/05902/2024).

Evaluation Questions and Outcomes

Research questions

The DREAMS Ethiopia impact evaluation will seek to answer the following research questions related to the impact of the DREAMS program in Helowein, Melkadida, and Kobe camps in Dollo Ado, Ethiopia:

- What is the impact of DREAMS (poverty graduation + indirect MSD + direct market support) on livelihoods, social cohesion, and perceived well-being of refugee and host community households in Dollo Ado, Ethiopia?
- What is the impact of a poverty graduation approach alone?
- Does linking direct MSD to graduation result in better outcomes than graduation alone?
- What is the cost-effectiveness of DREAMS and of graduation alone?

All questions will be answered at intervals of 0-1 years and 1-2 years from the conclusion of the poverty graduation program, respectively (the range is due to the staggered implementation of the cohort-based poverty graduation program).

Outcomes

To measure the impact of the DREAMS program and graduation program on household well-being and community cohesion, we will measure the following outcomes in household surveys.

Table 1: Key variables

Outcome category	Survey module name	Description
Household welfare & wellbeing	Total household consumption[1]	Total household consumption will be composed of: 1. Total food, beverage, and temptation goods expenditure over the preceding seven days including food prepared at home, purchased outside, and given in-kind 2. Total recurrent expenditure, such as fuel and transportation expenditures, utilities, personal hygiene and health over the preceding four weeks 3. Total infrequent expenditure on clothing, educational costs and fees over the last 12 months.

[1] Total household consumption will be composed of weekly food, beverage, and temptation goods expenditure converted to a 30-day value; recurrent expenditure, such as fuel, transportation, and personal hygiene, with a 30-day recall; and infrequent expenditures, such as clothing, educational, and healthcare costs, with a 12-month recall converted to a monthly value. The list of items in our consumption module is an adaptation from 2019 Ethiopia Socioeconomic Survey data in Ethiopia to find a list of goods that explains 85% of household consumption in the Somali region. We will then divide our estimated household consumption value by 0.85 to get an estimate for total consumption. We address outliers by winsorizing the total monthly consumption variable at the 2.5 and 97.5 percentiles to mitigate their effect on the analysis. Missing values for consumption quantities are imputed using the median quantity reported by other households in the same treatment arm that consumed the same item, while missing unit costs (prices) are imputed using the median value observed across the entire sample for that specific item.

	Household asset ownership [2]	Total asset value will be composed of: 1. Total durable assets 2. Total home improvements 3. Total productive assets 4. Total household savings, including savings generated through the VE business savings groups 5. Total business assets, accounting for business ownership by the household
	Food Security	We use an adapted version of the Household Hunger Scale[3]. It includes households' food availability, access, feeding habits and food stability over a specified period of time (one month preceding the survey). Specific measures will include the frequency of HH members going a whole day with/without meals, frequency of eating less preferred or less expensive food compared to their weekly eating routines, HH members' reliance on outside help for food, frequency of credit food purchases and proportion of HH regularly eating at least 2 meals a day. We will then create a food security index that is constructed as the sum of binary indicators (e.g., adults skipped meals, gathered wild food, bought food on credit) and is patterned after the

[2] Total asset value is a measure of the household's capital stock. It is composed of the reported current market value of durable household assets, home improvements, total productive assets (including livestock, agricultural land, and non-agricultural land), and the value of household savings. This value will then be adjusted for the household's share of business assets and liabilities to arrive at total net ownership. The list of durable and productive assets has been adapted from the **Ethiopia Socioeconomic Survey (ESS) and local context. To address outliers, asset values will be winsorized at the 2.5 and 97.5 percentiles**

[3] Household Hunger Scale

		USAID Household Hunger Scale (HHS). The final score ranges from 0 to 8, with higher scores indicating greater insecurity.
	Income (monthly)	The total monthly household income includes income for all individuals in the households, including income from employment, farm/livestock activities, social transfers, and enterprises.
	Business Activity	Measures household engagement in business activities, including self-employment and entrepreneurship. Captures the number of businesses operated by household members, business ownership structure, revenue generation, profitability, and frequency of income fluctuations. The measure for Business Activity explicitly tracks household involvement in the promoted value chains , which include: Shoat fattening, Fodder production, Poultry (local breeds), Poultry (Improved hybrid breeds), Sesame production, Watermelon production, Maize production, and Pepper production. The metric captures the number of businesses, revenue generation, and profitability.
	Exposure to Shocks	Measures the household's exposure to economic shocks such as the death of a household member, illness, job loss, loss of crop due to weather or pests, and loss of financial assistance. Captures coping mechanisms, including selling assets, borrowing money, reducing food intake, or engaging in additional income-generating activities.

	Access to Humanitarian Aid	Measures whether the household received cash or food assistance from external agencies (e.g., WFP, UNHCR) within the last 12 months. This is assessed to determine if DREAMS participation affected the likelihood of a household being considered for aid.
	Perceived Well-Being	This measure captures overall life satisfaction, happiness, and perceived financial security. Respondents rate their well-being on a scale, including satisfaction with household financial situation, future outlook, and stress levels related to economic conditions. We will create an index that provides a singular measure of perceived subjective well-being on a **1 to 10 scale**. It is the **unweighted average** of five standardized scales: Happiness, Health, Free Choice/Control, Life Satisfaction, and Financial Satisfaction.
Women's Empowerment	Decision-making power and financial autonomy	This measure measures women's role in financial decision-making, control over household resources, ability to make business decisions, and involvement in major household expenditure choices. It also includes measures of gender norms and perceptions around women's economic agency.
	Human & Social Capital	Assesses household participation in savings groups, agricultural cooperatives, community organizations, and networks that provide economic and social support. Includes indicators of trust, reciprocity, and social capital accumulation.

	Social Norms & Cultural Barriers	Measures community norms and attitudes towards gender roles in business, employment, and household financial decision-making. Captures changes in perception of women's work, leadership, and economic contributions.
	Spousal Relationships	Assesses spousal decision-making, mutual respect, trust, and the ability to express opinions in household financial and business matters. Includes measures of support for women's business activities.
	Pro-WEAI Index[4]	This composite score (ranging from **0 to 1**) measures women's economic empowerment by aggregating performance across multiple critical domains. The index is the sum of five **equally weighted (⅕ each)** component indices: Economic Decision-Making, Asset Control, Financial Service Access, Important Places (mobility), and Group Membership
Social Cohesion & Community/Market Integration	Financial Inclusion	Measures household access to financial products such as savings accounts, mobile money, microfinance, and credit. Captures how households utilize formal and informal financial services for business and personal needs.
	Perceived sense of trust and community within immediate community	Captures trust between refugees and host communities, perceived safety, and integration into local markets. Measures frequency and nature of interactions between refugees and host community

[4] Pro-WEAI

		members in business, social, and cultural contexts.
	Integration into local markets	This metric will attempt to measure households' interactions with market-level initiatives promoted as part of the MSD program. We will also ask all households about exposure to different components of the graduation program and MSD, and assess the extent of contamination and spillovers across study arms.

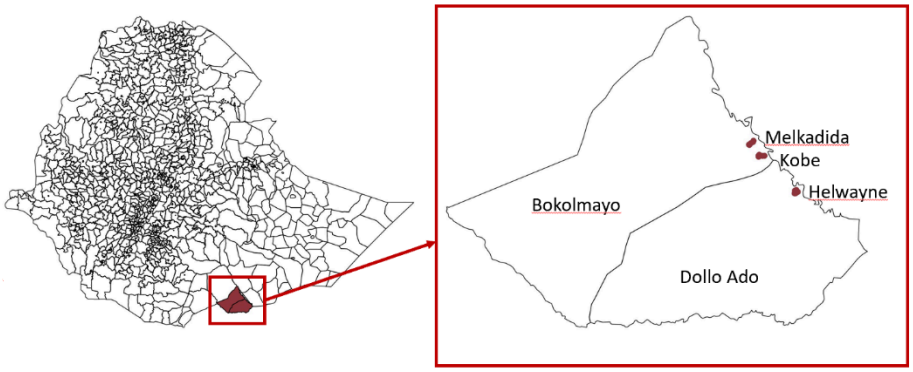
We will measure the impact of the DREAMS program and the graduation-only program on these outcomes for the full sample, as well as disaggregating impacts by refugee and host communities, households in different study cohorts, and other subgroups of interest.

RCT Design

Community Selection

The DREAMS program was implemented in Helowein, Melkadida, and Kobe camps and in surrounding host communities in Dollo Ado, Ethiopia. Figure 1 shows the location of the camps within Ethiopia.

Figure 1: DREAMS Ethiopia project and evaluation locations



Study areas were selected from within these camps following mapping exercises to identify villages less likely to have, or to be in line to, receive alternative livelihood and MSD interventions before or during the DREAMS study timeline. We excluded areas where Village Enterprise had previously operated. DREAMS was implemented in both refugee and host community areas, with 70% of DREAMS households from refugee communities and 30% of households from host

communities. The poverty graduation component of the DREAMS program is expected to include a total of six cohorts with varying numbers of households. Each cohort starts three months after the previous one. The first cohort was a "learning cohort" to allow Village Enterprise and Mercy Corps an opportunity to pilot the program. The RCT was conducted with cohorts 2-4.

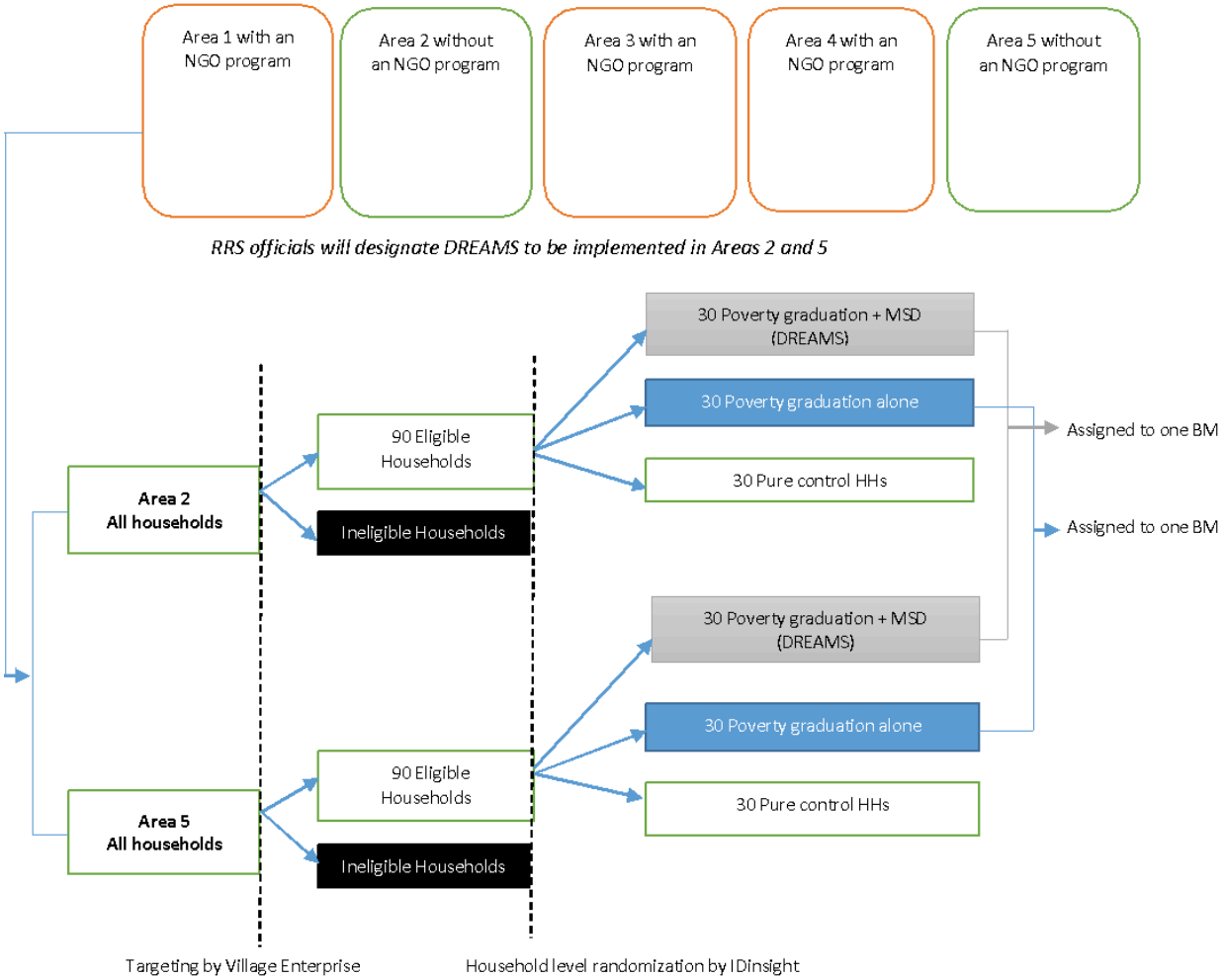
Randomization

For each cohort, Village Enterprise implemented a short targeting survey based on the Poverty Probability Index (PPI) for Ethiopia. This data was used to identify the 104 most vulnerable households per area (refugee zone or host kebele).[5] Some zones or kebeles were combined if fewer than 104 eligible households were identified. Village Enterprise conducted this targeting in 20 areas per cohort (14 refugee and 6 host communities) and shared the data with IDinsight.

For each study cohort, IDinsight set aside 14 households as buffers or replacements, and then randomly assigned 30 households per area to the DREAMS treatment arm, the poverty graduation-only treatment arm, or the control arm. We ensured that households within a polygamous family were clustered such that they were not assigned to different treatment arms. We stratified by available data (area, existing involvement in value chains and PPI scores) to maximize balance across treatment arms. Figure 2 summarizes the randomization design.

[5] For Cohort 4, 208 eligible households were identified in each of the 20 areas. All of the subsequent numbers were doubled, and DREAMS managed two BSGs per treatment arm in each area, rather than one BSG per treatment arm.

Figure 2: DREAMS Ethiopia randomization design



Note: The areas at the top of the graphic are meant to show that the program will be implemented in some areas but not in others. The area numbers do not correspond to specific places in the camps.

Differences between the treatment arms

A key feature of this randomization design is the distinction between the DREAMS treatment arm and the poverty graduation-only treatment arm. These two treatment arms will allow us to disentangle the effect of graduation from graduation plus MSD on refugee and host livelihoods. These two treatment arms differ in several ways:

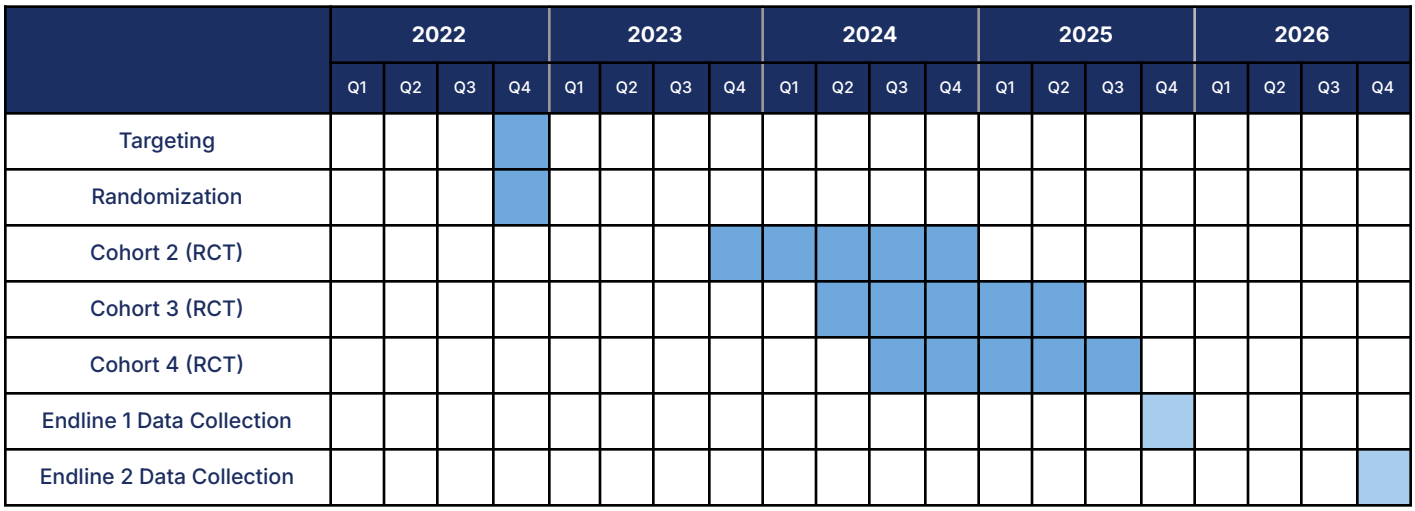
- **Business types:** Business groups in the DREAMS treatment arm were strongly encouraged to start their first business in one of the priority value chains, whereas business groups in the graduation-only treatment arm were not encouraged to start business in any particular value chain.

- **Smart subsidies:** Business groups in the DREAMS treatment arm received value-chain specific smart subsidies to lower the costs of participating in those value chains.
- **PSA linkages:** DREAMS facilitated intentional linkages between participants and PSAs, including for bulking, sale, and transportation of goods.
- **Trainings:** Government extension agents provided DREAMS participants with trainings on starting, maintaining, and growing businesses in priority value chains.
- **Targeting of other MSD interventions:** To the extent possible, Mercy Corps limited the targeting and sensitization of other value chain-specific interventions to DREAMS participants.

Study timeline

Figure 3 summarizes the study timeline.

Figure 3: DREAMS Ethiopia RCT timeline



Sample size calculations

Our evaluation includes 1,800 households from cohorts 2 and 3, and 3,600 from cohort 4, for a total of 7,200 households (randomly assigned to 2,400 DREAMS, 2,400 poverty graduation-only, and 2,400 control).[6] We will attempt to survey all households at Endlines 1 and 2. We considered a decision-relevant effect size to be 0.08-0.1 SD for household consumption. With this sample size we will be able to detect the following effect sizes for the different comparisons:

[6] Village Enterprise identified an excess of approximately 7-8% excess households, anticipating that up to 7-8% of households invited to participate in the graduation program will decline.

Table 2: Sample size calculations[7]

Sample	Combined treatment vs control (N = 4,800 T, 2,600 C)	Single treatment vs control (N = 2,400 T, 2,400 C)
Combined sample	0.08 SD	0.09 SD
Refugee household (70%)	0.09 SD	0.10 SD
Host households (30%)	0.14 SD	0.16 SD

Analytical Model

To estimate program effects, the primary analysis follows an Intention-to-Treat (ITT) framework, comparing the outcomes of households assigned to the treatment and control groups. The analytical model takes the following form:

$$Y_i = \beta_1 T_{1i} + \beta_2 T_{2i} + X'_i\gamma + \alpha'_s + \varepsilon_i$$

Where:

- Y_i denotes the outcome variable (household well-being, empowerment, and cohesion/integration measures) for household *i* at endline 1 or endline 2
- T_{1i} denotes whether household *i* is in the DREAMS treatment arm or not, and T_{2i} denotes whether household *i* is in the graduation-only treatment arm or not
- β_1 is the estimated treatment effect of DREAMS compared to control, β_2 is the estimated treatment effect of graduation-only compared to control, and β_1 vs β_2 compares DREAMS vs graduation-only
- X'_i is a vector of household-level covariates available in the targeting survey, namely gender, marital status, whether the household was involved in a priority value chain at baseline and derived income from that value chain at baseline, and PPI score at baseline
- γ is a vector of coefficients for the included covariates
- α'_s is a vector of categorical factors corresponding to the stratum that the household is found in. Households were stratified by cohort, area (zone and kebele), whether the household was involved in a priority value chain at baseline, and PPI score.
- ε_i denotes the household error term *i*

The ITT approach ensures that results reflect the program's impact regardless of variation in uptake.

A secondary Treatment-on-Treated (TOT) analysis will be conducted to estimate effects among households participating in DREAMS or graduation. This analysis accounts for variations in

[7] In these sample size calculations, we assume attrition = 15%. We do not make any variance adjustments due to including covariates from targeting data in our analysis, which may make our sample size calculations slightly conservative.

program uptake and assesses whether households that engage fully with the intervention experience stronger impacts. We will run two TOT analyses. In one TOT analysis we will apply a narrow definition of treatment: households will be considered 'treated' only if they engaged in the core components of graduation, i.e. started a business group and received at least the first disbursement of seed capital. In the second TOT analysis we will apply a broader definition of treatment: households will be considered 'treated' if they completed any major component of the intervention, including joining a BSG, starting a business with BSG members, receiving coaching/support from Village Enterprise, receiving a loan from Village Enterprise, or receiving discounts/subsidies. Together, these two analyses will provide a range of possible TOT estimates.

Risks

Below, we outline the key technical risks for the evaluation:

- **Movement within and outside of the refugee camp.** Attrition occurs when study participants cannot be located for endline surveys. Since we plan to sample all eligible households from our three study cohorts at endline, we want to minimize the number of households lost to follow-up. If attrition is different between the treatment or the control arms (either in rates or composition), then estimates of treatment effects may be biased. We will use information collected by Village Enterprise during targeting to identify households and limit attrition at endline. Village Enterprise also asked households if they were likely to leave the camp in the near term, and these participants were excluded from the study.
- **Entrance of other market-systems actors.** While Mercy Corps has agreed to limit its intervention to treatment areas to the extent possible, we have no control over other MSD programs that other implementers may initiate. Further, significant investments in specific sectors (e.g. agriculture) may undermine Mercy Corps' market strategy in the camps. We will explore these dynamics in our qualitative study.
- **The impact of indirect components of MSD on vulnerable households.** This design largely rests on the assumption that the direct market linkages subcomponent of MSD is a necessary enabler for vulnerable households to benefit from the full MSD program. In other words, in the absence of the direct linkages and/or the poverty graduation component, primary outcomes for vulnerable households will generally remain the same. If this assumption does not hold, this evaluation would underestimate the impact of the DREAMS program. We will further explore this assumption by attempting to measure contamination and spillovers to control households in both the quantitative survey and in the qualitative study.

Data Collection

As noted earlier, the evaluation includes DREAMS participants from cohorts 2-4. Each of these cohorts started three months after the previous cohort. The evaluation will incorporate data from three data collection points:

- **Targeting data (Village Enterprise):** Village Enterprise conducted a short quantitative survey to assess which households meet its eligibility criteria. This was conducted for all study households prior to randomization.
- **Endline 1 (IDinsight):** IDinsight will conduct the first endline survey at a single point in time among all study participants. This endline will take place at the end of implementation of the last study cohort (cohort 4). This means that the endline will take place 3 months after the initiation of cohort 3, and 6 months after the initiation of cohort 2. This initial endline is intended to capture shorter-term impacts of the program. The timing of this endline mirrors the endline timing that has been used in past randomized evaluations of Village Enterprise's poverty graduation approach. The results that we collect in endline 1 of the evaluation can then be compared to results from these other evaluations.
- **Endline 2 (IDinsight):** IDinsight will also conduct a second endline one year following the first. This means that it will capture outcomes 12-24 months after the start of program implementation across the cohorts. This second endline is intended to capture the medium to long-term impacts of the DREAMS program. This is particularly important given that the consortium expects the impacts of DREAMS – particularly from the indirect MSD – to be evident only after a couple years from the start of implementation. This will also provide a valuable opportunity to examine whether the impacts of poverty graduation are maintained over time.

Though implementation across the study population will start at different points in time, each endline will be done at one time (rather than staggered so that each is capturing the same follow-up time for each). We can exploit this differential cohort timing to predict impacts over time beyond the 12- and 24-month timeframes.

To the extent possible, IDinsight will collect data to try to understand "uptake" of the different components of direct and indirect MSD. We will also work with Mercy Corps to try to leverage any monitoring data that they collect. We will use these different measures to explore differential impacts dependent on uptake of various components.

We are working with a data collection firm (Laterite) to collect the data for Endline 1. We had a competitive procurement process to screen firms that are competitive on quality, cost, and experience. As we do on all projects where we engage survey firms, IDinsight will provide hands on support and oversight throughout data collection. IDinsight will be solely responsible for evaluation design, development of data collection instruments, piloting, data quality checks, and cleaning and analyzing data. We plan to have staff on the ground at all times to oversee the work of the data collection firm and to conduct independent quality checks.

The three Dollo Ado refugee camps are located in the Somali region of Ethiopia and almost exclusively host Somali refugee (Betts et al., 2019). Hence, the main language spoken by the

refugee and host communities is Somali. An IDinsight employee will conduct a round of classroom and on-the-job training for locally-hired enumerators fluent in the identified languages before any data collection. The field team will be trained in survey methodology, data collection, and a major emphasis will be placed on ethics training to ensure that the highest standards are maintained in protecting the vulnerable refugee population and the information and experiences they share. The IDinsight employee who will be managing fieldwork has undergone the National Institute of Health (NIH) human subjects' ethics training. The field team will also undergo the research ethics training.

Qualitative Study

The RCT will be complemented by a rigorous qualitative study to develop a richer understanding of the target population's needs and the mechanisms through which the DREAMS approach serves those needs. The qualitative research aims to gain a deeper understanding of the "how?" and "why?" underlying the effects observed in the quantitative impact evaluation.

The primary objectives of the qualitative study are to:

- Provide context for the quantitative results, including how and where the program achieved impact, whether graduation-only households benefited from MSD, and whether control households were affected by program activities.
- Inform Village Enterprise (VE) and Mercy Corps (MC) in refining the DREAMS Program for future cohorts and implementation in other geographies.

The study will be conducted at two time points: Endline 1 (October-December 2025) to capture short-term impacts, and Endline 2 (Q4 2026) to capture medium-to-long-term impacts. The same participants will be interviewed at both endlines to track how their perspectives change over time.

Key Thematic Areas

The qualitative study focuses on two key thematic areas, addressed across all participant groups:

1. **Understanding Mechanisms of Impact:** Exploring how DREAMS has changed (or not) the existing socio-economic challenges, participants' experiences (including differences by value chain, gender, and household status), and identifying the key **enablers and barriers** to impact. This also includes examining decision-making dynamics and the formal and informal **relationships between beneficiaries and market actors**.
2. **Understanding Indirect Impacts:** Investigating potential **spillovers** by exploring mechanisms through which non-program participants (Control group and graduation-only households) might have benefited, such as resource sharing or interactions with private sector actors (PSAs). The study will also assess if control households **access or participate** in DREAMS activities and their perceptions of the program

The Qualitative Study employs three distinct methods across the Helowein, Melkadida, and Kobe camps in Dollo Ado, Ethiopia. Twenty-four Focus Group Discussions (FGDs) will use stratified

random sampling of Treatment households to understand the mechanisms of impact within specific value chains. 75 In-Depth Interviews (IDIs) will utilize purposive sampling across the Full Treatment, Poverty Graduation Only, and Control arms to capture diverse individual perspectives and explore potential spillovers in non-program groups. Additionally, 10 IDIs with Private Sector Actors (PSAs) will be conducted to assess their perceptions of the Market Systems Development (MSD) approach and their relationships with beneficiary micro-enterprises. We will also consider interviews with business mentors to understand how the programmed differed for DREAMS vs poverty graduation only.. This mixed approach, repeated at Endline 1 and Endline 2, ensures a comprehensive picture of program impacts and underlying dynamics over time.

The transcripts from FGDs and IDIs will be analyzed thematically using a framework analysis approach in Microsoft Excel. The data will be disaggregated by gender and respondent type to capture the full range of experiences. Transcripts from focus group discussions, in-depth interviews, and private sector actor interviews will be transcribed verbatim, translated into English, and securely stored to maintain data integrity and confidentiality. This ensures that participant narratives are preserved in their original meaning, minimizing interpretation bias during analysis.

All qualitative data will be systematically organized in a structured coding and theme development matrix that aligned each response to the overarching research questions. A four-level analytical process was then applied to ensure rigor and traceability. At the first level, responses will be paraphrased to capture participant views accurately. At the second stage, they will be summarized across respondents to identify common perspectives. The third level involves generating recurring themes and sub-themes emerging from the data, capturing a broad range of experiences and insights. Finally, dominant themes will be consolidated to define the main qualitative narratives. Triangulation of evidence strengthens the credibility of the findings and provided a comprehensive understanding of the results.

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Appendix: Literature on Poverty Graduation and MSD Programs

Ethiopia hosts the third largest refugee population in Africa (UNHCR, 2022). With continued conflicts and instability in neighboring countries such as South Sudan, Somalia, Eritrea, and Sudan, refugees are likely to remain in protracted displacement over a long period of time. While the humanitarian response to the immediate needs of refugees provides vital, life-saving support, there is growing consensus that more durable approaches are needed to support refugees in long-term displacement to rebuild their lives and to gain more self-sufficiency.

Evidence from multiple contexts suggests that the Poverty Graduation Approach, which provides holistic livelihood support for ultra-poor households, has lasting positive impacts on a range of outcomes (IPA, 2021). An evaluation of the Village Enterprise poverty graduation program implemented in a non-refugee setting conducted in Kenya and Uganda between 2017 and 2020 determined that the program had a positive significant impact on households' monthly consumption and net assets (IDinsight, 2022). Similarly, Sedlmayr (2020) found that Village Enterprise's poverty graduation's savings groups increased microenterprise activities and could also be associated with women empowerment.

In 2021, a randomized control trial evaluating the impact of a graduation program on livelihoods in refugee and host communities in Uganda, determined that the program had significant positive impacts for both program participants and their households on key outcomes, including food security, nutrition, and self-reliance (IPA, 2022).

In 2018, a Randomized Control Trial (RCT) of the Village Enterprise graduation program in Uganda found that the program increased consumption, assets, and income, improved nutrition and subjective well-being. In 2020, Village Enterprise entrepreneurs experienced a 265% increase in household savings, 58% increase in annual income, and 21% increase in daily meal consumption over a period of 12 months relative to control households.

Although these studies show that the graduation programs have positive impacts on a range of outcomes, it is uncertain whether these results generalise to the refugee context due to differences in social context and government regulations affecting the refugee communities.

Similarly, there are initial indications that MSD could improve the economic welfare of participating households, but the evidence remains limited. For example, using a pre-post design, Mercy Corps (2018) showed that MSD led to increased market participation and uptake of improved seed variety for farmers, although it lowered the median agricultural income. Another quasi-experiment evaluation in Ethiopia by Sagara and Hudner (2017) found out that MSD had a positive impact on food security and household assets. Although the above studies suggest that MSD interventions positively impact household welfare, the studies were among all residents in the program areas rather than specifically targeting the ultra-poor. Hence, it is uncertain whether the positive impact of MSD can also be observed among vulnerable households particularly in a refugee setting.

Further, to the best of our knowledge, the poverty graduation and MSD programs have not been rigorously evaluated together and in a refugee setting. The research included in this proposal will extend the existing literature in two main ways. First, it will evaluate the impact of a combination of poverty graduation and MSD on livelihood, social cohesion and perceived wellbeing. Secondly, for the first time, the two programs will be rigorously studied in a refugee setting (among both refugee and host community households).

Ethiopia provides an ideal context for this study, not only because of the large refugee population, but also because the country's progressive policies toward refugees (UNHCR, 2020). In Ethiopia, the refugees are allowed to obtain work permits and access social and financial services, like banking. This context provides a unique opportunity to test the impact of Poverty Graduation alone and the blended approach (poverty graduation and MSD) in an environment where the refugees have relative freedom to invest. Findings from this evaluation will inform policy and public debate as well as programmatic decisions at Village Enterprise and Mercy Corps. The study findings will also inform policies and public debates on building cohesive communities and integrated markets that benefit both the host communities and refugees.

Poverty Graduation literature

Graduation model interventions are anti-poverty programming that seeks to offer a sustainable pathway out of poverty. There is evidence that graduation leads to poverty reduction and that graduation programs are more cost-effective than other livelihood programs targeting the extreme poor (IDinsight, 2022; Sedlymayr et al., 2020 Sulaiman et al., 2016). Further, in both refugee and non-refugee settings, ultra-poor graduation programs have been shown to significantly improve the lives of the very poor along many dimensions, including food security, total assets, and psychological well-being (Abhijit Banerjee et al., 2015, IPA, 2022).

A review of literature by the Consultative Group to Assist the Poor CGAP (2018) showed that a scaled-up implementation of poverty graduation in Ethiopia increased participants' income by an average of US$330 per year and helped more than 33,000 households (200,000 individuals) graduate and transition out of the safety net. In Bangladesh, the poverty graduation program led to a 37 percent increase in household earnings over seven years (CGAP, 2018). A graduation program implemented in Haku Winay in Peru showed that participant income from trade and services increased by 35 percent while agriculture income increased by 14 percent. The program also had a significant impact on food security, financial literacy, health outcomes, and empowerment indicators (CGAP, 2018).

Sedlmayr et al. (2020) examined the impact of integrated microenterprise development implemented by Village Enterprise in Uganda. The Village Enterprise's poverty graduation program differs from standard poverty graduation program in several ways. The program offers four months of business training sessions, nine months of mentorship engagement, and cash transfers and hence, usually costs a third of the least expensive poverty graduation program (Sedlmayr et al., 2020). Another study by Gallardo et al. (2021) examines the impact of Village Enterprise's poverty graduation program implemented in Kenya and Uganda. The study found that the program led to a

7.3 percent increase in consumption in Kenya and 3.6 percent in Uganda. The study also found that the program led to 8.5 percent increase in household assets in Kenya and 2.3 percent in Uganda.

An expanding literature base points toward a positive impact of the poverty graduation approach on household-level economic outcomes. However, little is known about the impacts of the poverty graduation approaches on the economic outcomes of the refugee and host communities. While the graduation approach was initially designed for the extreme poor living in rural areas, UNHCR recognized its potential to help refugees living in rural areas, urban centres, and refugee camps (UNHCR, 2018). A few project assessments and studies have shown promising evidence around graduation models in poverty reduction in refugee settings. For example, recent evaluation by IPA (2022) on the impacts of Graduation Program on Livelihoods in Refugee and Host Communities in Uganda determined that, the program had significant positive impacts for both program participants' livelihoods including their food security, nutrition, and self-reliance. Further, a monitoring and evaluation exercise of graduation pilot in Egypt showed that 20 percent of the refugees and host communities served between 2013 and 2015 had found jobs while 22 percent had their own business after the program ended (Montesquiou et al., 2016). The pilot is also estimated to have increased the average earned income per participant in Cairo by 18 percent and 27 percent in Alexandria. However, given that majority of the results save for the IPA (2022) Uganda evaluation, are from monitoring and evaluation non-experimental exercises, more rigorous evaluations still need to be done particularly in refugee settings given their varied social and economic contexts across and within countries and regions.

The graduation approach has been rightly criticized for supporting the most vulnerable to set up microenterprises but not supporting them to grow further (Gobin et al., 2016). While 'graduates' earn an income, this is not always enough to fully support their families. This is largely because business mentors typically lack the initial connections to broader markets that can make the difference from merely surviving to thriving, and markets in these contexts remain extremely limited. That said, poverty graduation programs that combine multiple interventions (business skills training, business mentoring and savings) to promote entrepreneurship among the ultra-poor have been shown to have positive and significant impacts on income, savings, asset accumulation, and food security (Gobin et al., 2016).

Market Systems Development (MSD) literature

The functioning of markets and their performance, to a great extent, determine the growth patterns and the speed of poverty reduction. However, systemic failures and complexities in the market structures sometimes prevent markets from functioning effectively. Due to these failures, the marginalized groups are the ones who suffer the most and are left out due to the existing social and economic barriers. As a result of these dynamics, governments and non-for-profit organizations have recognized that market outcomes are not always pro-poor.

The unfavorable market conditions for the extreme poor have led to a new international development approach – the Market System Development (MSD) approach. MSD seeks to address the underlying causes of market dysfunction by indirectly facilitating the business environment so

that markets can operate more effectively, sustainably, and beneficially for the poor (ECIKS, 2019). MSD programs have long used smart subsidies to reduce a range of ecological and market-related risks for the poor producers and other market actors in the short term while fostering long-term market access for resilience-building products and services (Mercy Corps, 2017).

MSD has been implemented in different sectors, including agriculture, livestock, energy, and employment. While the evidence on the impact of MSD on wellbeing is limited, there are a few promising project assessments and studies of MSDs, as outlined below:

- A pilot evaluation of a market systems approach in Bidi Bidi and Palorinya settlements in Uganda demonstrated mixed evidence regarding increased agricultural income but signs of increased market engagement. Among farmers who reported selling any produce in the previous year, the median agricultural income was $175 PPP among farmers at the endline. At baseline, the median agricultural income among farmers that had sold produce was $383. In addition, market sales participation increased from 15 percent among farmers at baseline to over 50 percent among farmers at endline (Mercy Corps, 2018).
- A comparative three program analysis: Making Vegetable Markets Work for the Poor (MVMW) in Myanmar, Effective Seed Storage (ESS) in Timor-Leste and Managing Risk Through Economic Development (M-RED) in Nepal , showed a positive effect on economic outcomes across their target populations - primarily smallholder farmers and the wider communities in which they lived. In ESS, for example, field interviews showed that the carefully crafted, short-term silo subsidies addressed farmers' immediate financial and ecological risks and ultimately provided the necessary stimulus and capital to spark a vibrant and sustainable market for the risk-reducing silo technology. Although the study did not use a rigorous evaluation, the findings suggest that the subsidy's amount and scale may have improved market efficiency, ultimately decreasing silo prices by 40% (Mercy Corps, 2017).
- An SDC-funded project in Armenia aimed to implement the "Making Markets Work for the Poor" approach in the dairy sector. The approach's key elements were understanding the market system and strengthening the market system. An observational study suggests that the approach increased the annual income of the 900 dairy households by US$314 (O'Sullivan & Rylance, 2016; The Springfield Centre, 2008).
- The PrOpCom programme in Nigeria identified the low use of fertiliser by smallholders as a significant barrier to productivity improvements in agriculture. The programme then worked with a fertiliser manufacturer to help the company change its business model to improve distribution and sell fertilizers in a manner that fitted with farmers' needs. One measure included selling fertiliser in smaller, more affordable packs. Within fourteen months, 61,000 farmers had bought 217,000 1kg packs, and 130,000 farmers had been educated by village level promoters (Robinson & Rust-smith, 2017).
- In Kenya, the Value Initiative Programme worked with a healthcare provider to create increased income opportunities for HIV/AIDS-affected households in the Western and Rift Valley provinces. A key element of the programme was supporting people in rural and peri-urban areas to grow African leafy vegetables. The aim was to help beneficiaries earn an income, meet daily survival needs, and take a first step towards integrating into more

profitable and growing value chains. After about one year into the program, 67 per cent of beneficiaries (717 out of a total of 1,066) were still growing the vegetables, and one third no longer needed food support (Kulei & Maes, 2012).

Although the above studies suggest that MSD approaches have the potential to positively impact livelihood, two gaps remain. First, the studies did not compare outcomes for program beneficiaries with non-beneficiaries. Second, the approaches have not been tested among the most vulnerable, especially extreme poor refugees who might be invisible to the private sector actors. Further, MSD approaches are still complex models yet to be fully explored; development partners will need to expand the evidence base to better answer in-depth questions about who benefits, how they benefit, and in what circumstances the approach can be most effective.

Layering the Poverty Graduation and MSD Models

In addressing poverty, development partners are shifting their approach to include interventions that address multiple challenges simultaneously, such as using the graduation approach and building inclusive market systems. The success of poverty graduation and MSD suggests that more significant impacts on poverty alleviation can occur by enabling and leveraging market forces to the greatest extent possible, reducing regulatory burdens, and creating sustainable pathways out of poverty. For example, programs could potentially improve revenues by facilitating group input purchases and market price information or linking the poor to markets or supporting the creation and expansion of local value chains (Goldberg, 2016).

Overall, the evidence on poverty graduation approaches and MSD models in humanitarian settings is limited. Combining the two approaches can maximize the strengths of each model while addressing the recognized shortcomings of each. Development partners are yet to explore the effects of combining the two in contexts of protracted displacement, like in Ethiopia.