

Measuring the impact and social return on investment of CAMFED's support for women's livelihoods | a proposed approach

Prepared by the London School of Hygiene and Tropical Medicine (LSHTM) for CAMFED and partners.

November 2023

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ABBREVIATIONS/ACRONYMS

BEQ Business entry questionnaire
BTS Business tracking survey
CBA Cost-benefit analysis
CUA Cost-utility analysis

CEA Cost-effectiveness analysis
DBC District Business Committee

EDP Enterprise development programme

GBV Gender-based violence

LSHTM London School of Hygiene and Tropical Medicine

NEET Not in Education, Employment or Training

SSA Sub-Saharan Africa

SDG Sustainable Development Goals
SRH Sexual and reproductive health
SROI Social return on investment

USD United States Dollar WTP Willingness-to-pay

ACKNOWLEDGEMENTS AND FUNDING

The LSHTM team are very grateful to the CAMFED Association members who offered their time and energy to participate in the workshops and to share their stories with us. Many thanks to the CAMFED Tanzania, Zimbabwe and International teams and all stakeholders (young women, government representatives and enterprise development partners) for actively engaging in this co-development process. And, finally, to Catherine Boyce, Lydia Wilbard and Catherine Shimmin from CAMFED who have been partners along this learning journey. Most grateful for your insights, collaboration and time.

LSHTM would like to thank CAMFED and King Philanthropies for supporting this scoping phase.

EXECUTIVE SUMMARY

CAMFED's Enterprise Development (referred to as 'Livelihoods') programme focuses on supporting young women's micro-enterprise growth and is an important component to help reduce household and individual poverty, increase their philanthropy, and support more girls in school. The Livelihoods programme consists of a) a Transition Programme delivered soon after completion of secondary school whereby young women receive careers advice, orientation into the peer support network represented by the CAMFED Association, information on sexual and reproductive health, and guidance on how to set up a small business; and b) a Business Programme that builds on the transition programme. Experienced CAMFED Association entrepreneurs volunteer their time as Business or Agriculture Guides to help women sustain and grow their micro-enterprises. A significant proportion of participants in the Business Programme have completed the Transition Programme. There is rigorous evidence on the impact and cost-effectiveness of CAMFED's education support, and evidence of the positive impact of CAMFED's livelihoods support. CAMFED is keen to build further on this evidence base for the Livelihoods programme using a more rigorous and participatory methodology for evaluation with the inclusion of a comparison group.

As part of a scoping phase (phase 1), CAMFED has engaged the London School of Hygiene and Tropical Medicine (LSHTM) as a research partner to *co-design* an impact and economic evaluation of CAMFED's Livelihoods programme in Tanzania and Zimbabwe. In particular, CAMFED is keen to examine the social return on investment (SROI) of the programme to learn about what is working well and communicate the impact in support of further resource mobilisation, replication and scale. SROI is a type of economic evaluation that measures social, environmental and economic outcomes and uses monetary values in the form of financial proxies to represent them. This enables us to sum, in a single monetary measure all the financial and non-financial benefits arising from an intervention and estimate a ratio of benefits to costs.

This report summarises the findings from the 6-month scoping phase and the proposed multi-year research plan.

Activities for phase 1 have included: a rapid literature review on appropriate methodologies used in impact and economic evaluations of other enterprise interventions; secondary data analysis of programme monitoring data from Tanzania and Zimbabwe collected by CAMFED to demonstrate a preliminary social return on investment (SROI); and participatory workshops with CAMFED partners – including young female entrepreneurs in Tanzania and Zimbabwe – to codesign the methodology, including identifying stakeholders, outcomes and mechanisms of action. Finally, we propose a co-developed plan for a rigorous impact evaluation along with SROI estimation based on the needs of the CAMFED team in Tanzania, Zimbabwe and across the region, as well as other stakeholders interested in learning from CAMFED's livelihoods programmes. Phase 1 is envisioned to be followed by phase 2: a four-year research initiative running from 2024 – 2027 (subject to securing funding).

Specific details of the results of the literature review, process for calculating the preliminary SROI, findings from workshops and our proposed methodology are detailed in the report. Below we highlight key findings:

- CAMFED's business surveys were used to measure the change in the outputs and outcomes experienced by the entrepreneurs and other stakeholders from the livelihoods program. We included two follow-up years for Tanzania and one follow-up year for Zimbabwe in the estimations. The preliminary SROI estimation points to a positive value for money for CAMFED's Livelihoods programme. An average investment of \$142.1 per entrepreneur in Tanzania is estimated to have created \$968.5 per entrepreneur of net present value between 2020 and 2022. That is, every US dollar invested by CAMFED into the Livelihoods programme is estimated to have generated \$6.8 in economic, social, education and health return over a three-year period from the start of the program. Thus, the SROI analysis estimated a ratio of 1:6.8 for Tanzania. Also, the estimation suggests that the additional income for the entrepreneur from higher business profits and their philanthropic support to enable more children to attend school are significant drivers of value for the livelihoods programme in Tanzania. For Zimbabwe, an investment of \$172.1 leads to \$1,328.4 of value per entrepreneur, resulting in an estimated SROI of 1:7.7 over a three-year period. Although not all outcomes that were included for Tanzania were accounted for Zimbabwe, the value that is created by entrepreneurs being able to employ more workers in the community and philanthropic support is substantial.
- There are limitations to this data including a short follow-up period, limited outcomes captured by the data available, lack of a comparison group ('counterfactual), and the fact that the Transition Programme is not explicitly accounted for in the dataset. We believe that a 3-4 year study that uses mixed-methods and a rigorous study design to measure the impact of the programme, and the 'value of the intervention' through the SROI and cost-benefit analysis will contribute to a deep learning about 'what works' to support women's livelihoods and shine a light on CAMFED's breadth of impact on the lives of young women.
- To estimate impact, we propose a quasi-experimental approach for 3-4 years. We would compare outcomes post-school among girls who have received and not received the CAMFED intervention within the same school. The comparison group are girls in CAMFED schools not receiving financial support from CAMFED though we recognise that students in this could receive financial support from community philanthropy. This comparison group will have a similar quality of education and live in the same communities as CAMFED girls. We will track post-school outcomes for the two groups with the intervention group receiving CAMFED's post-school transitions and livelihoods support. We propose evaluations in Tanzania and Zimbabwe. We recognise that resources will only be available for a comparison group study in one country. It will be difficult to ascribe changes in our outcomes of interest to CAMFED without a comparison group. The dual country approach will allow us to evaluate the impact of a similar programme across two different countries and contexts. Transferability of results is important for stakeholders who are potentially interested in scaling-up the model in other contexts. It will also allow us to apply a climate lens to the study in Zimbabwe as the Zimbabwe model includes support for climate adaptation and resilience through CAMFED's Agriculture Guide Programme. To capture the breadth of this multi-component intervention, we propose outcomes across five multiple domains: livelihoods (resources and capabilities); leadership and business skills; subjective wellbeing; empowerment and gender-based violence (GBV); mental health and sexual and reproductive health.

• To calculate the SROI of the Livelihoods programme, we propose including a costing analysis to understand the value of all resources invested in the intervention; and a cost-benefit analysis (CBA) with an exploratory subjective wellbeing valuation approach (CBA+) that facilitate the comparison of those costs with the outcomes obtained from the evaluation. The CBA will aim to assess the SROI for the CAMFED Livelihoods programme. For the CBA, the programme outcomes measured will be translated into a monetary measure that represents the value of the benefits to society.

1. BACKGROUND AND RATIONALE

1.1 Background

Africa has the youngest population in the world, with 70% of the population of sub-Saharan Africa (SSA) under the age of 30. It is projected that for each year between 2015 and 2035, there will be half a million more 15-year-olds than the year before [1]. According to data from the World Bank¹, 2023 is set to be the year when Sub-Saharan Africa will lead the world as the region with a majority of young people, with a projected ~516 million 0-14 year olds. This offers an unprecedented potential opportunity for economic and social development, but only if new generations are educated and fully empowered to realise their potential through opportunities for training and skills development, and appropriate opportunities for accessing productive employment [1] [2].

A subgroup of young people that have been the focus of much attention globally are those considered to be 'not in employment, education or training' (NEET) [3]. Most recent estimates indicate 238 million adolescents aged 15–24 years were NEET (175 million females; 63 million males), of whom 60% (142 million adolescents: 117 million females; 25 million males) lived in multi-burden settings, including SSA [4]. Sustainable Development Goal (SDG) goal 8², target 8.3 has a special focus on substantially reducing the proportion of youth that are NEET by 2020 [5]. This target has now expired, and while progress has been made in high-income countries, the situation of young people categorised as NEET in SSA has worsened over the past ten years. One in five young people (aged 15-24) in SSA were categorised as NEET in 2020, reflecting not only the negative social and economic impact of the COVID-19 pandemic on national economies, but also ongoing weakness in the ability of national economies to create employment [6]. Moreover, young people in employment are often underemployed or in precarious informal work.

Youth who are NEET are considered vulnerable as they face social exclusion and disempowerment, and disproportionately come from marginalised backgrounds, particularly in rural settings [7]. Evidence, particularly from high-income countries on NEET populations have demonstrated strong linkages with poor mental health and substance abuse [7], sexual risk behaviours [8] and gender-based violence [9].

NEET status also appears to be more prevalent and permanent for young women than for young men. Global prevalence of NEET is around three times higher among females (33%) than among males (10%) aged 15–24 years, estimated from 123 countries with available NEET data [4]. A multi-country analysis from Eastern and Southern Africa showed that in most countries younger women in the age group 15 to 19 years are achieving parity in primary education attainment, they are not yet progressing to secondary and higher education or entering the labour market at the same rate as their male peers. Women between the ages of 20 and 24 years have much higher rates of NEET compared to men in the same age group who are more likely to be employed or in education [6]. For young women in particular, early marriage, childbirth and gender norms around the trade-offs of further years of education, as well as gender norms around household roles and the suitability of certain employment for women,

¹ World Bank Data:

² Linked to <u>AGENDA 2063</u>

impacts on both education levels attained and employment [6], [10]. Further young women often withdraw from active labour market participation because of caring and domestic responsibilities.

Gendered responsibilities, unequal gender attitudes and norms may not hinder young women from working, but often result in them working in unpaid family farming and enterprises, further entrenching their NEET status [6], [11]. Evidence has shown that marriage and unpaid work in family agriculture or enterprises are the two factors that have the greatest impact on their increased NEET status [6], [10] There is increasing recognition that changes to NEET status requires continued provision of and access to good quality education and training as a priority, but it needs to be combined with inputs that give young women agency to make choices about marriage and their sexual and reproductive health. This ultimately means expanding opportunities for young women to contribute to their own and their family's financial well-being [12]. Further, evidence also shows that female leadership influences adolescent girls' career aspirations and educational attainment primarily through a role model effect [13]. Therefore, achieving gender equity in determinants of adolescent health and wellbeing requires addressing multiple drivers, including employment, and economic empowerment through strengthened livelihoods, leadership roles, better access to essential health care including contraception and changes in gender norms [14].

1.2 CAMFED (the Campaign for Female Education)

CAMFED is a non-governmental organisation (NGO) that is active in Ghana, Malawi, Tanzania, Zambia and Zimbabwe. CAMFED supports marginalised girls from low-income communities, primarily in rural communities, with economic and social support through school and beyond, into positions where they are financially independent and can potentially influence their communities. Upon school completion, young women who had been supported through school are invited to join the CAMFED Association – which as of 2023 has over 250,000 members - where they support their activism, philanthropy and leadership.

CAMFED Association members volunteer their time as "Guides" to help others at different junctures of their education: to attend and succeed in school and to build a livelihood, primarily through micro-enterprise, after school. CAMFED Association members also support other children to go to school from their own resources - in 2022 they helped more than 820,000 children, including 580,000 girls. This 'philanthropic support' is known as the 'multiplier effect', and CAMFED's evidence base shows that as its alumnae (CAMFED Association members) grow their enterprises and incomes, they increase the number of girls they support in school.

CAMFED's Livelihoods programme focuses on supporting women to transition to secure livelihoods - by growing thriving enterprises, pursuing tertiary education and / or securing employment. It enables women to lift themselves out of poverty, to improve their own lives and those of their families, and to choose to increase their philanthropy and support more girls in school. CAMFED expects the CAMFED Association to grow from 254,000 members at present to over 550,000 members by 2030, with 230,000 of these young women stepping into leadership roles including as "Guides" to help others. CAMFED aims to enable at least 160,000 new women-led enterprises over this period as well as supporting existing CAMFED Association enterprises to "sustain and grow".

CAMFED Enterprise Development ('Livelihoods) Programme

The enterprise development (referred to as 'Livelihoods') programme for CAMFED provides focused support for young women to launch and grow micro-enterprises as well as pursuing other positive career paths. The livelihoods support includes:

- 1. *Transition Programme* delivered soon after completion of secondary school whereby young women receive careers advice, orientation into the peer support network represented by the CAMFED Association, information on sexual and reproductive health, and guidance on how to set up a small business. Seed grants (approximately \$35) may also be provided at this stage and many young women launch small businesses particularly in the retail sector at this stage. Some of these grants have a financial literacy component in terms of building young women's experience of handling money. The Transition Programme includes regular meetings of peer group sessions, delivered by a Transition Guide (a CAMFED alumna; herself a young woman based locally), delivering structured training content over a period of around 6 months. Nearly all participants in the Transition Programme were also previously part of CAMFED's education programme.
- 2 A Business Programme builds on the Transition Programme. In the Business Programme, experienced CAMFED Association entrepreneurs volunteer their time as Business or Agriculture Guides to help women sustain and grow their micro-enterprises. Most participants in the Business Programme have completed the Transition Programme. The Programme includes regular meetings of peer group sessions whereby the Business or Agriculture Guide delivers structured business development content over a period of around 6 12 months. They also provide business mentoring visits to the women's enterprises. Women may also be supported to apply for an interest-free business loan from CAMFED or other providers at this stage.

The support for women's enterprise provided through CAMFED has four pillars which can be summarised as:

- Training and skills through the Transition and Business programme content;
- Sisterhood of support coaching and support by the female Guides who understand the context and gendered barriers to women's enterprise; exposure to female role-models;
- Access to finance in the form of grants or interest-free loans;
- Linkages to business support beyond that provided directly by CAMFED; through the District Business Committees that CAMFED convenes.

CAMFED Selection Process

The text below outlines CAMFED's criteria and process for selecting girls to receive the CAMFED programme. Selection typically takes place to support girls to attend secondary school - and post-school support follows on from support at school. We have therefore described the selection process as it applies to girls needing support to participate in secondary education, as well as the support that is provided to CAMFED clients (beneficiaries) during their secondary education.

Marginalisation: Girls and young women reached by CAMFED are affected by multiple and intersecting dimensions of marginality that can include poverty, geography, gender, disability. CAMFED's approach is based on local definitions of marginality: the process through which girls are identified to receive targeted support draws on a set of criteria grounded in government

definitions of 'vulnerability' and drawn up with and by communities. These cover the social background of girls (e.g., whether she is from a child-headed household, is affected by disability, etc.) as well as her educational status (whether she has dropped out or is at risk of dropping out of school).

Community selection: CAMFED collaborates with education ministries to identify districts and schools with the lowest secondary school completion rates for girls. CAMFED then convenes local stakeholders in committees and implements a transparent process to identify the girls in greatest need and determine the resources required to address the barriers to their attendance and welfare in school.

Financial support: Costs are a major barrier to girls' attendance — not just school fees and levies, but the costs of clothing and sanitary wear to attend school regularly with dignity, and the costs of transportation or accommodation associated with distance. CAMFED provides direct financial support — 'bursaries' — to address these needs for marginalized girls. Bursary packages are designed to be comprehensive, to ensure a full range of girls' needs are met and make class attendance less precarious.

Social and learning support: Girls from poor households often suffer from lack of confidence and low self-esteem and tend to participate at the margins in class. This is compounded by the lack of role models in secondary schools, where there are so few female teachers. Working with young women who had graduated with CAMFED's support, CAMFED launched the Learner Guide programme in 2013 to provide girls with mentoring and learning support. Learner Guides are young women who have succeeded in graduating, who then sign up to volunteer in their local secondary schools to support and accompany other girls through school. Trained Learner Guides provide one-on-one support for the most marginalized girls and deliver a deeper well-being and learning skills curriculum to all students, both girls and boys, called *My Better World*.

Post-School: All girls who complete school with CAMFED's support are invited to join the CAMFED Association (CAMA). Most girls supported by CAMFED in school make the choice to join the CAMFED Association once they complete school. This ranged from 87% (Zimbabwe) - 99% (Tanzania) in 2022. All girls and young women completing school with CAMFED's support and joining the CAMFED Association are invited to participate in the Transition Programme.

Both young women who complete the Transition Programme and older CAMFED Association members who may have completed school before the Transition Programme was available can participate in CAMFED's Business Guide and Agriculture Guide Programmes. The Business Guide Programme is offered across almost all operational districts in Tanzania (32 / 33) and all operational districts in Zimbabwe (29). The Agriculture Guide Programme is being scaled-up. It is currently offered in 17 districts in Zimbabwe, expected to scale to all 29 Zimbabwe districts over the course of 2024 and will be introduced in 12 districts of Tanzania from 2024.

The process of joining the Business and Agriculture Guide Programmes differs in the two countries. In Tanzania women apply to participate in the Business Programme according to selection criteria which include demonstrating they are already running a business. The selection process is managed by District Business Committees in collaboration with the Guides and is designed to be as inclusive and supportive as possible – most applicants are selected onto the Programmes. In Zimbabwe, the Guides themselves manage the process, supported

by the CAMFED Association Cluster Committees. They identify CAMFED Association members locally who can benefit from the programmes and invite them to join.

1.3. Rationale and objectives of scoping study

There is evidence on the impact and cost effectiveness of CAMFED's education support for marginalised girls [15] [16]. There is also evidence of the positive impact of CAMFED's livelihoods support and CAMFED are keen to build on the evidence base using a more rigorous and participatory process for evaluation [17]. The evaluation of CAMFED's Livelihoods programme will draw on previous impact and economic evaluations of youth livelihoods and employment programmes in Africa. However, the nature of CAMFED's programme that has built livelihoods training onto the existing educational support programme makes the evaluation of only the Livelihoods programme more complex.

As part of a scoping phase (phase 1), CAMFED has engaged the London School of Hygiene and Tropical Medicine (LSHTM) as a research partner to co-design an impact and economic evaluation of CAMFED's Livelihoods programme for young women micro-entrepreneurs in Tanzania and Zimbabwe. In the 6-month scoping phase, we have co-developed the methodology and evidence-based hypotheses to evaluate CAMFED's Livelihoods programme. Activities have included: a rapid literature review on appropriate methodologies used in impact and economic evaluations of other enterprise interventions; secondary analysis of data collected by CAMFED as part of its programme monitoring activities; and workshops with CAMFED partners – including young female entrepreneurs in Tanzania and Zimbabwe – to co-design the evaluation.

For the final activity, we have written this report summarising our findings, and have proposed a plan for a rigorous impact and economic evaluation meeting the needs of the CAMFED team in Tanzania, Zimbabwe, and across the region, as well as other stakeholders interested in evaluating and learning from the impact and social return on investment (SROI) of CAMFED's programmes. This phase 1 is envisioned to be followed by phase 2: a three to four-year research initiative running from 2024 – 2027

2. SCOPING STUDY OBJECTIVES

The overall objectives of phase one were to:

- 1. Undertake a rapid review of impact and economic evaluation methodologies for livelihoods programmes and other interventions with consequences in livelihoods and other sectors (e.g., health);
- 2. Analyse existing data collected by CAMFED for Tanzania and Zimbabwe to develop an initial evidence based hypothesis of the SROI of CAMFED's Livelihoods programme;
- 3. Engage with young women and CAMFED staff and stakeholders working directly on the intervention through four workshops in Tanzania and Zimbabwe to co-develop the impact and economic evaluation plan.
- 4. Develop the methodology and suggested approach for both measuring the impact of the CAMFED Livelihoods programme and the value for money, such as the social return on investment (SROI) and cost-benefit of the programme.

Definition of terms

To ensure that definitions are consistent and clear between all stakeholders, below are a few definitions of common terms used in the report.

- Impact evaluation provides evidence about the observed changes or effects, or 'impacts'
 produced by an intervention. These observed changes or 'effectiveness' findings can be
 positive and negative, intended, and unintended, or direct and indirect. An impact evaluation
 establishes the cause of the observed changes and forms the basis of the SROI calculation
 (shown below).
- Economic evaluation is the process of measuring costs and benefits to assess the value for money of an intervention or programme. Social return on investment (SROI) is a type of economic evaluation that measures social, environmental and economic outcomes and uses monetary values in the form of financial proxies to represent them. This enables the researcher to sum, in a single monetary measure, all the financial and non-financial benefits arising from an intervention and estimate a ratio of benefits to costs. For example, a ratio of 1:5 indicates that an investment of £1 delivers £5 of social value. The SROI approach is founded on social accounting and cost-benefit analysis principles (described in further details in section 5.2 below). To calculate the SROI, we need to establish impact of the intervention. Depending on the intervention and the sectors that it has impacts on (economic development, gender, health), a societal perspective is taken to value the intervention.

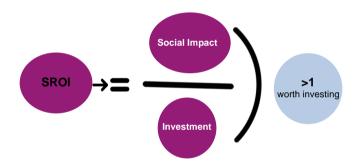


Figure 1: Formula for calculating the SROI.

- Participatory methods refer to a range of activities with a common thread: enabling all stakeholders (youth clients, researchers, community members, activists, government, donors) to play an active and influential part in research that affect their lives. This means that people are not just listened to, but also heard; and that their voices shape outcomes. The importance of local knowledge and experience is paramount, the result is interventions that reflect local realities, often leading to better supported and longer lasting social change.
- Theory of change attempts to explain the process of change experienced by stakeholders because of an intervention, outlining any potential causal linkages.

3. METHODOLOGY OF SCOPING STUDY

Objective 1: Rapid literature review.

We conducted a rapid review to identify recent literature on impact evaluations of entrepreneurship and livelihoods programmes for young women in Sub-Saharan Africa. We also included a particular focus on economic evaluation methodologies for interventions with consequences in the livelihoods and health sector, including SROI, cost-effectiveness analysis (CEA), and cost-benefit analysis (CBA). This review also identified applications of SROI to

entrepreneurship, training, and/or microfinance programs. This review was not systematic, and results from the review help inform this final report.

Objective 2: Analyse secondary data for social return on investment (SROI) hypothesis. We analysed secondary data that was comprised of a set of business surveys conducted by CAMFED from 2020 for Tanzania and 2021 for Zimbabwe with one-year follow-ups in 2021 and 2022. The surveys consist of two separate tools: the Business Entry Questionnaire (BEQ) that serves as the baseline before the entrepreneurs enter the program and the Business Tracking Survey (BTS) as follow-up.

The surveys ask questions on the following areas: personal profile, experience of the business support programme; business details (start dates, product/sector, ownership, employees, cash flow), savings, income, contributions to household spending, health insurance, household food security, business planning and challenges, loans and support services received, decision-making power in businesses and households, and philanthropy. The specific objective for the secondary data analysis was to arrive at an initial understanding of the SROI for CAMFED's enterprise development programme.

Objective 3: Engage young women, CAMFED staff and stakeholders to co-develop methodology.

We conducted four workshops led by the CAMFED Tanzania and Zimbabwe teams to gather feedback on possible evaluation objectives; identify outcomes that are meaningful to different stakeholder groups, particularly the CAMFED women entrepreneurs; and to co-design the final evaluation approach with CAMFED team members in Tanzania, Zimbabwe, and the UK.

Objective 4: Develop and present methodology for 3 year evaluation.

The review, data analysis and information gathered by the workshops informed the design of the evaluation and has been presented as part of a final report. The report provides a suggested approach for an impact and economic evaluation of CAMFED's livelihood programmes on adolescent girls' economic activity, wellbeing and health.

4. RESULTS

This section outlines the results of the different objectives of the scoping phase.

4.1. Rapid literature review

Impact evaluations of similar livelihood interventions

In east and southern Africa, there are examples of interventions with similar objectives as CAMFED, including strengthening educational, economic and social capacities of adolescents through programmes that combine entrepreneurial activities and life skills training. These have been implemented by NGOs or researchers, with some having been rigorously evaluated, while others have not. Most of them make recommendations for scale-up. We have drawn on impact evidence from four similar bundled interventions in SSA with rigorous evaluations (see Table 1). The purpose is to provide some evidence from similar interventions and evaluation methodologies in adolescent young women or women to inform our proposed approach.

Country	Participants	Intervention	Delivery mode/implementation partner/mode	Evaluation study design	Results
Uganda [18]	Adolescent girls (15-24)	Vocational training for income generation + "soft' life skills to build knowledge enabling girls to make informed choices about sex, reproduction, and marriage.	 Delivered from designated 'adolescent development clubs' rather than in schools to reach school dropouts, as well as girls enrolled in school. The evaluation team worked with BRAC, an international NGO to randomly assign clubs in different communities. 	 Cluster randomised controlled design; Representative sample of ~5000 adolescent girls at baseline, midline (2-years post-intervention) and endline (4 years post-intervention). Cost-consequence analysis 	 Positive results on economic and health outcomes; Four years post-intervention, adolescent girls in treated communities were 4.9 percentage points more likely to engage in income-generating activities, corresponding to a 48% increase over baseline levels, and the impact appeared to be driven entirely by their greater engagement in self-employment. Teen pregnancy reduced by a third, and early entry into marriage/cohabitation also decreased [18]. Further, many of the impacts disappeared two years after the programme ended (reductions in forced sex and delayed age at marriage were sustained).
Zambia [19]	Adolescent girls (15-24)	Adolescent Girls Empowerment Program (AGEP) designed to build adolescent girls' social, health and economic assets in the short term and improving sexual behaviour, early marriage, pregnancy, and education in the longer term.	 The two-year intervention included weekly, mentor-led, girls group meetings on health, life skills and financial education. Additional intervention components included a health voucher redeemable for general wellness and reproductive health services and an adolescent-friendly savings account. 	The AGEP evaluation was based on a multi-arm randomised cluster design implemented in ten sites, half urban and half rural, in four provinces in Zambia. Study provinces and the number of sites per province were selected purposefully.	 The intervention had modest, positive impacts on sexual and reproductive health knowledge after two and four years, financial literacy after two years, savings behavior after two and four years, self-efficacy after four years and transactional sex after two and four years. There was no effect of AGEP on the primary education or fertility outcomes, nor on norms regarding gender equity, acceptability of intimate partner violence and HIV knowledge [19]
Northern Uganda [20]	Youth (unemployed adults, men and women)	Youth Opportunities Program (YOP), a government programme in northern Uganda designed to help poor and	The government invited young adults to form groups and prepare proposals for	Individual randomised controlled trial	The programme led to substantial and persistent increases in investment, work, and income. Groups invest grants in

Country	Participants	Intervention	Delivery	Evaluation study design	Results
			mode/implementation partner/mode		
		unemployed adults become self-employed artisans.	how they would use a grant to train in and start independent trades. • Funding was randomly assigned among 535 screened, eligible applicant groups. • Successful proposals received one-time unsupervised grants.	Both treatment and control groups were surveyed two and four years after disbursement.	skills training but most of all in tools and materials. • After four years, groups assigned to grants were more than twice as likely to practice a skilled trade—typically a selfemployed artisan in carpentry, metalworking, tailoring, or hairstyling. • After four years the treatment group had 57% greater capital stocks, 38% higher earnings, and 17% more hours of work than did the control group. • Treatment group members also became more "firm-like" in that they were 40—50% more likely to keep records, register their business, and pay taxes. They also used significantly more unpaid family labour in agriculture and, for every four people treated, a part-time employee was hired and paid. • A third of the applicants were women and the programme had large and sustained effects on them as well. After four years, incomes of treatment women were 73% greater than control women, compared to a 29% gain for men.
Tanzania [21]	Adolescent young women (14-19 years)	Ujana Salama: A Cash Plus model for safe transitions to a healthy and productive adulthood The intervention aimed to facilitate safe transitions to adulthood, simultaneously promoting economic strengthening (e.g., starting a business, engagement in productive activities), health capabilities (e.g., knowledge, HIV testing, access to	Pilot being implemented within the Government of the Republic of Tanzania's Productive Social Safety Net (PSSN) with UNICEF.	 Cluster randomised controlled design; The <i>Ujana Salama</i> pilot was randomised among 130 villages in four districts/councils; In treatment villages (n=65), the plus component was targeted to all adolescents aged 	The study showed impacts on economic activity and entrepreneurial attitudes and aspirations, gender equitable attitudes, delayed age of first sex, increased contraceptive use, reduced experience of sexual violence and improved mental health.

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Country	Participants	Intervention	Delivery mode/implementation partner/mode	Evaluation study design	Results
		health facilities), and protection	•	14 to 19 years living in	
		outcomes (reductions in violence		PSSN households.	
		and exploitation proxied by		 In control villages, 	
		engagement in risky forms of		households continued to	
		transactional sex).		receive the PSSN but did	
				not receive the <i>Ujana</i>	
				Salama "plus"	
				intervention activities,	
				that included 1) livelihood	
				and SRH life skills	
				training; 2) mentoring	
				and asset transfer (80	
				USD); and 3) supply-side	
				strengthening of	
				adolescent-friendly HIV	
				and SRH services and	
				linkages to existing SRH	
				and HIV services for	
				adolescents.	
				To assess programme	
				impacts, three rounds of	
				data collection were	
T.11. 4 F				implemented.	

Table 1: Evidence of livelihood interventions of adolescent girls and young women in Sub-Saharan Africa

Economic evaluation methodologies

The rapid review of economic evaluation methodologies focused on understanding the best approaches to estimating the return on investment of livelihoods-related interventions like CAMFED's. Evidence from high-income countries currently recommends narrow sector-specific perspectives for cost-effectiveness. However, there are circumstances, where sector-specific interventions need to be partially or fully funded by another sector, and/or where it has substantial consequences (costs and benefits) that fall across a range of sectors - economic, health, education, environment and social - that a societal perspective is warranted. In low-and middle- income countries, the interventions with the strongest impacts are those that combine health and social development components to address multiple outcomes in resource-limited settings with high levels of poverty [22].

Our rapid review found that international standards for economic evaluations increasingly reflect the obligation to consider **societal perspectives**, with recent notable studies recommending including both a narrower (provider) perspective and a societal perspective [23]. In general, the United States' Second Panel on Cost-Effectiveness in Health and Medicine recommends that all economic evaluations report an analysis based on a societal perspective that "incorporates all costs and health effects regardless of who incurs the costs and who obtains the effects" [24].

In line with this, Remme et al. [25] compares three approaches for deciding whether a structural intervention to keep adolescent girls in school in Malawi is worth financing – that is the return on investment. Alongside a cost-benefit analysis (CBA) and a disaggregated societal perspective (cost-consequence analysis), the authors propose a co-financing approach where cost-effectiveness analysis (renamed later as Multi-Payer Cost Effectiveness Analyses (MP-CEA) is used to determine how much each sector would be willing to contribute towards the intervention.

Our rapid review, alongside consultations with CAMFED have indicated that the most appropriate approach for the economic evaluation of CAMFED's programme is a CBA as it allows for a societal perspective. We can translate the evaluation results into a straightforward single monetary measure reflecting social return on investment that aligns with CAMFED's overall objectives. In addition, at the end of the project, we are proposing a cost-utility analysis (CUA) in line with the MP-CEA approach given its technical rigour and the health-related outcomes of the programme.

4.2 Findings from the secondary data analysis for SROI hypothesis

An initial evidence-based hypothesis of CAMFED's value for money was estimated following standard Social Return on Investment (SROI) methodology. The following recommended steps were taken to arrive at an initial SROI:

- A. Establish scope and identify stakeholders;
- B. Map outcomes:
- C. Evidence the outcomes and give them a value;
- D. Establish impact;
- E. Calculate the SROI.

This preliminary analysis applied a mixed-methods approach that included key informant interviews and quantitative data analysis. Furthermore, the workshops helped to confirm our results.

Establish scope and identify stakeholders.

Our analysis identified the main stakeholders that were expected to experience benefits (or costs) based on interviews, and a review of CAMFED's documentation, as well as the workshops.

The primary stakeholders were CAMFED Association members that had graduated from the educational programme - i.e. young women. They are the primary recipients of group training sessions and peer support led by the Transition and Business Guides. They are eligible for grants and loans and get referred for business support from industry and government experts. Children were identified as additional stakeholders because CAMFED Association members provide financial and material support for children and young people to go to school, and this is done both on an individual level through personal philanthropy and as a group, pooling resources to support vulnerable children.

The analysis identified other relevant stakeholders expected to receive benefits, but these were not calculated as part of the SROI due to data constraints. These include the families of the entrepreneurs, transition and business guides, business and government linkages and other community members.

Mapping the Outcomes

We drew on CAMFED's livelihoods programme's main objectives to map potential outcomes. We developed a preliminary theory of change map to guide the SROI estimation. The SROI theory of change attempted to explain change as perceived by the entrepreneurs and other stakeholders of the program (as articulated through our workshops presented in section 4.3), rather than present the hypothesis behind programme design. A descriptive theory of change is presented below in Figure 2.

Inputs/Activities **Outputs** ↑ Income More support for household expenditures Transition/ Business Program (food, education, health) training and capacity building **Educational support** Support more girls into school Loans and grants Financial inclusion financial resources, loan management Build their savings and access banking Sisterhood of support Skills and capacities Guides who understand the context Increased business and life skills and gendered barriers to women's enterprise, exposure to female rolevisits, coaching, business and financial advisories **Outcomes Impact** ↑ Employment Jobs for young people in the community Higher educational status ↑ Wellbeing Girls achieve better opportunities through education ↑ Women's empowerment Healthier lives Entrepreneurs and their families have better nutrition and access to health services ↑ Sexual and reproductive health **↓**Early marriage Better status in community /

Figure 2. Theory of Change Map - Enterprise Development Programme

Measuring outcomes

The business surveys collected by CAMFED were used to measure the change in the outputs and outcomes (See Figure 2 above) experienced by the entrepreneurs and other stakeholders from the Enterprise Development program. We included two follow-up years for Tanzania and one follow-up year for Zimbabwe in the estimations. Not all the outcomes (and outputs) identified in the theory of change were selected for calculation that was informed by data availability in the business surveys and included the following in tables 2A and 2B:

confidence / decision making

Table 2A. Outcomes measured in Tanzania.

OUTCOME	INDICATOR	CHANGE YEAR 1
Income	Business profits	\$524
Employment	# of employees	0.1
School support	# of children	1.7
Financial inclusion	% with access to savings	9.6%
Physical Health	% with health insurance	4.1%
Mental Health	% with higher decision making	15%

Table 2B Outcomes measured in Zimbabwe

OUTCOME	INDICATOR	CHANGE YEAR 1
Employment	# of employees	0.7
School support	# of children	2.8
Financial inclusion	% with access to savings	15%

Valuing outcomes

To estimate the value of the change in an outcome, SROI methodology uses financial outcomes as well as financial proxies to assign a financial value to a typically non-financial outcome. Financial proxies are monetary values that have been identified and collected for each outcome. The use of financial proxies allows the analysis to sum – in a single monetary measure – all the financial and non-financial benefits arising from an intervention. It is particularly important to identify a financial proxy for those outcomes in sectors that would not usually have a market price.

We used the following techniques to value the outcomes from Tanzania and Zimbabwe:

- Revealed preferences: this approach was used to develop financial proxies based on market-related prices. It considers how much the entrepreneurs and other stakeholders would be willing to spend to achieve an outcome. For example, better mental health could be valued by the cost savings of treating depression. The market value could be the cost of visiting a mental health professional for depression related conditions.
- Market comparisons: this approach compares market values and derives a value as a result of the change. For example, the difference in potential salaries based on the level of education the children supported by the entrepreneur will attain.

There was no need to use a proxy value for the entrepreneur's income as they are already in monetary terms. It is noted that the SROI analysis used international evidence to give a monetary value to some of the outcomes (e.g., financial inclusion, physical and mental health), and were adjusted to the Tanzania and Zimbabwe settings using a purchasing power parity approach. For the three year research study, these values will be estimated and/or elicited directly from the data collected locally. Tables 3A and 3B shows the proxy values collected for Tanzania and Zimbabwe and their sources.

Table 3A. Outcomes measured and valued through financial proxies in Tanzania

OUTCOME	INDICATOR	PROXY VALUE	Source of proxy value
Income	Business profits	-	
Employment	# of employees	\$761	Average annual income for individuals with primary school education in Dar es Salaam (Nikolov & Jimi, 2018)
School support	# of children	\$147	Yearly difference in income for young women with secondary vs primary school (Nikolov & Jimi, 2018)

Financial inclusion	% with access to savings	\$168	Monetized wellbeing value of being able to save from UK adjusted to TZ (<u>UK Social Value Bank</u> , 2014)
Physical Health	% with health insurance	\$1,571	Monetized wellbeing value of good overall health from UK adjusted to TZ (<u>UK Social Value Bank, 2014</u>)
Mental Health	% with higher decision making	\$1,020	Monetized wellbeing value of high confidence from UK adjusted to TZ (<u>UK Social Value Bank</u> , 2014)

Table 3B. Outcomes measured and valued through financial proxies in Tanzania

OUTCOME	INDICATOR	PROXY VALUE	Source of proxy value
Employment	# of employees	\$1800	Minimum annual salary for Zimbabwe
School support	# of children	\$619	Yearly difference in income for young women with secondary vs primary school based on (Nikolov & Jimi, 2018)
Financial inclusion	% with access to savings	\$144	Monetized wellbeing value of being able to save from UK adjusted to Zimbabwe (<u>UK Social Value Bank, 2014</u>)

Establish Impact

The outcomes provided above refer to the changes experienced by the entrepreneurs or other stakeholders. To understand the overall changes to impact, adjustments are needed to assess what part of these changes are due to CAMFED's Enterprise Development Program, and not due to other external factors. Only those changes that can be attributed directly to the intervention are relevant. Standard SROI methodology recommends removing the proportion of those changes that will not be produced by the intervention, to avoid any over-estimation of social value.

To do so, we adjusted the outcomes by a range of discounting factors:

- Deadweight: measures the percentage of change that would still happen even without the intervention. As deadweight increases, the contribution to the outcome declines.
- Attribution: measures the percentage of change that is not attributable to the intervention and is rather due to other factors.
- *Drop-off:* the decline in the results of a project over time, in other words, how long the results will last for.

The combined percentages of the discounting factors are deducted from the monetized (valued) changes in the outcomes to get the total value created.



For the deadweight, we used sector-specific values following standard SROI practice.

Sector	Year 1	Year 2	Year 3	Source
Training and Employment	15%	30%	45%	
Community and Social	19%	38%	57%	UK Social Value Bank
Health	27%	54%	81%	

The outcomes generated by the livelihoods programme are expected to last for several years. Given CAMFED's holistic approach to economic empowerment it could be safely assumed that changes experienced by the entrepreneurs are potentially sustained in the longer term. However, in order to not over-estimate, the *drop-off* was set at 30% annually following SROI analyses for similar interventions [26], [27]. The drop-off rate was used where no follow-up data was available from the surveys (year three for Tanzania and years two and three for Zimbabwe).

There is no current guidance around the *attribution* for outcomes, and it can't be properly assumed like the other discounting factors. The real attribution (or causal impact) will be obtained from the impact evaluation proposed in this report. For this exercise, to be conservative, the attribution rate was set at 50%.

Project investment

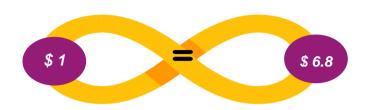
The average cost per entrepreneur trained in the livelihoods programme for Tanzania and Zimbabwe was \$142.1 and \$172.1, respectively. The cost accounted for the business guide programme delivery, grants and loans and loan administration. The transition program costs were not included as the surveys capture data after the start of the business program. A typical loan is around \$200 - \$500 and is interest free. Loan administration was assumed as 15% of loan capital. The loan cost was adjusted according to the percentage of entrepreneurs that received loans according to the samples in the business surveys.

The yearly average cost per entrepreneur was estimated through a five-year costing analysis that modelled the path of an entrepreneur through the livelihoods programme, going through the Transition programme in the first year and moving to the Business Programme in their second year, while receiving other support from CAMFED (business advice, loans and loan management in the following years). For the business and agriculture guides, the costing reflected selection and training, review training, manuals, phone and delivery costs.

Table 4: Yearly average cost per entrepreneur (costs in USD\$)

COMPONENT	AVERAGE COST PER ENTREPENEUR					
	Tanzania	Zimbabwe				
Business Guide	79.1	61.9				
Agriculture Guide	0	38.8				
Loan administration	15.8	18.0				
Loan	47.3	54.0				
TOTAL	\$142.08	\$172.14				





Value creation

The preliminary SROI estimation points to a positive value for money for CAMFED's livelihood programme. An average investment of \$ 142.1 per entrepreneur in Tanzania is estimated to have created \$968.5 per entrepreneur of net present value between 2020 and 2022. That is, every US dollar invested by CAMFED into the livelihoods program is estimated to have generated \$6.8 in economic, social, education and health return over a three-year period from the start of the program. **Thus, the SROI analysis estimated a ratio of 1:6.8 for Tanzania**. Also, the estimation suggests that the additional income for the entrepreneur from higher business profits and their philanthropic support for other students are significant drivers of value for the CAMFED's livelihoods programme in Tanzania.

Likewise, for Zimbabwe, an investment of \$172.1 leads to \$1,328.4 of value per entrepreneur, resulting in an estimated SROI of 1:7.7 over a three-year period. Although not all outcomes that were included for Tanzania were accounted for Zimbabwe, the value that is created by entrepreneurs being able to employ more workers in the community and their philanthropic support to support children in school is substantial.

Table 5: Components of SROI

Tanzania

OUTCOME	Δ MONE	TIZED OUTC		×	DEADWEIGH	т 🗶	ATTRIBUTION	-		IMPACT		SROI
	Y1	Y2	Y3	Y1	Y2	Y3		Y1	Y2	Y3	Present Value	
Income	523.9	735.9	515.1	15%	30%	45%		222.6	257.6	141.7	596.4	4.2
Employment	89.8	22.1	15.5	13%	30/0	43/0		38.2	7.7	4.3	49.4	0.3
Philanthropy	252.2	176.5	123.6	19%	38%	57%	50%	102.1	54.7	26.6	178.4	1.3
Access to Banking	13.0	41.2	28.9	15/0	30/0	31/0	30%	5.3	12.8	6.2	23.1	0.2
Physical health	63.8	44.7	31.3	27%	54%	81%		23.3	10.3	3.0	35.8	0.3
Mental health	95.4	181.4	127.0	2/70	34%	0170		34.8	41.7	12.1	85.5	0.6
Total											968.5	6.8

Zimbabwe

OUTCOME	Δ MONETIZED OUTCOME - inc. Drop- Off			X	DEADWEIGHT	X	ATTRIBUTION	=	II.	ИРАСТ		SROI
	Y1	Y2	Y3	Y1	Y2	Y3		Y1	Y2	Y3	Present Value	
Employment	1,259.8	881.8	617.3	15%	30%	45%		535.4	308.6	169.8	983.3	5.7
Philanthropy	466.0	326.2	228.4	19%	38%	57%	50%	188.7	101.1	49.1	329.6	1.9
Access to Banking	21.8	15.3	10.7	19%				8.8	4.7	2.3	15.4	0.1
Total											1328.4	7.7

It is **important to note**, however, that there are limitations and uncertainty in our findings. First, not all benefits across all stakeholders could be quantified and has likely led to an underestimation of the cost-benefit ratio. On the other hand, we only accounted for financial costs incurred. Excluding broader societal costs, such as volunteer time, may have led to an overestimation of the cost-benefit ratio. Further work is required to understand the potential magnitude of these over and under-estimations. Second, in addition to the monetised outcomes that were measured (i.e., income) we estimated proxy monetary values for other outcomes using data from other settings. Validating such values in Tanzania and Zimbabwe will be important when carrying out SROI estimates in the future round of this work.



Figure 3: Valuing of outcomes by country

4.3 Workshop findings

We used four participatory workshops with CAMFED staff, clients, i.e., young women entrepreneurs and government stakeholders to identify key evaluation components. The collaborative and participatory approach has been a *central* feature in the co-development of the evaluation methodology. The workshops were held in Tanzania and in Zimbabwe over February and April 2023. The workshops helped us identify the outcomes of interest, target audiences for the research, and understand the mechanisms of change for the intervention after consulting with workshop participants.



For the workshops in February, we brought together the different stakeholders (clients, government, CAMFED country staff) to understand the goals, purpose and relevance of the research strategy. Using pictures, drawings, flipcharts and small group sessions, participants reflected on the journey a young woman goes on in setting up and growing a business, the challenges she faces, the support she receives, and the benefits achieved.

Workshop in Dar es Salaam, Tanzania

The second workshops in April built on the results and stakeholder engagement from the February workshops with deeper dives into key outcomes to be measured, audience for research, the questions CAMFED and other stakeholders wish to answer from this research over the next 3-4 years, and the mechanisms of change. In addition to the plenary discussions, there were breakout groups by the type of stakeholder to understand CAMFED's impact by stakeholder group.

Research questions.

The main research questions that we sought to answer during the workshops were:

Table 6: Goals and research questions explored in workshops.

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Goal	Questions							
Outcomes	What is CAMFED's livelihood programme, what benefits does it bring							
	to the entrepreneur?							
	What is wellbeing, or "a good life", among people participating in							
	CAMFED's livelihoods programme?							
Target audience	Who do we want to reach with this evaluation?							
	Why will it be of interest for them?							
	What questions will it help them and us answer?							
Theory of	How does the intervention work?							
change	How do the different components of CAMFED's programme and							
(mechanisms of action)	external resources come together to make change?							

Summary of Tanzania and Zimbabwe workshops.

Provided below is an abbreviated summary of findings from the very rich and wide-ranging discussions in the workshops, aligning with the research questions presented above.

• Identification of outcomes

Across stakeholder groups, there was recognition of the benefits (impact) of the programme on different levels of the social ecology: individual entrepreneur and entrepreneur's business; families; communities and schools, and on employees and customers. The Figure 4 below is

created from the results of the February workshop, when participants were asked 'what does CAMFED create?"

Figure 4: Word cloud from the question "what does CAMFED create?"

Entrepreneur benefits

- Self-reliance, self-esteem, empowerment (mentioned most often)
- · Financial benefits
- Employment

Health benefits

- Nutrition (esp. at household level)
- Sexual and reproductive health (SRH)/delayed marriage

Community benefits

- Benefits to schools, including reduced dropout
- Women's leadership/role models for others



In Tanzania, at the individual level of the entrepreneur, the benefits arose from improved business skills, increased income, perceived increase in their credibility and reputation, improved perceived self-confidence and self-reliance. For the entrepreneur's business, benefits arose from increased income from sales, increased access to markets and improved products or services. The programme also assisted employees and clients by helping to provide either permanent or temporary jobs, increased wages, and improve customer satisfaction. At the household or family level, there was recognition that the programme resulted in an improvement in their standard of living, provision of food (increasing food security) and increased ability to afford school fees to access better schools. At the community level, it helped create jobs for members of the community, and support young women to prevent gender-based violence (GBV) by empowering them with knowledge and confidence and power over life choices e.g., marriage /timing of sex. Through their resources and knowledge entrepreneurs were also able to help others for example by providing pads, imparting entrepreneurial skills and reproductive health knowledge. Further it helped support children to enrol and stay in school through the philanthropy of the women supported and their provision of school-going costs and items such as uniforms and stationery.

In Zimbabwe, at the individual level, benefits to the entrepreneur were identified in areas of personal development, economic empowerment, decision-making power and community recognition. For the entrepreneur's business there were sustained growth prospects for the business, increase in revenues, increase in social networks and increase in business registration. There was also an impact on their employees and customers who could access a variety of goods and services. There was an improvement in women's status in the community and opportunities to access entrepreneurial skills and opportunities. At the

community level, workshop participants reported a reduction in anti-social behaviour and improved food security, as well an improvement in women's status through political participation and representation in different forums, participation of women in male dominated sectors and wider recognition of the importance of sexual and reproductive health. There are also benefits for children and education through improved school attendance and performance - enabled by the philanthropy and volunteering of the entrepreneurs - and associated reduction of early marriage and teenage pregnancy.

• Wellbeing as conceptualised by CAMFED Association members.

CAMFED Association members were asked to describe 'a good life' for a rural successful young woman in the Tanzania context to explore local conceptualisations of wellbeing.

The Business and Learner Guides (working in breakout groups) described a successful woman to be educated, a role model to other women, successful in running her business, and able to employ other women. She is also described as having material resources, such as car ownership, she owns a mobile phone, has a nice house with furniture. She is financially independent, as she can finance her children's education, pay her utility bills and can save money for the future. She has status in the community, as she participates in community activities and plays a decision-making role, eats healthy and nutritious food, and can hold political leadership positions. She is also confident, can take care of her children and can solve problems in society because of her wellness.

Government stakeholders had similar views on this as CAMFED Association members. They described a successful woman as someone who owns businesses, possesses material assets like smartphones, a car, nice clothes and has self-confidence. She can independently meet her basic needs, such as food, shelter and health care. She is also able to participate in a decision-making role in her community.

• Target audience

There was recognition that the stakeholders for this research include:

- CAMFED programme staff in Tanzania, Zimbabwe and across the whole consortium (in Africa and globally) who can understand what is working well and what could be adapted,
- The CAMFED Association member network young women delivering and receiving the programme – to understand drivers of effectiveness,
- Government officials who can consider the relevance of findings for government policy and implementation including potential replication/scaling up opportunities and funding partners interested in the effectiveness and SROI of their investments.

In response to the question on what participants expect to learn from this research, participants in the workshop mentioned that they will learn: how CAMFED Association businesses are progressing, the impact of the Business Guide programme on CAMFED Association entrepreneurs and their communities; business barriers facing female entrepreneurs in local communities, and how to operate businesses in relation to climate change and adversity.

• Research questions

Research questions they would be interested in (not organised by type of stakeholder) are:

o How have the lives of young women changed since the CAMFED intervention?

- How do the outcomes from CAMFED's enterprise development programme compare with other similar programmes?
- What aspects of the programme work and what does not work well? What changes could be made to improve it?
- o What does the programme cost?

There was recognition that the findings will inform stakeholders about the challenges young people are facing with their livelihoods in general, in the planning and in the identification of areas that need further improvement and investments, in budget forecasting and allocation of resources, and will provide valuable insights to help policymakers and business leaders make informed decisions.

• Theory of change (mechanisms of action)

The group was split into six breakout groups and each breakout group focused on one outcome of CAMFED's enterprise programme, as identified during the February workshops. Using role play, the groups collaborated to identify the steps or the journey that the woman entrepreneur has to take to achieve these outcomes with CAMFED's support. The outcomes were:

- Increased business profits and income of the woman
- o Education philanthropy more girls in school
- o Improvements to women's status and empowerment
- Health improvements such as nutrition and access to reproductive health services
- o Financial inclusion / savings etc
- Employment and salaries paid to others
- Food security



A Business Guide explaining the steps (theory of change) towards increasing business profits and women's income

The details of the theory of change exercise in Tanzania for each of these outcomes are included in Appendix 2.

5. PROPOSED METHODOLOGY

The preliminary secondary data analysis to calculate the SROI in Tanzania and Zimbabwe has provided indicative positive evidence of the impact of CAMFED's Livelihoods programme.

There are however limitations to this data including: a short follow-up period, limited outcomes tracked, lack of a comparison group ('counterfactual), and the fact that the Transition Programme is not explicitly accounted for in the dataset.

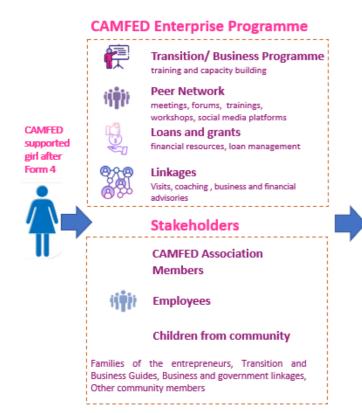
We believe that a three-year study that uses mixed-methods and a rigorous study design to measure the impact of the programme, and the 'value of the intervention' through the SROI and cost-benefit analysis will contribute to a deep learning about 'what works' to support women's micro-enterprise and livelihoods more broadly; and shine a light on CAMFED's breadth of impact on the lives of young women. Our literature review provided examples of a few similar programmes to CAMFED, however context and delivery are key and thus testing in Tanzania and Zimbabwe is essential for making assumptions or recommendations about an expansion of a programme.

The overall research questions for the impact and economic evaluation are:

- To what extent and how does CAMFED's enterprise development programme positively impact young women's participation in education and livelihoods, livelihood skills, health and well-being during the transition to adulthood?
- What is the SROI and cost-benefit analysis of CAMFED's enterprise development programme as it relates to adolescent livelihoods, health and wellbeing?

Please see Figure 6 for the process that we undertook to develop our proposed approach.

Figure 6: Flowchart of process that we undertook for the proposed approach.



Collaborative scoping phase

Collaborative effort with CAMFED Tanzania, Zimbabwe, UK, LSHTM and stakeholders across countries through:

- Weekly team meetings to build shared learning.
- · A rapid literature review.
- The analysis of existing CAMFED data to investigate indicative social return on investment (value for money) of CAMFED's support for women's enterprises.
- Participatory workshops with all stakeholders to develop theory of change, identify outcomes, and reach consensus on definitions and evaluation approach for phase 2.
- Co-developing proposed approach for what we want to measure and how to measure it.
- Preliminary thinking about measuring effectiveness (impact), and value for money or SROI (cost effectiveness) of the CAMFED programme, and the effects on girls and young women on businesses, health and wellbeing.

Impact evaluation

- Effectiveness of intervention on identified outcomes:
- Livelihoods (resources and capabilities)
- Leadership and business abilities
- Subjective well-being
- Empowerment
- Mental health and substance abuse
- Sexual and reproductive health
- Identification of comparison groups (matching)
- Collect data over 3 time points to demonstrate causal impact.

Economic evaluation

- Costing to establish costs of inputs and outputs
- SROI (based on effectiveness data and costing to establish value of the intervention)
- Cost-benefit analysis.

5.1 Impact evaluation

Based on the workshops and consultations with CAMFED, we present our proposed approach to evaluate the impact of CAMFED's programmatic support for women's livelihoods. In both Tanzania and Zimbabwe this includes the Transition Guide and Business Guide programmes; in Zimbabwe, CAMFED also supports an Agricultural Guide programme.

5.1.A Primary study design – assessing impacts of CAMFED on girls' lives.

CAMFED has effects across different components of a young woman's life, including direct impacts on her income, availability of resources, social and economic empowerment and self-esteem, and indirect impacts on her and her family's physical and mental health and well-being. In order to fully capture the multiple effects of the programme, we believe that a rigorous study evaluating the causal impact of CAMFED on different dimensions of a young woman's life is necessary.

Rationale for proposed approach.

As the Transition and Business Guide programmes are delivered mainly to girls who have received existing CAMFED education interventions delivered at individual- and school-level, and because the transition programme is specifically designed for the completing Form 4 age group and cannot be deferred -- given the 'transitional window' for young women -- a randomised or deferred-intervention design is not possible. Further, given the nature of the CAMFED intervention that provides safeguarding support and trainings to schools, stipends and financial support to students during school, followed by enterprise trainings just after Form 4, identifying a suitable counterfactual group of girls not receiving the intervention has been a bit more challenging. However, we have identified a potential suitable option for comparison group selection with benefits and drawbacks.

The proposed option is a quasi-experimental approach to evaluate CAMFED's <u>post-school</u> programming for young women including both the transition programme and business and agricultural guide programmes. We would compare outcomes among girls who have received and not received the CAMFED intervention *within the same school*. The comparison group are girls from CAMFED schools not receiving financial support from CAMFED though we recognise that students in this could receive financial support from community philanthropy. This comparison group will have a similar quality of education and live in the same communities as CAMFED girls.

Justification for dual country approach.

The dual country approach will allow us to evaluate the impact of a similar programme across two different countries and contexts. In particular, local government and economic context shapes CAMFED's activities and outcomes. The transferability of results is particularly important if funders/stakeholders are interested in scaling-up the model in other contexts. It will also allow us to apply a climate lens to the study in Zimbabwe as the Zimbabwe model includes support for climate adaptation and resilience at the level of women's farms and agribusinesses through CAMFED's Agriculture Guide programme. This offers us an interesting opportunity to examine the role of CAMFED in improving climate resilience.

Quantitative study design

We suggest the following designs for each country:

- Tanzania. Quantitative survey at baseline and follow-up over three time points with intervention and comparison group. Alongside the survey, we also propose an embedded in-depth qualitative study with a smaller subset of young women following them over the course of the programme. Our scope of inquiry will allow us to assess whether, and the extent to which, the programme works, but also the 'how' and the mechanisms of how it works within the reality and experiences of the young women's lives in the context.
- **Zimbabwe**. Quantitative survey at baseline and follow up at three time points with no comparison group.

We assume that resource limitations will allow for tracking a comparison group in one country and have prioritised conducting a controlled study in Tanzania as the economic situation in Zimbabwe, including high inflation, make the research context more challenging. While we recognise that resources will only be available for a comparison group study in one country, we note that it will be difficult to ascribe changes in our outcomes of interest to CAMFED without a comparison group.

We will include economic and business questions in the survey above. However, for an indepth understanding of young women's businesses, we also propose a *business-specific cohort design* (without a comparison group) to offer a deep dive into how businesses start up, sustain and grow. This will build on CAMFED's existing business surveys and will collect data on businesses supported by CAMFED on their assets, earnings, number of employees, human or physical capital investments, and other information as needed.

Qualitative and citizen science sub-studies

The qualitative data collection is a vital part of the research strategy to explore in-depth the impacts of CAMFED on girls' lives. Furthermore, we also plan to use qualitative methods to obtain information on operational challenges and experiences, to help draw lessons on how change is realised, and potentially to make programme improvements in the future.

First, we plan to conduct qualitative research (group discussions using participatory research techniques, such as community mapping, drawings, focus group discussions, or in-depth interviews with a subset of young women to explore perceived impacts of the intervention, and the processes of and barriers to change (objective 1). These participants will be selected from those that completed the baseline questionnaire. At follow-up, apart from examining changes that have taken place in young women's lives, we will also explore intervention acceptability and barriers to uptake of the intervention among women. This will contribute to improving the intervention at other sites, as well as understanding issues related to the difficulty of attending the training sessions in the Livelihoods programme.

We also propose embedding a citizen science approach, where CAMFED clients can be trained as researchers to develop research questions and lead research. For example, we can potentially leverage the youth researchers academy

(<u>https://innovations.bmj.com/content/8/3/183.abstract</u>), an LSHTM initiative in Zimbabwe to help engage youth peer researchers to lead on the qualitative interviews. Because the research academy model was developed in Zimbabwe, we would prioritise this location for

the citizen-science component, though if resources were available this could expand to Tanzania.

5.1.B Sample and comparison group selection

Tanzania pre-post with comparison group

In Tanzania we propose a pre-post matched comparison group evaluation design. Girls/young women leaving school at Form 4 and eligible to receive the CAMFED transition programme and the business guide programme will be compared with those leaving the same school but not eligible to receive these programmes.

Because CAMFED bursaries and participation in CAMFED is targeted to vulnerable girls, individual socioeconomic status (SES) and other important factors will be likely to differ between CAMFED bursary recipients and non-recipients. This will confound the effect of the intervention on outcomes. To address confounding by measured covariates, we suggest using propensity score methods, estimating the propensity to receive CAMFED programme using records and baseline data, and stratifying by propensity score to estimate the average treatment effect (ATE) of CAMFED across the whole population, as well as the average treatment effect among girls receiving the CAMFED programme (ATT) [28].

All girls in Form 4 at selected CAMFED schools will be included in the evaluation, with girls not receiving CAMFED bursaries serving as the comparison group. Using CAMFED school attendees as the comparison group has also several logistical benefits: given CAMFED's existing relationships with schools it will likely be easier to obtain education records for students and sensitise participants and their families about the importance of the study. Some drawbacks of this design include compensatory behaviours by non-CAMFED clients because girls in the comparison group will be familiar with CAMFED and may know CAMFED clients, they may be demoralised by not receiving CAMFED support or motivated to change behaviour because they are not receiving treatment. On the other hand, the connections between girls at the same school and within communities could also lead to the 'diffusion' of benefits such as informal sharing of knowledge and advice between the intervention to comparison group. [29]. This will be monitored using qualitative research assessing the motivations of participants in both arms.

5.1.C Data collection and sampling

We suggest three and up to four data collection time points. A baseline survey before the girls sit the form 4 completion exams; a midline survey after the completion of the transition programme (6-7 months after baseline); and an endline survey two years after baseline (post the completion of the business guide programme) A fourth round three years after baseline will aid in the longer term impacts of CAMFED and is recommended if resources are available. Please see <u>Figure 7</u> for schematic on proposed time points for data collection overlayed on the intervention milestones.

We will use the following data sources:

Young woman's survey. The intervention and comparison groups will be interviewed
at each time point. Intervention participants will be identified using CAMFED
administrative records at baseline. We will use community, participant families and
school-based sensitisation to build support for the study at baseline and will collect

- contact information for participants and their families to ensure follow-up is as complete as possible.
- **Linked education records.** Linked records from schools will be used to measure educational achievement prior to Form 4, including Form 2 exams.
- Parent/caregiver survey. Parents or caregivers of study participants will be interviewed at baseline to provide information on household characteristics, including household socioeconomic status and educational attainment of parents or caregiver

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Figure 7: Suggested data collection time-points versus intervention time-points.

Month/Year					Oct '24	Nov'24	Dec '24	Jun-25	July '25	Aug-25	Nov '25	Jan '20	May-26	Nov-26	Nov-27	Dec-27
Secondary School Form	Form 2		Form 3			Form 4 exams										
Approx. age (years)	13	13.5	14	16		17		175					18.5	19	20	
CAMFED - school-level	School-level intervention - life skills educational resources; support from a															
	Learner Guide; teacher mentor training; support for school; parent support															
	groups including re child protection															
CAMFED - individual financial support	Financia	l support	for secon	dary sch	ool atte	ndance										
CAMFED - transition programme								programme -								
							Training in									
							inclusion, o									
							planning, b	usiness								
CAMFED - enterprise programme							skills, SRH			Business	Guide Pro	ogram				
CAMIFED - enterprise programme										Structure		_				
											oth techni					
										business skills and						
										leadership. Also loan						
										support t	to for som	ne				
										participa	ints					
Data collection points - post transition Retrospective educational Baseline (before fo						form 4 exam	ıs)	Midline (after 6 m	onths)			Endline 1	(Endline 2	Disseminatio	
	achieve	ment dat	a (form 2	exam												
NB - the exam for completing form 4 is first week of November																

5.1.D Outcomes

The potential effects of the CAMFED intervention as described by stakeholders are wideranging, from increased individual economic resources through livelihoods, economic and social empowerment and reduced exposure to gender-based violence. To capture the breadth of this multi-component intervention, we suggest that outcomes be measured across five multiple domains, with co-primary outcomes reflecting the goals of CAMFED to support girls to enter employment or education and develop leadership skills (Table 6).

This is not an exhaustive list, and we recognise that there are measures or outcomes in addition to those included here. The primary outcomes have been selected to enable sample size calculations for the evaluation. Further details of measures that will be included in the survey will be determined during the development of the theory of change (please see attached GANTT chart).

Additional survey data will include:

- Household and individual socioeconomic status, educational achievement (through linked education records), and other socio-demographic information;
- Income from businesses, earnings, savings;
- Details on mobile phone availability and mobile phone/social media use;
- Process measures, including attendance at CAMFED trainings, size of grants/loans received, number and types of businesses started.
- We will explore other measures to capture aspects of leadership and business abilities, including outcomes for philanthropy to support children in school financially, volunteering time to serve as Guides, and other civic engagement.

Sample size

For this evaluation, we will measure outcomes among all girls leaving Form 4 in schools receiving CAMFED school-level support and will compare outcomes among girls receiving individual-level CAMFED support. Across all CAMFED partner schools in Tanzania, we estimated a median number of girls leaving Form 4 of 74 (IQR: 45 to 108) and a median number of girls receiving CAMFED per school of 15 (IQR: 11 to 18). For the sample size calculations, we have also assumed inclusion criteria that omit very large or very small schools (for example, >200 or <30 girls leaving Form 4).

We used Monte Carlo simulations to estimate the minimum sample size needed to estimate the effect of the intervention on co-primary outcomes. Our simulations assumed that the effect of the intervention would be modelled using mixed effect logistic or linear models, depending on the distribution of the outcome, and would include adjustment for school as a random effect and household SES and district as a fixed effect. At baseline, in Form 4 of each school, we assumed an arithmetic mean number of CAMFED participants receiving individual-level support of 15 (+/-4 in each school), and mean number of girls leaving Form 4 of 74 (+/-7 in each school). We accounted for 10% loss to follow-up in both CAMFED participants and others by assuming 67 girls (+/-7 in each school) were measured at follow-up per school, of whom 13 (+/-4 in each school) received CAMFED individual-level support.

Because we suggest two co-primary outcomes, we have assessed the power to detect differences in each outcome with alpha=0.05/2. 1000 simulations were run to generate power estimates.

- NEET: With a sample of 20 schools, we have approximately 80% power to detect a 50% decrease in the odds of NEET. This represents a decrease in the proportion of NEET from 15% in the non-participant group to 10% in the CAMFED participant group. Within a sample of 20 schools, we assume 1,480 participants enrolled at baseline, of whom 300 are CAMFED participants.
- Entrepreneurial attitudes: We have over 90% power to detect a 10% increase in entrepreneurial attitudes score, from 2.84 to 3.13. (Entrepreneurial attitudes scores range from 0-4.) This estimate uses the same assumptions as the NEET sample size calculation.

Table 6. Outcome domains and suggested measures <*Note that not all measures are included and will be finalised at project start-up in consultation with national research partners and stakeholders>*

Domain	Suggested primary or secondary outcome measure	Other outcomes and constructs to measure
Primary outcom	nes	
Resources and capabilities	 NEET (not in education, employment, or training). NEET is a standard measure used to understand the school-to-work transition of young people worldwide and is an indicator for SDG 8.3. Standard measures of NEET for Tanzania are generated using the Tanzania Labour Force Survey [30]. We suggest using the standard international definition of employment, which includes at least 1 hour of work in the last week, including both salaried and self-employment. We recognise that most employment generated through CAMFED's model will be informal i.e. entrepreneurship in enterprises that are not yet registered. For this reason, we will use the least restrictive definition of employment. 	 Sub-constructs within NEET: in education/training, in employment, type of employment (formality and sector), hours worked [31] Household food security* (HHFS or HFIAS) [32], [33] Time spent on economic activities, including farming/fishing, paid employment, self-employment, household chores [21] Young women's income, earnings and related measures Individual savings Employment of others/salaries paid.
Leadership and business abilities	Entrepreneurial attitudes. This measures adolescents' entrepreneurial drive using 4 true-false questions: 1. I dislike taking orders from others 2. I am always coming up with new ideas/solutions to problems 3. I am persisting until my plans are fulfilled 4. I am always searching for ways to improve This measure has been used in previous studies in Tanzania and other settings [34].	 Entrepreneurship skills. This measure asks participants to rank their own abilities to conduct 10 activities related to starting and running a business, such as: "obtain credit to start up new business or expand existing business;" "Make sure that your employees get the work done properly (if they have employees);" and "manage financial accounts," [[21][18] Amplify agency scales (self-belief, self-governance, leadership skills and environmental beliefs subscales)**[35] Aspirations, as measured using ideal future employment [21] Civic engagement e.g., volunteering as Guides / other leadership roles Philanthropy for children to stay in school. Decision-making roles

Domain	Suggested primary or secondary outcome measure	Other outcomes and constructs to measure				
Secondary outcomes						
Subjective wellbeing	Subjective well-being*** measures how a respondent feels about her life. A one item measure will be used; "Imagine a ladder where on the bottom, the first step, represents the worst possible life for you and the highest step, the tenth, represents the best possible life for you. On which step of the ladder would you say you are today?" [21][36] Wellbeing measures to consider from University of Oxford Wellbeing Research Centre: https://wellbeing.hmc.ox.ac.uk/research	 Life Engagement Test is a 5-item measure of purpose in life [37] There is not enough purpose in my life To me, the things I do are all worthwhile Most of what I do seems trivial and unimportant to me. I value my activities a lot . I don't care very much about the things I do. I have lots of reasons for living [Note that this would require validation in study settings] We suggest this measure specifically to capture the purposedriven approach of CAMFED's programmes. Resilience (https://www.hsph.harvard.edu/health- 				
Empowerment and GBV	 Girls' social and economic empowerment [38] == power with, power within and power to Financial inclusion and financial decision-making power 	 happiness/repository-of-resilience-measures/) Marital status and age at marriage for married adolescents Experiences of GBV, measured using WHO Violence Against Women Instrument (WHO-VAW) [39] Note: May also be some common themes with Amplify Agency work. Power to choose your own husband may also be relevant 				
Mental health and substance use	Depressive symptoms . CES-D is a 10-item measure of depression symptoms and has been validated for use in study sites [40]	 GAD-7 is a measure of anxiety [41] AUDIT-Y is a measure of alcohol use in youth [42] WHO-ASSIST is a measure of substance use [43] 				
Sexual and reproductive health	Transactional sex will be asked using the question implemented in the Demographic and Health Surveys: "In the past 12 months have you had sex or become sexually involved with someone because they provided you with, or you expected that they would provide you with material support of any kind?" [44] Unmet need for contraception among married and unmarried adolescents.	 Pregnancy before age 18 years HIV testing in past 12 months 				

^{*} Measure at household level using parent/caregiver or household survey

** Validated psychometric tool used by CAMFED in relation to the My Better World programme.

*** Reference: https://www.hsph.harvard.edu/health-happiness/list-of-reviews-that-identify-and-evaluate-subjective-well-being-scales/

5.2 Approach for economic evaluation (SROI and cost-benefit analysis)

5.2.A General approach

Livelihoods interventions, such as this, address a range of domains in an individual's life. Consequently, the outcomes of interest will fall across sectors (economic development, gender, health). Unlike in traditional economic evaluations where outcomes of interest fall neatly within one sector (and are therefore relevant to one payer), assessing the value for money of livelihoods interventions therefore requires a broader approach. A Social Return on Investment (SROI) lens allows for the accounting of social value produced by the intervention regardless of what sector the value falls under.

The preliminary SROI hypothesis described in section 4.2 indicates a positive return on investment for CAMFED's Enterprise Development programme, emphasising economic, educational, philanthropy and health outcomes as drivers of value. Given the positive results and the current data limitations including the short follow up period, limited outcomes and the fact that the transition program is not explicitly accounted for, we believe that a three-year study that encompasses the entire livelihood's program can address the data gaps from the surveys and shine a light on CAMFED's breadth of impact on the livelihoods of young women.

We propose carrying out a range of analyses that will allow us to assess the return on investment of the livelihoods program, including a costing analysis to understand the value of all resources invested in the intervention; and others that facilitate the comparison of those costs with the outcomes obtained from the evaluation.

5.2.B Costing analysis

The costing analysis will aim to capture the value of all resources used to deliver CAMFED's livelihoods programme. We will carry out an economic costing of the intervention, estimating both the development and implementation phases. Costs will be collected from the perspective of the provider (CAMFED and those delivering CAMFED's programme) and will cover both direct intervention delivery, as well as ancillary activities and overheads that facilitate intervention delivery.

We will estimate resource use through a mix of observation, qualitative interviews and record review. Prices will be determined through record review. If goods are donated or subsidised, shadow prices in the study country will be obtained. We will cost all inputs utilised in the intervention including staff, supplies, equipment, vehicles and building space.

Data collection

We will begin our costing data collection by holding focus groups with CAMFED staff to map the intervention and determine the scope, ensuring all relevant activities are captured. As the intervention development took place prior to the proposed study, we will estimate costs largely through qualitative interviews and record review. Intervention development costs will be annuitised to account for different assumptions on the working life of the intervention as estimated by CAMFED staff.

Implementation costs will be estimated through primary data collection (we will embed our questions in the impact evaluation surveys). We will determine staff time use through time and motion studies and surveys. We will carry out three waves of data collection (start, middle and

end of the intervention) to account potential efficiencies in the delivery of the intervention as well as to capture different components.

Cost data will be collected in a highly disaggregated manner in order to facilitate not only the analysis of the existing programme, but also future modelled projections of programme scale-up or implementation in different settings. Costs will be estimated by phase, year, input category, delivery site, activity, and payer. We will calculate a total cost of delivering the interventions in the evaluation sites, as well as a unit cost per beneficiary reached. We will carry out deterministic sensitivity analyses to understand the potential drivers of cost.

5.2.C Return on Investment

We will carry out four separate analyses to understand the Program's Return on Investment including a cost-benefit analysis (CBA) with an exploratory subjective wellbeing valuation approach (CBA+) as the main analysis given its relevance to CAMFED's approach and overall objectives. Other complementary methods will include cost-consequence analysis (CCA) and a cost-utility analysis (CUA). The CCA offers a straightforward comparison of outcomes presented alongside the program's costs. The CUA dives deeper into the economic evaluation of CAMFED's health outcomes, estimating the aggregate health-related effects of the intervention on the entrepreneurs and presenting cost-effectiveness ratios for those outcomes. Please see Appendix 2 for a more detailed description of these complementary analyses.

• Cost-benefit analysis (CBA)

The cost-benefit analysis (CBA) will aim to assess the SROI for the CAMFED Livelihoods programme. For the CBA, the programme outcomes measured will be translated into a monetary measure that represents the value of the benefits to society. The result of the CBA will be provided in the form of a net monetary benefit (NMB) [45] and a benefit to cost ratio.

Some of the outcomes obtained from the impact evaluation and the *business-specific cohort* design (as described in section 5.1.A) will be translated into a monetary measure. See Table 7 below to see the domains with outcomes that are methodologically amenable to a conversion into monetary terms.

- The main (A) economic outcome NEET and employment generation in the community will be valued through direct monetary measurement. The self-employed income of the entrepreneurs and the present wages accrued by the workers will serve as the monetary values.
- For the (B,C) health-specific outcomes in the form of mental (CES-D) and physical health (early pregnancy), Quality Adjusted Life Years (QALYs) gained or Disability Adjusted Life Years (DALYs) averted obtained from the CUA will be valued in monetary terms. The recommended approach is to value individuals' willingness-to-pay (WTP), that is the willingness to exchange income to achieve reductions in mortality and morbidity risk using measures of the value of a statistical life year or statistical case of morbidity. These values reflect an individual's rate of substitution of wealth for a (generally small) increase in life expectancy or quality of life. As commonly done in CBA through a 'benefit transfer' process, estimates of these values will be extrapolated from other contexts where data is available and appropriate. It will involve carefully reviewing the literature to identify high (best) quality studies that are suitable for application in the CAMFED specific context, clearly addressing the implications of related uncertainties and their effects on bias [46][47].

 The monetary values of domains A, B and C will be added together and compared to the cost of delivering the livelihoods intervention to understand the value for money.

• Subjective wellbeing valuation (CBA+)

The rest of the outcomes measured in the impact evaluation (D,E,F) will be valued using more exploratory methods and could potentially be a mix of techniques to elicit willingness-to-pay (WTP). A nascent innovative approach to valuing non-market goods is Subjective Wellbeing (SWB) Valuation. Data on reported (experienced) wellbeing as well as the outcomes of interest will be collected as part of the evaluation at baseline and follow-ups through the *girls' survey* (as described in section 5.1.A). That data will be used to estimate the relationship (functional form) between wellbeing, income and the outcomes. By observing SWB direct monetary measures of welfare change associated with a non-market change can be observed using a direct utility (as measured by SWB) function [48]. The results will then be used to estimate what is called as the *marginal rates of substitution* between each outcome and income, providing the values to monetise the estimated effects of the Program.

The findings from this analysis, in monetary terms, will be added to those from CBA described above to present a broader value for money measure (CBA+).

Table 7: What benefits can we monetise?

Domain	Suggested primary or secondary outcome measure	Other outcomes and constructs to measure	Valuation method and analysis type
Primary outcom			
Livelihoods and material resources	NEET (not in education, employment, or training)	 Sub-constructs within NEET Household food security Time spent on economic activities Young women's income Individual savings Salaries paid to employees as a result of economic activities 	Market Prices (CBA)
Leadership and business abilities	Entrepreneurial attitudes	 Entrepreneurship skills Amplify agency scales Aspirations Civic engagement Philanthropy for children to stay in school Time spent providing services to the community (volunteering) Decision-making roles 	Exploratory methods / Subjective wellbeing valuation (CBA+)
Secondary outo			
Subjective wellbeing	Subjective well-being	Life EngagementResilience	Exploratory methods / Subjective wellbeing valuation (CBA+)

Domain	Suggested primary or secondary outcome measure	Other outcomes and constructs to measure	Valuation method and analysis type
Empowerment and GBV	 Girls' social and economic empowerment Financial inclusion and financial decision-making power 	 Marital status and age at marriage for married adolescents Experiences of GBV, measured using WHO Violence Against Women Instrument 	Exploratory methods / Subjective wellbeing valuation (CBA+)
Mental health and substance use	Depressive symptoms		Value/Benefit Transfer (CBA)
Sexual and reproductive health	Transactional sex Unmet need for contraception	 Pregnancy before age 18 years Family spacing HIV testing in past 12 months 	Value/Benefit transfer using WTP for mortality and morbidity risk reductions using measures of the value of a statistical life year or statistical case of morbidity.

6. RESEARCH TEAM

In building the team we have brought together an interdisciplinary team with expertise in quantitative and quantitative approaches to livelihoods, gender and health research, including social epidemiology, health economics and social sciences from the London School of Hygiene and Tropical Medicine (LSHTM) and CAMFED International, Tanzania and Zimbabwe. The breadth of experience of the research team spans the core competencies required for the project.

The LSHTM team includes: Dr. Meghna Ranganathan (MR), Dr, Sergio Torres-Rueda (STR), Dr. Melissa Neuman (MN) and Mr. Andres Madriz Montero (AMM). MR is an Assistant Professor and Deputy Director of LSHTM's Center for Evaluation with interdisciplinary training in social epidemiology and health economics and policy. She has 15 years of experience in the design, measurement, and evaluation of violence and HIV prevention interventions with a particular focus on cash transfers and livelihood strengthening programmes to address economic drivers of risk. STR is an Assistant Professor in health economics with 12 years of experience in economic analysis and research. He has wide-ranging experience supporting national health planning and priority setting, and leading cost-effectiveness analyses on gender, heath and HIV in a wide range of LMIC countries. MN is an Assistant Professor of epidemiology with over a decade of experience designing and implementing quantitative evaluation studies in sub-Saharan Africa and South Asia. Her research focuses on communitybased interventions to improve health and measuring and addressing the social determinants of health in low-income settings; and AMM is a health economist with relevant experience in economic evaluation of health-related interventions, supporting national health priority setting with an emphasis on costing and cost-effectiveness analysis for a range of African and Latin American countries.

The *CAMFED team* includes staff members with expertise in both monitoring, evaluation, research and learning, and livelihoods programming and delivery in Tanzania, Zimbabwe and the UK. In Tanzania the team includes Festo Mboyo, MEL (Monitoring, Evaluation and

Learning) Manager; Samwel Stanley, MEL Officer; Nelly Fute, Enterprise Development Manager; Anna Sawaki, Director of Programs and Partnership; with oversight by Nasikiwa Duke, National Director, CAMFED Tanzania. In Zimbabwe the team includes Jeffrey Nyandoro, MEL Manager; Simon Choga, Enterprise Development Manager with oversight by Justina Hama, Co-National Director of CAMFED Zimbabwe. Lydia Wilbard, Executive Director: Engagement and Learning; Catherine Boyce, Chief Impact Officer and Catherine Shimmin, Head of MEL, CAMFED International are also core members of the team.

FM is an experienced social scientist with over ten years of experience working with international organisations in research, monitoring and evaluation in health and education sectors. He has a bachelor's degree in Geography and Environmental Studies and a Master's in Project Management. SS is an experienced M&E specialist with 12 years of working with various organisations in the Health, Nutrition and Education sectors. He holds a Bachelor's degree in Computer Science, which is complemented by his attainment of a Master's degree in Monitoring and Evaluation. NF has an MBA in Agribusiness and over 10 years of experience in youth economic empowerment related works in the areas of agrifood, coffee and renewable energy. AS is an experienced advocacy professional with 13 years of experience. She holds a degree in political science and public administration and a Master's degree in mass communications. ND has nearly two decades of experience working on gender issues, including girls' education, women's economic empowerment, health, and leadership. She holds an Advanced Diploma in Banking from the Institute of Finance Management and a Masters in Accounts and Finance from Mzumbe University in Tanzania. She has worked with CAMFED for 12 years in various positions including Director of Programmes and is now the National Director. JN has a BBA in Management and Development Studies and nine years' experience in M&E related work, SC is a development economist with over ten years of experience in community and livelihood development working with vulnerable groups. He holds a Master's degree in Food Security and Sustainable Agriculture and a Bachelor's in Economics. JH has 17 years working experience in the field of monitoring, evaluation and learning. She holds a Master's degree in Biostatistics and Epidemiology as well as an Honors Degree in Statistics. LW is a Public Health specialist and registered Nurse, with over 15 years' experience in development. She is an expert in community, girls' education, women empowerment, entrepreneurship, education and health programming and is a strong advocate for gender equality. She holds a degree from Muhimbili University and a Master's in Public Health from Johns Hopkins University. CB brings over 15 years of experience of co-developing and delivering on CAMFED's enterprise, climate and learning strategies and a MSc in Economic and Social History. CS brings 12 years of experience supporting Monitoring, Evaluation and Learning at CAMFED, an MA in Social Anthropology and an MSc in Public Health.

Further, we are fully committed to engaging with research partners in Tanzania and Zimbabwe and will develop terms of reference to select the appropriate partner and have drawn up a set of criteria. The criteria that we will assess potential partners by are: experience in evaluating mixed-methods trials in Tanzania and conducting longitudinal research in Zimbabwe, experience in livelihoods research and being familiar with the complexities of measuring microenterprise profit and disaggregating household/business income, experience in obtaining local ethical clearance, having strong local contextual knowledge, experience working with international partners, and experience conducting interdisciplinary research.

As a team, we are committed to mutual capacity strengthening both at the individual and institutional level across all partners. Furthermore, we have undertaken a collaborative and participatory approach in the co-design of this evaluation plan. We will continue to build on this by establishing the stakeholder co-development group for the research study. We will also

establish a business-focused advisory group to advise us on the business/enterprise related study activities and questions.

7. LEARNING AND DISSEMINATION

As part of the inception phase, we will develop a dissemination strategy jointly together with all partners. All research products will be jointly co-authored with CAMFED and national research partners and the stakeholder groups. We will maximise the impact of our research findings and support uptake of the results into policy and practice and make sure that all of our work is quality assured through peer-review.

The research will generate two types of outputs: peer-reviewed papers (quantitative and qualitative) based on data from the two study sites (Tanzania and Zimbabwe), costing and cost-benefit analysis papers and multisite synthesis products. We anticipate at least two papers from the baseline data, two-three papers from the midline data collection, and four papers from the endline in each country. There may be other opportunities for analyses for publication from the data that are not mentioned at this stage.

Developing and sharing key messages with the range of stakeholders at each stage is essential to deepen interest and engagement with a view to impact. Apart from peer-reviewed articles, we will also disseminate the findings through multiple platforms of in-person communication, evidence briefs, webinars and conferences. Research findings will be supplemented by stories of change in the lives of beneficiaries. We will include a public engagement component to include community feedback.

8. ETHICS

All research will be designed and proceed in compliance with the London School of Hygiene and Tropical Medicine's ethics committee and national ethics committees in Tanzania and Zimbabwe. The work will also be undertaken in line with CAMFED's Child Protection Policy and ethical standards. The study protocols and procedures will be informed generally by human subjects' research ethics frameworks for research involving adults, and specifically by ethical considerations in researching sensitive issues with young people, including ethical and safety recommendations for domestic violence research with women [49]. The 'do no harm' principle will guide all our decisions and we will ensure to always put participants' wellbeing and safety first. All members of the team will be trained and certified in human subjects' research ethics. All research will be conducted with informed consent and most research participants will be adolescents and young adults. Where we conduct research with adolescents (under 18) we will gain parental consent and adolescent assent unless this is not possible. Informed consent, assent, and comprehension evaluation processes will be completed prior to each participant engaging in data collection. Potential participants and adolescent participants' parents or caregivers will be given multiple opportunities to ask questions throughout the consent/assent process. We will exclude participants who do not demonstrate the capacity to give full consent or assent.

Assessing and mitigating participants' risks throughout data collection will be a high priority for the study team. Our research participants may experience psychological distress and we will ask about this in the questionnaire. All our sites will build partnerships with counselling services in local community based organisations, and we will provide information to all participants on the availability of these facilities. Participants who report feeling unsafe and at risk of imminent violence will be referred where appropriate through established referral networks including health, psychosocial, legal aid, shelter and other services for adults and adolescents. Referrals will be made in line with LSHTM, CAMFED and national partners' Safeguarding Policies and Procedures – and in cooperation with existing child protection

referral network providers, including the police and local authorities, employing confidentiality procedures to protect the privacy and rights of participants.

If a participant has a concern about any aspect of the study, they may discuss this with the researchers and may withdraw at any time. If a participant remains unhappy and wants to make a formal complaint, they can contact the local ethics committees. Insurance policy covering research participants will also be in place, and participants may make a claim for financial compensation if issues arise. All participants will be reimbursed for their time spent in participating in research activities. We will reimburse direct costs (e.g., transport) and provide refreshments.

9. WORKPLAN/TIMELINE

Please refer to the attached excel sheet (CAMFED Gantt chart) for a draft workplan for the four year study.

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APPENDICES

APPENDIX 1: Attendance from stakeholders in Tanzania and Zimbabwe

The attendees of the Tanzania workshops were CAMFED Staff and different stakeholders supporting the Livelihoods programme. In April 2023 these were: sixteen (16) CAMFED Association members, two (2) CAMFED Staff from Zimbabwe, two (2) CAMFED International Staff, three (3) researchers from LSHTM, two (2) participants from Small Industries Development Organization (SIDO), three (3) trade officers who are members of District Business Committees (DBCs), two (2) from Tanzania Local Government Authority (LGA) and seven (7) CAMFED Tanzania Staff.

In May 2023, in Zimbabwe, the 22 participants included the following stakeholders: CAMFED National Office facilitators (6), CAMFED district staff (2), District Business Committees (4), CAMFED Association Business Guides (3), Transition Guides (1), Agricultural Guides (3), and Learner Guides (3).

APPENDIX 2: Theory of change for each outcome in Tanzania

The group was split into six breakout groups and each breakout group focused on one outcome of CAMFED's enterprise programme, as identified during the February workshops:

- Breakout Group 1-Increased business profits and income of the woman.
- Breakout Group 2- Education philanthropy more girls in school.
- Breakout Group 3- Improvements to women's status and empowerment
- Breakout Group 4- Health improvements such as nutrition and access to reproductive health.
- Breakout Group 5- Financial inclusion / savings etc.
- Breakout Group 6- Employment and salaries paid to others.

Common themes that emerged from the breakout groups were that the ability to start-up and grow a thriving business was a critical stepping stone to achieving these wider set of outcomes or benefits.



Participants of the workshop during breakout sessions (CAMFED Tanzania)

Breakout Group 1-Increased business profits and income of the women

This breakout group had a task to show a step by step journey to the point a woman increases her business income and profits. So, the discussion was centred to look at different factors contributing to increased business profits and income of the woman in the society, achieved through CAMFED's enterprise programme. Insights shared are summarised below:

- i. Business Guide Programme: The program supports CAMA entrepreneurs to run their businesses professionally.
- ii. Capital: The idea was expressed that the higher the capital invested into the business the higher the profit and vice versa.
- iii. Business education: When an entrepreneur has knowledge and skills of running a certain business that will result in high income and profits.
- iv. Market surveys: Market surveys conducted by entrepreneurs will determine the critical success factors in that market and hence high profits.
- v. Business registration: When business is registered it can operate with freedom hence high income and profits.
- vi. Use of technologies in the business operations: Technologies add value to business services/products hence high income.
- vii. Business loans (CAMFED, local government authorities, Family members): Loans are used to start and expand businesses hence higher income.
- viii. Family support through (Capitals, loans, mentorship) is important.
- ix. CAMFED Association (CAMA) network: CAMFED Association network can support fellow CAMFED Association entrepreneurs in capacity building and can also be a market to CAMFED Association businesses' products.
- x. Political declarations and policy changes can impact the context for doing business.

- xi. Land ownership: When women are allowed to own the land it will lead to their business flourishment and hence high income.
- xii. Tradition values and norms: some traditional practices are supportive and others are non-supportive to women's businesses.
- xiii. Tax: When a business is registered it will be paying tax to the government and comply with government's regulations to operate freely.

Breakout Group 2- Education philanthropy - more girls in school

This group sat and drew a woman's journey to the point she can be able to send more girls to schools as a philanthropist. The journey looks as shown in the bullet points below:

- i. Having a source of income through a business was seen as an enabler to being a philanthropist: Education and Capital: For women to be able to support young girls in school they should have business education and capital to run their business successfully.
- ii. Income: If the business runs smoothly then an entrepreneur will get disposable income
- iii. Spirit of supporting others: Philanthropy is coming from someone's heart and readiness to give back to her community.
- iv. Motivation: There should be a self-motivation to support others
- v. School business projects: Parent supporting groups in schools can start business projects which will earn them income to support giving back to their community.
- vi. Society contribution to send many girls to schools: Society can play a major role in supporting girls in schools as long as its members are well off.
- vii. Spirit of volunteering in society is important
- viii. Networking is important
- ix. Employment is another means to earn an income and support yourself and others

Breakout Group 3- Improvements to women's status and empowerment

The points below shows key "ingredients "for supporting women's empowerment and status / respect in the community:

- i. Purpose: Having a goal of what one needs to achieve in life and how they will reach that goal.
- ii. One's determination to put in the effort and achieve their goals.
- iii. Having a thriving business was seen as an enabler, In turn this required:
 - a. Education/skills: Need to be educated and be able to analyse business opportunities and risks that are coming up with setting new businesses.
 - b. Surveys/Information: Research on business information and opportunities.
 - c. Capital: This is like a fuel in starting a successful business
 - d. Starting business operations: Successful women in business are much more respected than the ones who are dependent on their husbands/male partners.
 - e. Growth plan through: Customer service, perseverance in business, business registration
- iv. Livelihood: being able to accommodate education, health, meals and shelter a self-sufficient household is more respected than the opposite.
- v. To support the community: A successful woman can support other people in their community as long as they are financially okay themselves.
- vi. Participation in community agenda: Successful women (those who can meet their basic needs, provide for their families and have established stable income) are often involved in the decision making process of their community compared to those who are not successful.
- vii. Being a role model: Successful women exemplify good practices to their fellow sisters.

Breakout Group 4 - Health improvements such as nutrition and access to reproductive health

In order to improve women's health in the society the following seemed to be the factors to consider in that journey:

- i. Mind-set shift of CAMFED Association (young women) Entrepreneurs: Educated women know new ways of protecting their health contrary to the women who are not educated.
- ii. Readiness to seek health information and the proper use of dispensaries.
- iii. With an income from enterprise women can afford health insurance costs for herself and her family (including children).
- iv. Increased options on the type of food to eat: The successful women know the importance of the balanced diet and can afford nutritious foods
- v. To be able to use technology to get health information: Knowledgeable women are ICT savvy.

Breakout Group 5- Financial inclusion / savings etc

For a woman to be able to have a disposable income which will allow her to save using existing financial services in her community the following steps need to be taken to materialize the end results:

- i. A young woman who is ready with a decision to be making savings. Being a CAMFED Association member participating in enterprise programs like CAMFED's Transitions and Business Guide programme enables her to acquire knowledge on the importance of savings.
- i. Education/Skills: Business and Financial education can support a young woman to start a business and thereby acquire an income that can be saved.
- ii. Business ideas: The young business woman needs to have unique business ideas for them to be able to start a business and save part of the income she generates.
- iii. Capital: Capital can be obtained from employment, grants, loans or allowances and help with income generation from enterprise
- iv. Business: An entrepreneur starts a business that can be an agri or no agri-business.
- v. Market: She should study her market in areas of products, competition, prices, customers
- vi. Income/profit and financial inclusion: When a business women gets profits from business then she can be able to apply for a national identification card letter etc which is important for accessing financial services
- vii. Financial services: The documents above can support this woman to open bank accounts from nearby branches or get financial services from SACCOs, VICOBA, Mobile Money Agents etc.
- viii. Saving: Having the income and all the necessary documents can facilitate a woman to practice saving her income.

Breakout Group 6- Employment and salaries paid to others

Women can employ and pay salaries to others if they are financially independent resulting from their engagement in income generating activities as follows:

- i. Education/Skills: For a woman to be able to employ others she should have business skills gained from various training hence needs for training support arises.
- ii. Business ideas: She also needs expert advisor and trainings
- iii. Capital: She needs to have capital which she can get from employment, grants, loans or allowances
- iv. Business operations: For a business to prosper she needs to analyse the place, price, product, promotion (4Ps).
- v. Business growth: If business operations go well then there will rise a need to employ others to support the expansion.

vi. Employment creation: the entrepreneur needs to think about interview, verification, on job training.

APPENDIX 3: Synopsis of other economic evaluation methodologies

We propose conducting five analyses: 1) a costing analysis to understand the value of all resources invested in the intervention 2) a cost-consequence analysis (CCA) in which costs will be presented alongside all outcomes available; 3) a cost-utility analysis (CUA) where we will hone in on physical and mental health outcomes; 4) a cost-benefit analysis (CBA) where we will quantify the financial return on investment of outcomes where a financial benefit can be estimated; 5) a subjective wellbeing valuation approach to estimate, in an exploratory manner, the range of financial benefits from other outcomes and integrated to the results from the cost-benefit analysis (CBA+).

We have included a summary of the costing and cost—benefit analysis. Provided below is a description of the other analyses that we can conduct with this data.

Cost-consequence analysis (CCA)

Cost-consequence analyses are a form of economic evaluation that present the costs and effects in a disaggregated manner. A list of outcomes is compiled and presented alongside costs. CCA is recommended for the evaluation of complex interventions, and it allows the reader to form their own opinions on the relative importance and policy relevance of different outcomes.

Cost-utility analysis (CUA)

A cost-utility analysis will be conducted to estimate the aggregate multiple effects of the intervention on the beneficiaries. The impact evaluation will inform on a range of physical and mental health outcomes, such as depression, anxiety and sexual and reproductive health. We will use these data to calculate disability adjusted life years (DALYs) averted. Validated DALY weights from the peer-reviewed literature will be used to value morbidity. Alternatively, health utility could also be assessed through the estimation of quality-adjusted life years (QALYs) gained. We can explore the use of existing and validated descriptive systems, such as the EQ-5D-3L or the CHU9D, incorporating data collection into the impact evaluation.

Incremental cost-effectiveness ratios (ICERs) will be calculated and compared against a range of country-specific cost-effectiveness thresholds to understand how the value for money of CAMFED's Livelihoods fares *within* the health sector. Deterministic and probabilistic sensitivity will be carried out to characterise and measure uncertainty.