



Impact Evaluation of the Social Support for Resilient Households Project

Malawi

PEI Analytics and Advisory Global Public Goods (P180353) - TFOC1230 - Malawi IE

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Keywords: Randomized experiment, antipoverty programs, social protection, resilience, livelihood packages

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IE PROFILE INDICATORS

No.	Indicator	Description
1	IE code	PEI Analytics and Advisory Global Public Goods (P180353) - TF0C1230 - Malawi IE
2	IE Title	Impact Evaluation of the Social Support for Resilient Households Project
3	IE TTL	Benedetta Lerva
4	IE Contact Person	Benedetta Lerva, DIME World Bank
5	Region	AFR
6	Sector Board/Global Practice	SPJ
7	WBG PID (if IE is evaluating a WBG operation)	https://operationsportal.worldbank.org/secure/P169198/home?tab=dashboard
8	WBG Project Name (if IE is evaluating a WBG operation)	SOCIAL SUPPORT FOR RESILIENT LIVELIHOODS PROJECT (P169198)
9	Project TTL (if IE is evaluating a WBG operation)	Chipo Msowoya, Ivan Drabek
10	Intervention	Alternative livelihood packages
11	Main Outcomes	Food security and consumption, income and income diversification, assets, savings, youth skills, employment, entrepreneurship
12	IE Unit of Intervention/Randomization	Cluster of Savings and Loans Groups (SLGs) in Experiment 1, Individual Youths in Experiment 2
13	Number of IE Units of Intervention	311 in Experiment 1, 700 in Experiment 2
14	IE Unit of Analysis	Household
15	Number of IE Units of Analysis	6,000 Households in Experiment 1, 700 Households in Experiment 2
16	Number of Treatment Arms	4 arms in Experiment 1, 2 arms in Experiment 2
17	IE Question 1 (Treatment Arm 1)	What is the impact of graduation (coaching/household assets & trainings) on food security and consumption, income and income diversification, assets, savings?
18	Method IE Question 1	Random assignment at cluster level (T1 vs T3)
19	Mechanism tested in IE Question 1	“Package”
20	IE Question 2 (Treatment Arm 2)	What is the impact of the enhanced package (bundled group skills training) on food security and consumption, income and income diversification, assets, savings?
21	Method IE Question 2	Random assignment at cluster level (T1 vs T2)
22	Mechanism tested in IE Question 2	“Package”
23	IE Question 3 (Treatment Arm 3)	What is the impact of pooling graduation with the enhanced package on food security and consumption, income and income diversification, assets, savings?
24	Method IE Question 3	Random assignment at cluster level (T1 vs T4, T2 vs T4, T3 vs T4)
25	Mechanism tested in IE Question 3	“Package”
26	IE Question 4	What is the impact of the Youth Skills Challenge on youth skills, income and income diversification, employment, and entrepreneurship?
27	Method IE Question 4	Random assignment at individual youth level
28	Mechanism tested in IE Question 4	“Package”
29	Gender-specific treatment (Yes, No)	No
30	Gender analysis (Yes, No)	No
31	IE Team & Affiliations	Benedetta Lerva (DIME World Bank, Principal Investigator); Emily Beam (University of Vermont, co-Investigator); Martin Mwale (PEI Fellow, co-Investigator); Sebastian Insfran (DIME World Bank, Research Analyst); Daisy Reboul (DIME World Bank, Research Assistant); Bryan Mthiko (DIME World Bank, Field Coordinator)
32	Estimated Budget (including research time)	\$980,971
33	CN Review Date	09-2023
34	Estimated Timeframe for IE	01-2023 to 03-2026
35	Main Local Counterpart Institution(s)	Ministry of Finance and Economic Affairs, National Local Government Finance Committee

1. EXECUTIVE SUMMARY

This impact evaluation consists of two experimental studies to evaluate the socioeconomic impacts of the Social Support for Resilience Livelihoods Project (SSRLP), a project of the Government of Malawi, implemented by the Community Savings and Investment Promotion initiative (COMSIP) with support from IDA. Experiment 1 will assess the comparative impacts of enhanced livelihoods and graduation packages, while Experiment 2 will assess the impacts of a business-oriented package for youth called Youth Skills Challenge (YSC).

Experiment 1 will answer the following questions:

1. What is the impact of livelihood packages on household resilience, in terms of food security, consumption, assets/savings, and income diversification?
 - a. What is the impact of graduation (coaching/household assets & trainings)?
 - b. What is the impact of the enhanced package (bundled group skills training)?
 - c. What is the impact of pooling graduation with the enhanced package, and what is the optimum bundle?
2. What is the cost-effectiveness of enhanced and graduation packages?

Experiment 2 will answer the following questions:

1. What is the impact of the Youth Skills Challenge on youth skills, IGA and earnings, employment and entrepreneurship, and empowerment?
2. What is the cost-effectiveness of the YSC program?

The two experiments are randomized controlled trials (RCTs); both include a control group comparable to the treatment groups in all aspects except that it will not receive any program components.

In Experiment 1, an eligible population of former recipients of the Social Cash Transfers (SCT) or Climate-Smart Public Works Program (CSEPWP) that has gone through a basic skills training called “basic livelihoods” is divided into four experimental groups; one group receives nothing (T1), one group receives the enhanced livelihood package only (T2), one receives the graduation package only (T3), one receives both enhanced and graduation (T4). An individual comparison of T2 and T3 with T1 provides the impact of each intervention alone, while the comparison of T2 and T3 with T4 tests for complementarities between the two interventions. The unit of randomization is what the program implementers refer to as a “cluster,” a grouping of typically two savings and loans groups (SLGs) that are geographically proximate and whose members receive program benefits jointly.

In Experiment 2, we will measure the impact of the YSC program to answer the above questions by randomizing youth who have applied for and deemed eligible for the program into two groups: a treatment group that is invited to participate in the program, and a control group that will not be invited. These youth will necessarily be part of enhanced-receiving clusters, as YSC is a key component of the enhanced livelihoods package.

2. BACKGROUND AND KEY INSTITUTIONAL FEATURES

Although there have been significant strides globally to reduce extreme poverty by 2030 (Sustainable Development Goal (SDG) 1), sub-Saharan Africa remains in extreme poverty, accounting for 60 percent of all people living in extreme poverty worldwide (World Bank, 2022). According to Multidimensional Poverty Index (MPI) study conducted across 110 countries, 1.1 billion of 6.1 billion people are poor; roughly five out of six poor people live in Sub-Saharan Africa or South Asia: 534 million (47.8 percent) in Sub-Saharan Africa and 389 million (34.9 percent) in South Asia (UNDP,

2023). In Malawi, over 70% of people live below the \$1.90/day international poverty line, and most (94%) of the affected people live in rural communities (Caruso et al. 2022); 58.8% of Malawians live in multidimensional poverty as measured by the Malawi Multidimensional Poverty Index M-MPI (UNDP 2022). Malawi has a youthful population, with 51% below 18 years, and almost 84% of the population live in rural communities (NSO, 2018), whose livelihoods are more likely to be affected by climate shocks due to their dependence on smallholder agriculture.

Recently, the Government of Malawi, with support from IDA, has been implementing the Social Support for Resilience Livelihoods Project (SSRLP) from July 2020 to December 2027 to contribute towards reducing poverty and protecting poor and vulnerable households from the effects of shocks. Development of the project was purely government-led and aligned to the national social protection strategy, the Malawi National Social Support Programme II (2018-2023). The MNSSP II promotes dynamic social safety nets and economic inclusion through its five mutually dependent thematic areas of (a) consumption support, (b) support for resilient livelihoods, (c) shock - sensitize social protection, (d) linkages between safety nets and other programs, and (e) safety net systems strengthening.

The main objective of the SSRLP is to improve resilience among the poor and vulnerable population and to strengthen the national platform for safety nets in the Republic of Malawi. The SSRLP has three mutually reinforcing components, namely: (i) Improving social and economic inclusion, (ii) Strengthening harmonized delivery systems, and (iii) Capacity building and institutional strengthening support. Economic inclusion interventions are part of improved social and economic inclusion component implemented jointly with both Social Cash Transfers (SCTP) and Climate Smart Enhanced Public Works (CSEPWP). SSRLP has scaled up economic inclusion interventions alongside cash transfers, having recognized that there is growing evidence that “cash plus” schemes can sustainably increase assets, incomes, and economic resilience of extreme poor. Therefore, livelihood support and graduation interventions under SSRLP were overlayed on cash transfers to deliver maximum impact toward asset and income growth and promote resilience for extreme poor social protection beneficiaries in Malawi.

Implemented by the Community Savings and Investment Promotion initiative (COMSIP), the livelihood support or economic inclusion component of the SSRLP complements consumption support provided through both social cash transfers and climate smart public works wages through a “cash plus” model. This is done by enhancing the productive capacity of SCTP and CSEPWP beneficiaries to increase poor households’ incomes and assets, build human capital, and promote both economic and social inclusion in a sustainable manner. Both SCTP and CSEPWP beneficiaries are enrolled into the livelihood/economic inclusion support on voluntary basis. The intervention centers around mindset approaches and provides three livelihood packages: basic livelihoods, enhanced livelihoods, and (pilot) ultra-poor graduation. The impact evaluation, therefore, aims at assessing the impact of the latter two livelihood packages on household resilience in terms of food security, consumption, assets/savings, and income diversification. Additionally, it will measure the impact of livelihood packages on household resilience in the event of climate shocks (drought and floods). The evaluation is also designed to measure the cost-effectiveness of enhanced and graduation packages.

3. LITERATURE REVIEW (E)

Robust evidence indicates that graduation-style social inclusion programs, first pioneered by BRAC, are effective in generating short- and longer-run improvements in household economic outcomes, such as income, consumption, and assets (Banerjee et al. 2015, Bandiera et al. 2017, Banerjee et al. 2021, Andrews et al. 2021). This evidence of

success has spurred program development by both NGOs and governments worldwide. Government-led interventions hold particular promise for their ability to reach far larger groups of people and to achieve economies of scale through their size and integration with other social safety net programs. However, the push to scale has also generated challenges in terms of maintaining costs and managing the complex logistics of a complicated program.

Recent work found that the combination of multiple supports far exceeded the provision of a one-time asset transfer (Banerjee et al. 2022), but less is known about what the ideal combination of supports would be. This study will enable us to test the impact of a lower-cost set of supports that include skills training and support in cooperative development, along with subsidized seeds, versus a more resource-intensive program that adds seed capital and regular coaching over a longer duration. We also test for the presence of complementarities to these two programs, if the additional seed capital and support helps households leverage the training provided through the less intensive (enhanced) program.

Having additional assets and savings may be particularly critical in times of flooding, droughts, or other crises, mitigating the difficulty of navigating that period and perhaps reducing the time to recovery. This context is well suited for an investigation of the impact of these graduation programs on household resilience in the face of economic shocks.

Additionally, we plan to focus on the impact of this support on household formation and migration. Individual out-migration to nearby cities or the capital is common, and additional resources may enable household members to seek employment outside their home communities (Bryan et al. 2014, Angelucci 2015), which in turn may yield greater economic returns and improve household income diversification. We will concentrate on these outcomes not only to ensure we accurately measure economic impacts for the entire household but also so we can shed insight into these migration behaviors. This topic has not been well investigated in previous studies (Andrews et al. 2021), although other work has found that CCTs and cash-for-work programs can increase migration (Angelucci 2015, Gazeaud et al. 2023).

The youth training program will add to the growing literature on skills-development programs for youth in LMICs. Results from previous studies have been mixed, with some interventions increasing employment and income (Blattman et al. 2014) and others having minimal to no impacts (Hicks et al. 2017). A distinguishing feature of this program is its focus on relatively rural communities, in which this training may be more likely to promote enterprise development rather than wage employment.

4. POLICY RELEVANCE

The impact evaluation has, since inception, been a collaborative effort between the research team and the project team at the World Bank and the client government. The government counterparts have been actively involved in the conceptualization of the evaluation designs and their learning needs have been guiding the process; as an example, follow-up local workshops have always included both COMSIP and government partners. There has been a direct transfer of the evaluation capacity, which not only helps clients support the research team undertaking the impact evaluation, but also creates a platform that would increase understanding of the study amongst these partners and, therefore, absorb its results and lessons learned. In addition, the Malawi project has also embarked on building local capacity through baseline preparations; as an example, community facilitators for the project being implemented have been trained in the usage of SurveyCTO in collecting data. The IE will inform the continued

implementation of SSRLP, therefore providing a right path for integrating lessons and informing the Government of Malawi's broad social protection system. In terms of policy, Malawi has implemented SCT and CSEPWP for many years in a traditional cash disbursement model. Because this impact evaluation is a “cash plus” extension towards resilience building, and because it bundles interventions to identify the most critical elements to improve resilience, it will inform the continued implementation of SSRLP, therefore providing an evidence-based path for integrating lessons and informing the Government of Malawi's broader social protection system. Furthermore, because similar initiatives are being implemented in several other countries, shared lessons will increase acceptability and triangulation of the results, promoting their possible adoption and use by the Malawi Government. This may result in policy design improvements for similar social protection programs in the country.

5. THEORY OF CHANGE (E)

The interventions studied in the two experiments provide skilling and assets to beneficiaries. Trainings are expected to build the human capital of the beneficiaries and relax constraints related to lack of information, while assets transfers are expected to build the physical capital of the beneficiaries and relax constraints related to a lack of liquidity and credit opportunities.

- The inputs for the enhanced packages are joint skills training, trainings on cooperative development and management, agricultural inputs for selected crops, and linkages for value chain development; outputs are the number of participants trained and number of trainings delivered, number of farmers who received inputs for their crops.
- The inputs for the graduation package are asset transfers, coaching and mentoring, and asset-based skills training; outputs are number of participants trained and number of trainings delivered, the value of assets delivered per participants, number of people who received coaching/mentoring and number of coaching/mentoring visits per person.
- The inputs for YSC are vocational training, training and supervision for business plan development, and financial linkages; outputs are youth enrolled in vocational training, number of youth who received training on business plan development and number of trainings delivered.

For all interventions, the intermediate outcomes consist in the number of income-generating activities per participants, their consumption value, asset value, savings value, and income value. The long-term outcomes are improved food security and increased resilience to income shocks.

The figure below summarizes inputs, outputs, and outcomes connected to the three different interventions – notice that YSC is included in the enhanced package box since YSC is a component of the enhanced package and not a standalone activity.

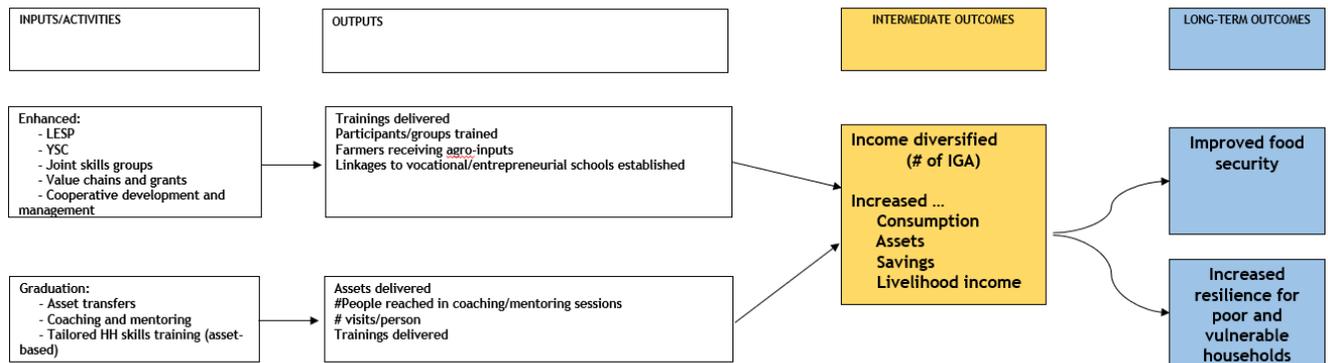


FIGURE 1: THEORY OF CHANGE

6. HYPOTHESES/EVALUATION QUESTIONS (E,R)

RESEARCH QUESTIONS

Experiment 1

Broadly, we ask, what is the impact of SSRLP livelihood packages on household resilience, in terms of food security and consumption, income and income diversification, assets, savings? We have the following specific research questions:

RQ1. What is the impact of graduation (coaching/household assets & trainings) on the above outcomes?

RQ2. What is the impact of the enhanced package (bundled group skills training) on the above outcomes?

RQ3. What is the impact of pooling graduation with the enhanced package on the above outcomes?

In addition to these key questions, we ask the following:

- What is the impact of livelihood packages on household resilience in the event of climate shocks (drought and floods)?
- What is the cost-effectiveness of enhanced and graduation packages?

Experiment 2

RQ4. What is the impact of the Youth Skills Challenge on youth skills, income and income diversification, employment, entrepreneurship?

In addition, we ask, what is the cost-effectiveness of the YSC program?

Experiment 1 research questions were developed jointly by the research team and implementing partner during the May 2022 Lisbon workshop. In the November/December 2022 workshop in Blantyre, the research team added the sub question about the cost-effectiveness of these programs from Experiment 1 and outlined the research questions for Experiment 2.

HYPOTHESES

Assuming successful program implementation, the following impacts are hypothesized:

H1: The graduation program will increase food security, consumption, assets/savings, and income diversification.

H2: The enhanced program will increase food security, consumption, assets/savings, and income diversification.

H3: The enhanced and graduation program will increase food security, consumption, assets/savings, and income diversification

H4: The YSC program will increase youth skills, IGA and earnings, employment and entrepreneurship, and empowerment

LINK TO PEI IE COLLABORATIVE LEARNING PRIORITIES

These research questions speak to the following knowledge gaps:

- What is the marginal contribution of constituent interventions to overall impact and overall cost?
 - o We will measure the impacts of two distinct interventions alone and in combination and determine their cost-effectiveness.
- What is the cost-effectiveness of large-scale government-led programs?
 - o Although the graduation program is at a more modest pilot stage, the enhanced program is projected to reach hundreds of thousands of beneficiaries annually. These results will determine the cost-effectiveness of these efforts.
- Do economic inclusion programs improve households' resilience to (climate, conflict, or economic) shocks? How?
 - o We will examine heterogeneity in program impacts based on (plausibly) exogenous exposure to climatic or other shocks in order to measure how the program promotes resilience

SCALE-UP

The enhanced program is implemented on a broad scale among selected beneficiaries participating in the SCT and CSEPWP programs. However, the graduation program is in the pilot stage, and this evidence will inform the decision to scale this program to a larger share of enhanced participants. This decision will depend on its overall cost-effectiveness alone and in combination with the enhanced program.

7. MAIN OUTCOMES OF INTEREST (E,R)

Table 1 below presents the main outcomes of interest and their definition.

Table 1. Main Outcomes of Interest

Outcome Type	Outcome Name	Definition	Measurement Level
Primary/Secondary			
Primary	Income	Income from wage employment, agriculture, livestock and own businesses	Individual level
Primary	Income Diversification	Number of income sources	Household level
Primary (Experiment 1 only)	Consumption, Food security	Expenditures, food consumption	Household level
Primary	Assets	Household assets, agricultural and business assets	Household level
Primary	Savings	Money saved in any savings tool	Household level
Primary (Experiment 2 only)	Youth Skills	Skills acquired in a field of choice through vocational training	Individual level
Primary (Experiment 2 only)	Employment	Youth engaged in any income generating activity	Individual level
Primary (Experiment 2 only)	Entrepreneurship	Activities started	Individual level
Secondary	Time use	Time worked in wage employment, agriculture, livestock and own businesses	Individual level
Secondary	Financial inclusion	Loans	Household level
Secondary	Agency and empowerment	Sense of control, resilience and self-esteem, Control over earnings, control over decisions, restrictive norms	Individual level
Secondary	Social capital	Community financial support, collective action, social support	Household level
Secondary	Well-being	Life satisfaction, psychological distress, subjective health	Individual level

Those outcomes will be measured through household surveys, targeted towards the intended beneficiary. The surveys will comprise household-level questions, questions at individual level directly targeted to the intended beneficiary, as well as questions repeated for each household member.

8. EVALUATION DESIGN AND SAMPLING STRATEGY (E,R)

Evaluation design

The study is composed of two randomized experiments with different designs. Randomization into treatment and control will be done by the research team, in coordination with COMSIP, and it will occur after the completion of the baseline survey.

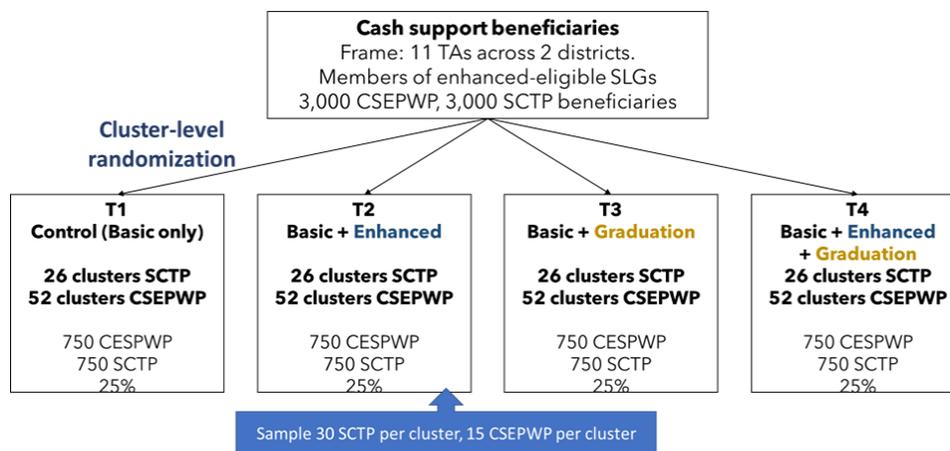
The unit of randomization for experiment 1 is an SLG cluster, which typically comprises two SLGs. SLG Clusters in Dedza and Nkhatabay will be randomized into one of three treatment groups and one control group. Households and individuals in treatment villages will be eligible for all intervention activities, depending on the specific intervention and their eligibility to receive the specific intervention. Households and individuals in control clusters will receive only basic services from the implementing partner while the evaluation is ongoing, which are a uniform entry point intervention for all SCT and CESPWP beneficiaries. Once the evaluation is complete, clusters in the control group will receive the program as well pending their eligibility assessment and program targets.

There will be four treatment arms (T1, T2, T3 and T4) for this experiment as follows:

- T1: those accessing only the basic (control group).
- T2: those accessing only the enhanced package (bundled group skills trainings).
- T3: those accessing only graduation packages (coaching, household assets and trainings).
- T4: those accessing both the enhanced and graduation package.

Figure 1 shows the IE design for experiment 1. The numbers in Figure 1 refer to the total number of participants to be included in the experiment at follow-up, equal to 6,000. Note that at baseline, only 3,300 will be interviewed due to time constraints.

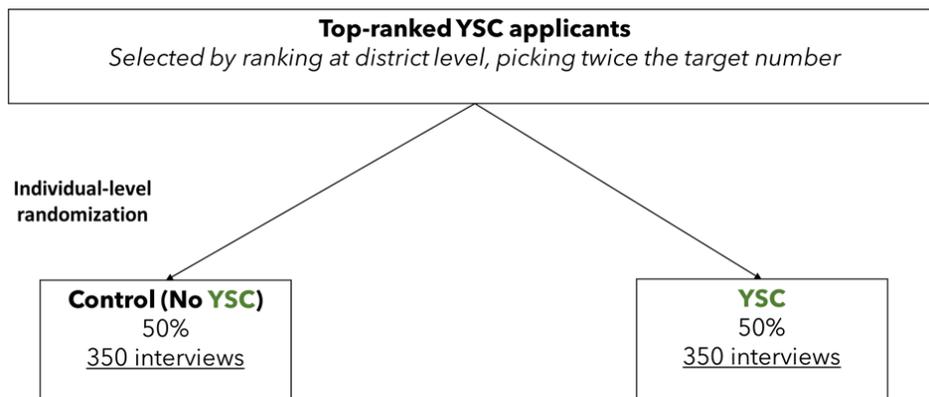
Figure 1: How experiment 1 aims to measure the overall impact



The unit of randomization for experiment 2 is individual youths. All youths in the catchment area will receive the youth group mentorship. All will be given a chance to apply for the YSC, and top candidates (up to a district-specific threshold, equal to twice the district-specific target), will be recruited for the experiment. Those falling into the treatment group will receive individual business startup equipment, while those in the control group will receive the intervention later, after the endline of the survey of the impact evaluation is completed (see Figure 2). Recruitment targets for this experiment will be determined by the maximum number of held slots and the district-specific target. Based on district-level ranking, the experiment will pick twice the district-specific target, and within each district 50% of these top applicants will be randomly selected for inclusion in the treatment group, and 50% in the control group.

The aim is to enhance youth skills, entrepreneurship skills, empowerment, employment, and earnings, for the treated. A total of 328 slots are available in the 5 districts, hence the experiment will include 700 youth, of which a maximum of 328 (out of 350 assigned to the treatment group) receive the program while a maximum of 350 (out of 350 assigned to the control group) do not.

Figure 2: How experiment 2 aims to measure the impact of YSC component



Identification strategy

Identification is guaranteed by the randomized assignment of the eligible sampled clusters (in Experiment 1) or individuals (in Experiment 2) in treatment groups, allowing the groups to be identical in terms of baseline characteristics, so that any differences between groups at endline can be solely attributed to the randomized treatment. Because we draw our samples from a pool of basic livelihood beneficiaries from two programmes, SCT and CSEPWP, we stratify our sample by the two programmes.

Population, inclusion and exclusion

Experiment 1 of the study will take place in 11 Traditional Authorities from Dedza and Nkhatabay districts in Malawi. These locations were chosen based on the SSRIP operational constraints of COMSIP. Within these districts and TAs, we will randomly select 207 CSEPWP clusters and 104 SCT clusters, to enroll in the study.

Experiment 2 will maintain the same two districts as in experiment 1 (Nkhatabay and Dedza), plus three additional districts (Lilongwe, Rumphi and Nkhotakota). The sampling frame for this scenario will be the clusters from

Experiment 1 receiving enhanced livelihood support (T2, T4 in Figure 1), plus additional clusters from the three additional districts.

Ethical issues

All study clusters will continue to receive the “standard” basic package and remain eligible for the cash transfer programs. The Experiment 1 control group will be eligible to receive the enhanced package following the conclusion of the study, such that all participants will eventually receive the same benefits. Additionally, the clusters for sampling were chosen such that the SSRLP program still meets its target number of enhanced and graduation beneficiaries, so that the impact evaluation is not constraining the scale of the program in aggregate.

In the case of Experiment 2, COMSIP has identified the maximum number of available district-specific program slots in YSC, so the impact evaluation is not artificially constraining the size of the program. The only variation due to the intervention is that rather than selecting the very top-scoring, eligible applicants, districts will select a larger set of eligible applicants that will be randomized. Additionally, in Experiment 2, members of the control group will be eligible to participate in YSC after the impact evaluation has concluded.

8.1 TREATMENT AND CONTROL GROUPS

See above under “Evaluation Design”.

8.2 SAMPLE SIZE CALCULATIONS

Experiment 1

We target about 6,000 members (of which only 3,300 cluster members interviewed at baseline due to time constraints) who are part of the SCT or CSEPWP programs across 311 clusters in Dezda and Nkhatabay. Specifically, we target 207 CSEPWP clusters and 104 SCT clusters. These targets are based on the anticipated number of clusters that would be assessed to be enhanced eligible.

Among expansion clusters in Dedza and Nkhatabay, COMSIP conducted an assessment of those that completed baseline training to assess their readiness. To select the target number of clusters, we used the following protocol:

1. Include all “eligible” clusters (clusters that scored higher 14 or higher on COMSIP assessment rubric), and exclude all clusters deemed “ineligible” (those with a score of 10 or lower on the rubric)
2. Among those “to be considered,” include those that meet the following criteria: assessment score ≥ 11 & members ≥ 10
 - a. This yielded 50 from CSEPWP and 12 from SCT
 - b. Include all selected (50) from CSEPWP and randomly select 2 from SCT
3. In the list, indicate “Priority 1” as those determined as “eligible,” with the remainder as “to be considered”
 - a. This will yield 207 CSEPWP and 104 SCT, of which we have 157 CSEPWP and 102 SCT that are eligible/Priority 1
4. For baseline, we will randomly select 8 members from CSEPWP and 16 members from SCT clusters. At follow-up surveys, we will target 15 members from CSEPWP and 30 from SCT by including those selected for our baseline sample and randomly selecting the remainder.

We are limited in the number of clusters available, and we set the per-cluster targets so that we end up with a roughly even distribution of members between CSEPWP and SCT.

Our main hypotheses rely on testing the impact of any one intervention arm vs. the control group or another intervention arm. The probability of assignment to any one treatment arm is 25%, and there are 6,000 cluster members across 311 clusters.

To calculate the minimum detectable effect size, we use the following assumptions:

- 80% power, 5% significance level
- ICC of 0.02. This is based on the maximum estimated ICC (for number of income sources) at the GVH level after including TA fixed effects from another study in nearby districts in Malawi (Zomba and Mangochi). ICCs for other outcomes range between 0–0.008. We use the larger estimate to be conservative, as there may be multiple clusters within a single GVH in more populated areas.
- 1500 individuals per arm and 77 clusters per arm
- Control-group standardized outcome with mean 0 and s.d. 1
- Attrition rate of 10%
- Participation "wedge" of 90 pp. This allows for 10% of the sample to be non-compliers. We expect high compliance because these group members have already met the eligibility criteria to participate in the enhanced and graduation arms and because all members continue to participate in their respective programs (CSEPWP or SCT)

This yields an MDE of 0.138 standard deviations. The MDE could fall as low as 0.120 if the ICC is less than 0.02.

We conservatively assume that baseline measures have no predictive power of endline outcomes. The actual R2 would depend substantially on the outcome of interest: we expect low R2 for income, which is highly variable, but higher predictive power for consumption and food security.

Secondarily, we are interested in program-specific impacts: the impact of the intervention among SCT clusters only and the impact among CSEPWP clusters only. Using the same assumptions, we are less well powered, with a MDE of 0.19–0.21 s.d. between the two programs. This is well powered for more direct aspects, such as asset values and income generating activity, but may be underpowered for indirect impacts on food security, consumption, or well-being.

Experiment 2

Experiment 2 will maintain the same two districts as in Experiment 1 (Nkhatabay and Dedza), plus three additional districts (Lilongwe, Rumphu and Nkhotakota). The sampling frame for this scenario will be the clusters* from Experiment 1 receiving enhanced livelihood support (T2, T4), plus additional clusters from the three additional districts.

A total of 328 slots are available in the 5 districts. The recruitment will follow the normal application process. Based on district-level ranking, the experiment will pick twice the district-specific target and, within each district, randomly pick 50% to treatment and 50% to control. 700 applicants from this pool will be randomly interviewed for baseline (350 from the control group and 350 from the treatment group).

Our main hypotheses rely on testing the impact of the YSC intervention vs the control group. We consider a general standardized outcome as well as the impact on the likelihood of engaging in a microenterprise, for which we assume a control-group rate of 20%

To calculate the minimum detectable effect size, we use the following assumptions:

- 80% power, 5% significance level
- 350 individuals in treatment and 350 individuals in control
- Control-group standardized outcome with mean 0 and s.d. 1; 20% of control-group youth have a microenterprise
- Attrition rate of 10%, yielding a follow-up sample of 630 out of 700 participants
- Participation "wedge" of 95 pp. This allows for 5% of the sample to be non-compliers. We expect high compliance because all individuals subject to randomization have already submitted a business proposal and were assessed high enough to qualify for the program.

These assumptions yield an MDE of 0.235 standard deviations, which we anticipate is large enough for primary outcomes such as assets and income but may not be well-powered for impacts on, say, household-level consumption. Additionally, with a baseline rate of 20% of youth participating in a microenterprise, we are powered to detect a 10pp increase. If the baseline rate is higher, say 40%, then we are powered to detect an 11.7pp increase

9. DATA COLLECTION (E,R)

Data will mainly be collected for this impact evaluation through quantitative household surveys.

9.1 QUANTITATIVE

Outcomes (as specified in table above) will be measured before the intervention through a baseline survey, as well as after the intervention in a endline survey.

The baseline survey for Experiment 1 is planned to start in September 2023 and end in mid-October 2023, before implementation activities start at the end of October. A midline survey is expected in the Fall of 2024, one year after the baseline, and an endline survey is expected in the Fall of 2025, two years after the baseline.

The sampling frame for the IE includes, as mentioned earlier, 104 SCT clusters and 207 CSEPWP clusters. The reason behind the different number of clusters between programs is that there are fewer SCT clusters than CSEPWP clusters, and the IE is currently sampling all the available and eligible SCT clusters. During the baseline, 8 SLG members (in CSEPWP clusters) and 16 SLG members (in SCT clusters) are included, while midline and endline surveys will include 16 SLG members in CSEPWP clusters and 30 SLG members in SCT clusters. The rationale behind the choice of including more SLG members from SCT clusters than CSEPWP clusters is to have a balanced sample that is composed of 50% CSEPWP members and 50% SCT members.

The baseline survey for Experiment 2 is planned to start in December 2023 and end in January 2024, with a midline survey one year after baseline and an endline survey two years after baseline. The sampling frame for Experiment 2 includes twice the district-specific program target for five districts, as specified earlier, and baseline respondents are selected among the youth who qualify to receive the program.

9.2 MANAGEMENT OF DATA QUALITY

At all steps of the preparation and progress of the data collection, measures will be taken to ensure data quality. Prior to data collection, the instruments will be programmed on SurveyCTO. Electronic data collection will ensure a smooth questionnaire flow, with skip patterns so that enumerators and respondents only see relevant questions. The programming will also include value validations and constraints, to reduce the occurrences of data entry errors.

Enumerators and supervisors will be trained extensively on the questionnaire. The training will be instrumental in flagging misunderstanding from the field team, potential issues during fieldwork, or suggestions to improve the wording or the flow of questionnaire, including the translation. As such, the surveys will be adapted and improved throughout the training based on feedback and experience from teams, to improve data quality further.

During data collection, data quality will be monitored both in the field and using high-frequency checks on the data received on the server. On the field, teams and enumerators will be closely monitored, to ensure that they follow protocols. Teams will submit data to the server every day or as often as networks allow, which will allow for real-time monitoring of the data. High-frequency checks on the data will include measures of enumerator performance and completeness, such as time spent reading the consent form. Any suspicious activity, such as enumerators that seem to go through the consent form too fast, or who submit forms of unexpected lengths or start interviews at unexpected time, will be closely monitored. Supervisors and enumerators will be contacted to determine whether interviews need to be done again if data quality cannot be guaranteed.

9.3 ETHICAL ISSUES

Since this impact evaluation requires collecting data from human subjects, the impact evaluation has been submitted for ethical review from both a Malawi Institutional Review Board (IRB) and an international IRB. The boards are, respectively, National Committee on Research in the Social Sciences, and Solutions IRB. Data collection will only occur after approval from both boards.

Special attention has been given to getting informed consent from the respondents. Respondents will be presented the purpose of the study, risks and benefits, confidentiality, and point of contact. Enumerators will be supervised to ensure that respondents are provided all the information needed for them to be able to provide informed consent. In particular, data quality checks will be made to check that enumerators do not skip or reduce the time spent on reading the consent form with all detailed information.

9.4 IMPLEMENTATION MONITORING SYSTEM ^(R)

- Describe the implementation monitoring system, particularly, what specific indicators and system will be used to follow up the studied population, their treatment participation, treatment *actually* delivered and received based on activities, and outputs (see the theory of change section).

The research team has signed a data sharing agreement with the clients allowing us to access their COMSIP Integrated Management Information System (CIMIS) data, which is supported by SSRLP and is still being programmed. The research team plans to work with the M&E officers of COMSIP to define service delivery indicators for every program component.

10. DATA PROCESSING AND ANALYSIS

DATA CODING, ENTRY, AND EDITING¹ (E)

Data will be collected with tablets and uploaded on a World Bank-owned SurveyCTO server. All code (cleaning, processing, and analyzing data) will be uploaded on GitHub to ensure transparency and replicability. High frequency check will be performed daily on the data during data collection, to make sure the data being collected is truthful and high-quality (this involves checking the distribution of variables by enumerator, checking the duration of the whole survey and of specific sections overall and by enumerator, and performing consistency checks). As mentioned earlier, missing data will be imputed following the Fairlie et al (2015) procedure to build estimation bounds.

10.1 MODEL SPECIFICATION FOR QUANTITATIVE DATA ANALYSIS

The impact evaluation will measure intention-to-treat (ITT) effects in both experiments, using ordinary least squares to measure the impact of assignment to each treatment arm relative to the control group. All intended beneficiaries will be included and analyzed according to the group they were originally assigned to, regardless of whether they ended up participating in the interventions.

Experiment 1: Our primary specification will include district-level fixed effects as well as any stratification-cell fixed effects, such as cluster type (SCT vs. CSEPWP). Reflecting the unit of randomization, standard errors will be clustered at the SLG cluster level.

Experiment 2: As with Experiment 2, our primary specification will include district-level fixed effects as well as any stratification-cell fixed effects.

Corrections for multiple hypothesis testing will be carried out by constructing summary indices following Anderson (2008); subgroup analysis will focus on whether participants are from CSEPWP or SCT clusters, and participant gender.

Balance checks will be undertaken using the data collected at baseline, to ensure that there is no systematic difference between all treatment and control groups. Demographic characteristics will be checked across all groups, with variables such as household size, but also key outcomes such as expenditures or income, assets or plot ownership.

Non-random attrition will be tested for and, if attrition is differential across treatment groups, the study will report bounds around estimates, following Lee (2008) and Fairlie et al (2015).

The IE and pre-analysis plan will be registered in the AEA RCT Registry once baseline data is available.

11. STUDY LIMITATIONS AND RISKS (E)

We anticipate the following risks and threats to internal and external validity of the impact evaluation:

- **Risk:** Participants dropping out of the impact evaluation affecting representativeness of the sample.
 - o Related threat: The evaluation outcomes might be influenced by the characteristics of the participants who have dropped out from the study.
- **Risk:** Study findings are not generalized because the institution(s) implementing the interventions are not representative.
 - o Related threat: The institution’s local context might be specific for the study geographic area leading in difficulties replicating the same interventions in different locations and contexts.
- **Risk:** Implemented interventions with significant positive impact within the targeted districts might face implementation challenges during national-wide scale up.
 - o Related threat: Resource allocation, program monitoring and coordination approach used could result in different outcomes.

12. IE MANAGEMENT (E,R)

12.1 EVALUATION TEAM AND MAIN COUNTERPARTS

Table 2. IE Team and Main Counterparts

Name	Role	Organization/Unit
Benedetta Lerva	Principal Investigator (Lead Researcher), Impact Evaluation Task Team Leader (TTL)	DIME, World Bank
Emily Beam	Co-investigator	University of Vermont
Martin Mwale	Co-investigator (PEI Fellow)	DIME, World Bank
Daisy Reboul	Research Assistant	DIME, World Bank
Bryan Mthiko	Field Coordinator	DIME, World Bank
Sebastian Insfran	Research Analyst	DIME, World Bank
Chipo Msowoya	Project TTL	Social Protection and Jobs, World Bank
Massimo Sichinga	Task Team Member	Social Protection and Jobs, World Bank
Hugo Brousset	Task Team Member	Social Protection and Jobs & PEI, World Bank
Susan Kondowe	Operation Manager, Project Manager	Community Savings and Investment Promotion (COMSIP) Cooperative Union

Ernest Jumbe	Livelihood Specialist	COMSIP
Fred Kazombo	Ultra-poor Graduation Specialist	COMSIP
Miriam Saiwa	Enterprise Development Specialist	National Local Government Finance Committee (NLGFC)
Dalitso Kalimba	Deputy Director	Poverty Reduction and Social Protection, Ministry of Finance and Economic Affairs
Bessie Msusa	Deputy Director, Role Overall Policy Coordination	Poverty Reduction and Social Protection, Ministry of Finance and Economic Affairs
Maxwell Moyo	Monitoring and Evaluation Specialist	COMSIP
Blessings Chikoko	Monitoring and Evaluation Specialist	COMSIP
Benjamin Kayala	Monitoring & Evaluation Officer	NLGFC

12.2 WORK PLAN AND DELIVERABLES

Table 3. Milestones, Deliverables, and Estimated Timeline

Milestones	Deliverables	Completion Date
Peer-reviewed Concept Note	Methodology note	September 15, 2023
Data collection plan	TORs Questionnaires Field Procedure Plan Randomized Sample	September 15, 2023
Data collection (Baseline - Experiment 1)	Cleaned data Dictionaries	October 15, 2023
Data collection (Baseline - Experiment 2)	Cleaned data Dictionaries	December 15, 2023
Baseline data analysis	Presentation Data file Do files Baseline report	January 31, 2024
Implementation of intervention aligned to evaluation (Experiment 1 and 2)	Rollout plan Monitoring reports verifying treatment and control status	April 15, 2024
Follow-up data collection plan	TORs Questionnaire Field Procedure Plan	August 15, 2024

Data collection (Midline – Experiment 1)	Cleaned data Dictionaries	October 15, 2024
Data collection (Midline – Experiment 2)	Cleaned data Dictionaries	September 15, 2024
Midline data analysis	Presentation Data file Do files Midline report	March 15, 2025
Data collection (Endline – Experiment 1)	Cleaned data Dictionaries	October 15, 2025
Data collection (Endline – Experiment 2)	Cleaned data Dictionaries	September 15, 2025
Final report and policy notes	Technical note Policy note Data file Do files	March 15, 2026
Dissemination of findings	Presentations	March 31, 2026

12.3 BUDGET

A budget exercise for this study is presented in Table 4. Based on the deliverables and timelines described in the previous subsection, the budget amounts to US\$981K to cover IE activities from January 2023 to March 2026. It is important to note that IE costs for the first six months (January 2023 – June 2023) were covered partially by the PEI seed grant (US\$35K), as well as other funding sources (e.g., DIME TFs, BB, etc.). Assuming that data collections costs will be entirely covered by the project’s operational funds, the budget exercise estimates a funding gap of about US\$315K for the study’s next stages (baseline, intervention monitoring, midline, endline, and dissemination of findings), mostly to cover costs related to the research team time (~US\$250K).

Table 4. Total Budget per Category (in thousands)

Category	Total	Covered	Source (TF, project,...)	Funding Gap
Staff	354	204	Seed grant, BB, TF, TBD	-150
STC (RA, FC,...)	144	48	Seed grant, TBD	-96
Others (IRB, Server,...)	11	5	Seed grant, TBD	-6
Data Collection	392	392	Operation	0
Travel	80	17	Seed grant, TBD	-63
Total	981	666		-315

A detailed budget with breakdown by FY is attached.

13. PLAN FOR USING DATA AND EVIDENCE FROM THE STUDY

This study falls under the broader PEI Impact Collaborative research and policy agenda. As such, Malawi is one of the first studies that will provide relevant evidence related to the scale-up of government-led economic inclusion

programming. The IE and operational teams supporting the SSRLP intervention have already utilized this platform to seek feedback and cross-learn from academics and policy implementers who are part of the PEI network. For instance, the team has presented the impact evaluation design during a workshop organized by PEI in June 2023. In addition, the research team has been directly involved in the drafting of multiple modules included in the standardized PEI quantitative tool that this study (and other similar economic inclusion studies supported by PEI) will implement to conduct household surveys to program's beneficiaries. The IE team plans to keep this tight collaboration with PEI to support its learning and innovation agenda and inform the Impact Collaborative learning priorities with the results coming from this study.

Moreover, the IE team benefits from a strong collaboration with the SSRLP's implementing agency: COMSIP, and other Malawian government agencies involved in this project such as the National Local Government Finance Committee, and the Ministry of Finance and Economic Affairs. The team has been meeting weekly with these government agencies' monitoring and evaluation specialists and project managers for more than six months now. This continuous exchange has led to a smoothly inception of the impact evaluation study, which will soon start baseline data collection activities. Moreover, this collaboration is already improving processes related to COMSIP's administrative data and monitoring activities, as well as procurement processes for technical services, since these have been used as inputs during the study's design and preparation stages. This strong and continuous collaboration should ensure that learnings from this study can be quickly consumed by government and translated into better policy regarding these types of programs.

Finally, as noted in section 12.1, the IE team will provide reports and will plan to present partial and final results to the government and local stakeholders as part of dissemination travel missions after each stage of data collection and analysis.

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APPENDIX