UNHCR
United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés

BASELINE EVALUATION OF

THE IKEA FOUNDATION LIVELIHOODS AND ENERGY PROJECTS AMONG SOMALI REFUGEES AND HOSTS IN MELKADIDA (ETHIOPIA)

PHASE 3 BASELINE REPORT

FINAL

JUNE 2020

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Commissioned by:
UNHCR Melkadida

TANGO INTERNATIONAL
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ACKNOWLEDGEMENTS

This report was prepared by Maryada Vallet and Dr. Victoria Brown of TANGO International. This study would not have been possible without TANGO's data collection partner, Green Professional Service, including: Zenagebril Degu (Manager), Solomon Bizualem Brhane (Team Leader), Anteneh Eshete (Survey Supervisor), Abdulfetah Mohammed and Mustafa Mohamed (Qualitative Researchers), along with the hard work of the local field team. The report also benefited from inputs by Tommaso Russo (TANGO Research Assistant/Analyst).

The evaluation team would like to acknowledge the assistance received from colleagues at UNHCR Melkadida whose time and thoughtful reflections helped make the evaluation possible, in particular Dejan Tanaskovic, Giulia Naboni, Saboor Atrafi, and Diana Benato. The country office and sub-office facilitated the travel permissions, field visits, and interviews, providing crucial support for which TANGO is very grateful, in particular to Michael Sanderson, Adelina Gomez, Mohammed Abdi Ali, Yinebeb Seyoum Kebede, and Abubakarr Talib Jalloh (Head of Sub-Office), among others. We would also like to thank the valuable input received from many other stakeholders including ARRA zonal and camp staff, refugee and camp leaders, and partner organisations in the Melkadida camps. Robert Nyambaka, UNHCR Ethiopia Senior Livelihoods Officer, also provided important country-wide input. We would like to acknowledge the inputs and facilitation provided by UNHCR Geneva and Regional Bureau, from: Christine Fu, Senior Evaluation Officer; Anna Korneeva, Private Sector Partnerships Officer; and Anna Gaunt, Senior Regional Livelihoods Officer. Finally, we would especially like to thank the project participants who were generous with their time and provided the evaluation team important insight into their experiences in Melkadida.

Photo credit: TANGO/GPS

Acronyms

AGD	Age, Gender, and Diversity
ARRA	Administration for Refugee & Returnee Affairs
CAHW	Community Animal Health Worker
CL	Cooperative Leader
CRRF	Comprehensive Refugee Response Framework
ETB	Ethiopian Birr (currency)
FAO	Food and Agriculture Organisation
FCS	Food Consumption Score
GPS	Green Professional Service
GoE	Government of Ethiopia
GPS	Green Professional Service
HFIAS	Household Food Insecurity and Access Scale
IP	Implementing Partner
JWG	Joint Working Group
KII	Key Informant Interview
KPI	Key Performance Indicators
GoE	Government of Ethiopia
MFI	Micro-Finance Institutions
NCRRS	National Comprehensive Refugee Response Strategy
NGO	Non-Governmental Organisation
PoC	People/Persons of Concern
RSC	Refugee Studies Centre (Oxford University)
SGBV	Sexual and Gender Based Violence
TANGO	Technical Assistance to Non-Governmental Organizations International
UNHCR	United Nations High Commission on Refugees
WHO	World Health Organisation

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Evaluation information at a glance	
Title of the evaluation:	Evaluation of the Ikea Foundation Livelihoods and Energy Projects among Somali Refugees and Host Communities in Ethiopia
Timeframe covered:	2014-2018 (some variation by country)
Expected duration:	November 2019 – February 2020 (mid-term early 2021 and endline 2022)
Type of evaluation:	Evaluation of Livelihoods, Self-Reliance and Energy Projects being implemented in the Somali Region of Ethiopia (Decentralised theory-based Evaluation)
Population covered:	Refugee cooperative members of livelihoods and energy projects in the five Melkadida camps: Melkadida, Kobe, Bokolmanyo, Helaweyn, Buramino
Evaluation commissioned by:	UNHCR Melkadida, with support by UNHCR Evaluation Service
Evaluation manager / contact in UNHCR:	Dejan Tanaskovic and Giulia Naboni, Evaluation Coordinators (Melkadida) Christine Fu, Senior Evaluation Officer (HQ)

Note: This baseline report is intentionally short in length in order to highlight key results **as a starting point** for Phase 3 of IKEA Foundation investments and as a usable quick-reference document for the sub-office team.

Word Cloud: Cooperative Leader Interviews on Self-Reliance

Executive Summary

Purpose and Overview:

- The **purpose** of this baseline performance evaluation is to establish a benchmark early in Phase 3 (2019-2022) of IKEA Foundation's energy and livelihood investment from which to evaluate both the results of participation in UNHCR-supported cooperatives, as well as the functionality, and future viability and expansion, of the cooperatives. It is called 'baseline' because the continued investment has shifted focus during this phase on cooperative formalisation and capacity building.
- The Livelihood Project provides business development support to all cooperatives, including energy; included in this study are **40 total cooperatives**. It will rely on the previous phases' investments that have built hard assets in the five camps: Melkadida, Kobe, Bokolmanyo, Heleweyn, Buramino. The five types of agricultural cooperatives (i.e., farming and livestock-related) include: Milk, Meat-selling, Livestock traders, Community Animal Health Workers (CAHW), and farming/agriculture. The three types of energy-related cooperatives are Solar, Firewood, and the one new Cookstoves, which begins production in 2020.
- This baseline performance evaluation was independently conducted by Technical Assistance to Non-Governmental Organizations (TANGO) International and local partner Green Professional Service, employing a **mixed-methods design**. Refugee survey **quantitative** data collected by the Oxford Refugee Studies Centre (RSC) impact evaluation in November 2019 are used, including 424 members of Farming and Meat-selling cooperatives (186 male/238 female). To create a more complete baseline dataset, TANGO extended the survey to include a census of eight energy cooperatives (Firewood, Solar, Cookstove) comprised of 149 active refugee members (47 male/102 female). TANGO collected primary **qualitative** data comprised of 38 Cooperative Capacity Assessments through semi-structured cooperative leader interviews; and key informant interviews with four implementing partner (IP) staff. The desk review included over 80 project documents and related literature. The key evaluation questions for the evaluation series relate to the relevance and responsiveness of project design and implementation, the effectiveness of the projects, and the factors contributing to results.

Key Results and Conclusions at Baseline:

- Agricultural:[1] **Meat-selling and Farming cooperatives** are wealthier in terms of owning high value assets (large livestock). Most Meat-selling and Farming members perceive they are better off in terms of financial stability, physical security, and confidence compared to their previous work arrangements, which is not surprising as these cooperatives have existed for longer. Their co-op income appears to be modest, yet actual data for this variable is not available from the Oxford RSC dataset nor from UNHCR's local and global sources of monitoring data. Many Farming and Meat-selling members are accessing formal financial services for credit and savings. These cooperatives report below-camp-average access to household electricity, and very few members report receiving skills trainings since arriving to the camps. Female members of Farming cooperatives are most likely to bring their older children to their farm site, which could pose child protection concerns that UNHCR and partners should follow up.
- **Firewood cooperative** households are more vulnerable overall and report less household income and more consumptive debt, and the members (who are majority female) tend to have less aspirations for the future and more experiences of physical disability or depression as compared to

[1] Reanalysis of Oxford RSC data; see full Oxford RSC report for further detail regarding their survey analysis and findings.

the other co-op members. Firewood member households are particularly vulnerable to instances of food insecurity. Most Firewood members earned nothing from their co-op work at the time of the baseline and do not feel their co-op income is worth their time, as the Firewood co-ops have stalled production in the past year due to cost and access issues related to their Prosopis supply and broken equipment. Thus, the project has its work cut out for them to address these challenges in the next phase: i.e., ensuring all members are adequately trained, addressing the working status of equipment and availability of tools, assessing Prosopis supply and how to increase demand. The Firewood members have clearly felt the protection benefits of the cooperative, as it provides more safety (for the members and their children) in their work. The evaluation team finds the project has promoted AGD considerations in the member selection to ensure women and vulnerable households had the opportunity to participate, particularly in Firewood cooperatives; however, that approach has an impact on the effectiveness of the cooperative. To include vulnerable refugees in a livelihood project warrants a longer, integrated and tailored investment is needed to bolster basic employment and job-readiness capacities before they can contribute successfully.

- The **Solar cooperative** members are mostly male and more likely to have some education, and their households tend to have fewer elderly or members with vulnerabilities. The Solar cooperatives' work is providing some monthly income for members, yet, it has not yet provided more perceived financial stability compared to the members' previous work, nor is it equivalent to the median of what other working refugees earn. Thus, over two-thirds of Solar members question if the income earned is worth their time. Yet, there are various non-income reported benefits for them. Many Solar members are accessing formal financial services for savings and have a high rate of savings, which they use for productive inputs. Most Solar households have access to household electricity, which has improved their children's education outcomes. The members report more safety and less violence in their communities as a result of their work. The main area for improvement facing the cooperative is strengthening their abilities to source and purchase their own inputs and materials, and to do effective marketing that will increase their business income.
- The **Cookstove cooperative** consists of just 10 members, split with male (6) and female (4) refugee members, but with the small sample size the baseline results should only be interpreted generally. The cooperative has been in the formation and training stage during 2019. The members have high aspirations for their economic future, already perceiving benefits from the cooperative in terms of their confidence and safety. The members also appear to have benefited from the Energy Project with high levels of access to household electricity, which they report improves their children's educational outcomes. As they begin production in the next phase, one of the main challenges to address is creating sufficient demand and market linkages for their product.
- General feelings of **security** and **social cohesion** are reported across cooperative types. However, there is a pattern of energy members (Firewood, Solar, Cookstove) reporting more experiences of violence and less access to health care, which should be explored through project monitoring. Firewood and Cookstove members perceive that members face less SGBV as a result of their membership. The energy cooperative members also report reduced conflict among refugee members and between refugees and hosts who are cooperative members.
- General **achievements/member resilience capacities at baseline** to build on:
    - While debt is largely for food consumption, there are promising levels of savings (formal and informal) reported by members across the cooperatives.
    - Despite some member households facing instances of food insecurity throughout a month's time, most report acceptable levels of food consumption.

- Resilience analysis indicates that the member households that are more food secure tend to have more household assets, savings, social capital with the host community, and human capital by way of physical health. Notably, these variables are all part of **adaptive capacity**, that is, the ability to make proactive and informed choices about one's livelihood strategies even when faced with shocks and stressors; the baseline results show that many of these variables are being strengthened among the participants of this UNHCR project.

- From the **Cooperative Capacity Assessment**, the cooperative leaders report the co-ops are highly developed in their social cohesion and concern for community development. Cooperative capacity is least developed around market and value chain linkages. Further, most cooperatives lack financial management systems, business planning, and strategic planning for sustainability, among other basic administrative procedures. Most cooperative leaders estimate they need 2-3 more years to become self-reliant, citing market linkages, increased savings and access to capital, and more intensive business guidance and training, including for the management committees, as key elements for which they need adequate partner support.
- According to partners, the next phase will build on the mindset shift that was developed among members in the previous phase toward market-based livelihoods and self-reliance. The ability of cooperatives to recruit and retain motivated and productive members is critical for the coming years. IP report that what they need from UNHCR to better support the cooperatives is increased staff numbers and capacity, in particular, capacity which matches the cooperative business-building aims of the next phase. The evaluation team finds that the IP offering technical support in past phases may not be the best fit for the business support needed in Phase 3.

Recommendations for Phase 3: (may be adjusted through decisions of Joint Working Group, JWG)

1. **Identify/support the right partner(s) to boost cooperative capacity in business planning and systems, and to ensure the backbone of business data is available**; this may need to include an alternative partner approach that ensures adequate business development expertise and sustainability of services, and also should involve local government cooperative agencies. Who: UNHCR Melkadida (Project Management with Senior Leaders), with JWG support; Timing: begin search by June 2020 and onboard by January 2021.
2. **Assess business viability,** particularly for Firewood and Cookstoves, and provide vulnerable members with the integrated support needed. Viable cooperatives need to **ramp up market and value chain linkages**. Who: UNHCR Melkadida (Energy Project with Senior Leaders), with JWG support; Timing: issues to be addressed June-December 2020.
3. **Sustainability planning tailored by cooperative should be a priority early in this phase,** for both cooperatives and partners. Who: UNHCR Melkadida (Project Management with partners); Timing: ongoing through June 2021.
4. **Enhance monitoring of livelihood project outcomes** through business development partner and through supplemental qualitative monitoring of indirect outcomes and key elements of cooperative capacity building (guided by the indicators of the Cooperative Capacity Assessment). Who: UNHCR Melkadida (Project Management with partners); Timing: develop and begin new monitoring plan by end of June 2021.

Ongoing consideration: UNHCR Melkadida's current livelihood strategy extends through 2021; thus, the operation should ensure the strategy revision (and role in livelihoods) is aligned with the new/forthcoming UNHCR global strategy on Livelihoods and Economic Inclusion. This will be followed up in more detail in the mid-term and endline evaluations.

PURPOSE AND OVERVIEW

Study Objectives

Purpose of the baseline: To establish a starting benchmark for Phase 3 of IKEA Foundation investments. The purpose of this baseline performance evaluation is to establish a benchmark early in the Phase 3 (2019-2022) of IKEA Foundation's energy and livelihood investment from which to evaluate both the results of participation in United Nations High Commission on Refugees (UNHCR)-supported cooperatives, as well as the functionality, and future viability and expansion, of the cooperatives. The evaluation is called a 'baseline' because the continued investment has shifted focus during this phase on cooperative formalisation and capacity building. To be able to measure key changes in refugee cooperative members' income and well-being at the end of Phase 3, it is critical to have a quality baseline dataset.

Technical Assistance to Non-Governmental Organizations (TANGO) International is an independent consultant firm hired to conduct the series of baseline, mid-term (process), and endline (performance) evaluations for Phase 3. Since 2018, TANGO has conducted 10 decentralised livelihood programme evaluations across UNHCR operations, as well as the centralised Evaluation of UNHCR's Livelihoods Strategies and Approaches[2] that has contributed to UNHCR's new global livelihood strategy—The Global Agenda for Economic Inclusion.

The key evaluation questions (KEQ) for this series of performance evaluations will be based on three evaluation criteria, listed below. These KEQ guide the discussion for the Conclusions section of this report.

KEQ on **relevance and responsiveness** of design and programming modalities:

- To what extent has design, targeting, implementation, and monitoring of the livelihood and energy interventions in Melkadida/Dollo Ado been relevant and appropriate in supporting UNHCR's self-reliance and protection-centred approach, which also considers age, gender, and diversity (AGD)?

KEQ on **effectiveness** of implementation**:**

- To what extent have livelihood and energy investments made by UNHCR and its partners contributed to improving the socio-economic status of the target population, their self-sufficiency, and increased empowerment of women?

[2] TANGO International (2018).

- To what extent have results been achieved at a sufficient scale to induce broader level changes within communities, also considering AGD dimensions (e.g. in the increased development of economy, education outcomes, and safety)?

KEQ on **contributions** to results:

- Why and how have the livelihood and energy interventions in Melkadida/Dollo Ado produced the observed results (e.g., partner capacity, internal and external factors)? What could be done differently to improve the expected results, and what could be done differently to improve results considering the AGD dimensions?
  - What **resilience capacities** of beneficiaries and cooperatives/communities contributed to the outcomes for beneficiary households?

Background

Context overview: The Somali Region of Ethiopia has a well-established history of assisting and hosting people of concern (PoC) with the most recent major influx dating back to 2009 when protracted crises and drought resulted in Somalis seeking refuge in the Dollo Ado and Bokolmanyo woredas. Initially two camps were opened in 2009, Bokolmanyo and Melkadida. With the continued arrival of refugees due to increased conflict and drought across the region, three additional camps were opened by the end of 2012: Kobe, Hilaweyn, and Buramino. The total number of Somali refugees in Ethiopia (including Somali region's Melkadida and Jijiga camps) represents 26 percent of the current overall refugee population of the country.[3]

There are some continued arrivals to Melkadida and the population is often fluctuating, as many move back and forth from Somalia; the current refugee population for Melkadida stands around 161,000 (approximately 53 percent female; 35 percent adults of working age, 18-59 years). See the Box to the right with total Melkadida camp populations. The refugees are primarily agro-pastoralist and a majority are Mai Mai speakers from the Rahanweyn clan, with a smaller population of Mahatiri speakers from the Maheren clan, among other Somali clans. All camps are located within close proximity to the Somali border, ranging from as far as 88Km (Bokolmanyo) and as close as 25Km (Buramino).

Melkadida camp populations as of April 2020

- Melkadida Camp: 34,572 refugees
- Hilaweyn Camp: 35,593 refugees
- Kobe Camp: 30,667 refugees
- Buramino Camp: 33,259 refugees
- Bokolmanyo Camp: 26,713 refugees

Source: UNHCR (2020).

The Melkadida project area is located in an arid and harsh environment that is increasingly affected by climate change. In the Somali Region communities of Ethiopia, increased human health problems and disease outbreaks are linked to higher temperatures, increases in barren land, increased dust and wind, and scarcity in drinking water.[4] Chronic and recurrent drought in the region is a constant threat to pastoralist livelihoods and provokes food insecurity for local communities.[5]

In terms of important national context, in November 2017 and in response to the Global Compact on Refugees, the Government of Ethiopia (GoE) supported by UNHCR and other humanitarian and development actors, adopted a new strategy that works within the Comprehensive Refugee Response Framework (CRRF) to provide improved living conditions for both refugee and host communities across the country.[6] The GoE National Comprehensive Refugee Response Strategy (NCRRS) includes nine pledges to comprehensively

[3] UNHCR (2019a).
[4] Riché B, et a. (2009).
[5] Gerth-Niculescu, M. (2019).
[6] UNHCR Ethiopia (2018b).

respond to refugee needs including work permits, expansion of out-of-camp policies, increased access to education for refugee children, increased access to irrigable land and basic services, among others. Significantly, the Strategy includes the GoE's vision that all refugees and host communities become socio-economically active and self-reliant by 2027, and commits to changing the primary assistance model from refugee camps towards development-oriented settlements over a 10-year period. The Administration for Refugee & Returnee Affairs (ARRA) is the GoE agency leading in the protection of refugees and overall coordination of refugee assistance interventions in Ethiopia.

Project background: The IKEA Foundation livelihood and energy projects are continuing the investments in the Dollo Ado region that began in 2011 with the emergency created by protracted conflict and famine in the Horn of Africa. During Phase 1 (2012-2014), the focus was provision of basic services and life-saving assistance. Following the first phase, UNHCR and IKEA Foundation recognised the need for a broader approach for the long-term care of refugees. The goal of Phase 2 (2015-2018) was to provide the conditions necessary for refugees to lift themselves out of poverty, decrease dependency on aid, and strengthen self-reliance. The projects included livelihood, education, energy and environment, nutrition, water, and shelter strategies. Phase 3 will continue with a focus on two main areas: energy and livelihoods, with linkages between the two, including refugees and host communities across the five camps: Melkadida, Kobe, Bokolmanyo, Heleweyn, Buramino.

The **impact goal** of the Livelihood Project is: Somali refugees and their host communities in Dollo Ado and Bokolmanyo have improved their livelihoods and self-reliance. The project provides business development support to all cooperatives, including energy. It will rely on the previous phases' investments that have built hard assets in the five camps. In this phase, it will continue to improve cooperative business development and management, to develop value chains, increase production and improve production bases, and engage private sector. The **five types** of agricultural cooperatives (i.e., farming and livestock-related) include: milk, meat, livestock traders, and community animal health workers (CAHW), for which there is one of each type per camp, and farming/agriculture (at least one per camp, except for none in Bokolmanyo). The **three types** of energy-related cooperatives are solar and firewood (one of each type per camp), and cookstoves (Melkadida only). There is a **total of 40** of these agricultural and energy cooperatives, which is the sample frame for this evaluation.[7]

The key performance indicators (KPI) for the 2019-2021 livelihood project are provided in Annex 3, with all indicators to be measured by the sub-office team twice per year through livelihood monitoring surveys.[8] The main livelihood outcomes include:

- Self and wage **employment** are increased in the agriculture, livestock and enterprise sectors
- **Incomes** from agriculture, livestock, and services sectors increased
- Business activity through access to **financial services** is bolstered.
- Business management and technical **skills** in agriculture, livestock, and services sectors are enhanced.
- **Food security** of households are strengthened

The Energy and Environment Project, which is part of the larger livelihood strategy, aims to facilitate economic development through improved energy access and business development.[9] This phase is building on the "hardware" interventions since 2015, which included the distribution of solar lanterns, cookstoves, and solar home systems (but no longer part of the IKEA Foundation project), and the installation of solar

[7] There are currently 47 cooperatives total, but this includes gum/incense and construction cooperatives, which were not included in this study per agreement with the UNHCR sub-office.
[8] UNHCR Ethiopia (Melkadida) (2019a).
[9] UNHCR Ethiopia (Melkadida) (2019b).

street lights and mini-grids. Other humanitarian organisations in the area are also engaged in the distribution of energy-related hardware in coordination with the UNHCR Energy Unit and other energy stakeholders. The international non-governmental organisations (INGO) DRC and ZOA, for example, have provided training support to the cooperatives and sharing of good practices with the project implementing partners.

Following the initial investments of the previous phase, the focus of this project phase is to strengthen the "software" components of the energy sector. The project is comprised of two main strategies: 1) scaling up the photovoltaic/solar technology, while improving the quality of service and maintenance and enhancing livelihoods in the energy sector (e.g., through cooperatives); and 2) establishing, optimising, and scaling the local production of cookstoves by leveraging the available workforce and material, improving refugee household's energy consumption of different products (including Prosopis firewood briquettes), and linking the cooperative concept with the market. The draft evaluation plan for the 2019-2021 Energy Project lists outcomes and KPI at the community/cooperative and individual levels, of which, the indicators that are captured in this performance evaluation series are described in an evaluation matrix table in Annex 3.

This report continues as follows: A summary of methods and study limitations is provided next. The baseline findings of the quantitative survey are then presented, framed around an outline of the livelihood and energy project outcomes described above, along with brief analysis of the member resilience capacities. This is followed by baseline findings from the qualitative study on cooperative capacity and partner capacity to support cooperatives on their path toward self-reliance. The report concludes with conclusions on programming implications and recommendations for Phase 3.

Summary of Methods

This baseline performance evaluation was independently conducted by TANGO, employing a mixed-methods design with concurrent primary quantitative and qualitative data collection. As this is a summary of methods, please refer to the Inception Report for a full description of methodology, analysis, and quality assurance mechanisms.

Quantitative methods: The survey included 567 refugee cooperative members as a merged dataset (see Methods Box). Refugee survey quantitative data collected by the Oxford Refugee Studies Centre (RSC) impact evaluation in November 2019 are used,[10] including 418 refugee cooperative members of Farming and Meat-selling cooperatives. The sampling method aimed for a census of all active refugee members of the selected co-ops.

Methods

This baseline evaluation used a mixed-methods approach.

Quantitative study:

- Refugee survey conducted in all five camps (total n=567), including:
  - 418 members of Farming and Meat-selling cooperatives (183 male/235 female) by Oxford RSC;
  - 149 members of Solar, Firewood, and Cookstove cooperatives (50 male/99 female) by TANGO

Qualitative study:

- Primary data collected through 38 Cooperative Leader interviews; and KII with 4 IP staff
- Desk review of over 80 documents

To supplement the Oxford RSC data and create a more complete baseline dataset, TANGO was hired to extend the quantitative survey to energy cooperatives. The TANGO sampling included a census of eight energy cooperatives comprised of 149 active refugee members verified by

[10] Background to the impact evaluation per the Oxford RSC draft report: Between June and December 2019, the Refugee Studies Centre, at the University of Oxford, undertook a retrospective evaluation of the impact of the programmes in Dollo Ado supported by the IKEA Foundation. The evaluation covered the years 2012-2019 and five main areas: 1) the impact on the refugees and hosts; 2) enabling and inhibiting factors; 3) likelihood of the work being sustained; 4) the impact on refugee policy and practice; and 5) what needs to happen in future in order to maximise the benefits of the investment.

the field team;[11] the response rate of active members was 99 percent. The field team verified active membership by gaining consensus among members at each co-op site of the revised members list, and these revised numbers were then shared and agreed with UNHCR. TANGO sought to use the same methodology and questionnaire as Oxford RSC in order to build a coherent and consistent merged dataset; this includes using the same sampling strategies, core survey modules, and indicator calculation methods, yet, it involved various limitations, which are discussed below. As the questionnaire was previously pretested and used, another pretesting with beneficiaries was not conducted.

The main difference in the cooperative sample selection between Oxford RSC and TANGO is that RSC only selected registered cooperatives. For TANGO's sample, and in consultation with UNHCR, instead of selecting the two registered Firewood cooperatives for the sample, one registered/one unregistered were selected considering the challenges these co-ops have faced and to capture baseline information that reflects the range of functioning across the Firewood cooperatives. These represent two of five Firewood cooperatives that exist, as the baseline budget limited the team from selecting all five.[12] Still, this strategy is coherent with the sampling strategy of the Farming cooperatives in which four of the eight total Farming co-ops were included in the sample. In all, due to the large size of both the Farming and Firewood cooperatives (approximately 60-80 refugee members each) and limited study budget, a selection of cooperatives was made; whereas for the other cooperative types with much smaller member numbers (Solar and Meat-selling), all cooperatives were included in the sample. Additionally, the Cookstove cooperative is not registered, but was added to the baseline sample because it is a new cooperative that will begin operation during the third phase. Table 1 shows the final merged baseline sample.

Table 1. Baseline sample by cooperative type, camp, and gender of member at baseline

	Firewood		Solar		Cookstove		Meat-selling		Farming		Total		
Camp	male	female	male	female	male	female	male	female	male	female	male	female	Total
Bokolmanyo			6	2			7	33			13	35	48
Melkadida			6	1	6	4		43	34	18	46	66	112
Kobe/Kole	9	43	7	1			24	38	65*	49*	105	131	236
Hilaweyn			4	2			4	17	46	18	54	37	91
Buramino	4	44	8	2			3	19			15	65	80
Total	**13**	**87**	**31**	**8**	**6**	**4**	**38**	**150**	**145**	**85**	**233**	**334**	**567**

*Kobe and Kole are two separate Farming cooperatives both operating near Kobe Camp.

Qualitative methods: To avoid repetition with the Oxford RSC extensive qualitative data collection (see RSC report), the added value of this baseline qualitative component was the focus on interviews with cooperative leadership. To assess cooperative capacity, interviews were conducted with refugee cooperative leaders of nearly every cooperative (38 completed out of 40 total, 45 percent female[13]), which included a 60-point capacity rubric along with semi-structured discussion. Four key informant interviews (KII) with implementing partner (IP) staff of three local NGO[14] further provided qualitative data on IP and UNHCR capacity to support the cooperatives. Finally, over 80 project documents provided by UNHCR were reviewed for background and relevant secondary data.

[11] The original cooperative lists provided by UNHCR for the eight co-ops selected totaled 208 members, but for the Firewood cooperatives in particular, the number of actual active members was much lower.
[12] TANGO's baseline contract included a quantitative sample of n=100 (an estimate provided by UNHCR during the proposal phase), which was expanded within the budget up to <200 by limiting the scope of the qualitative component.
[13] The 38 Cooperative Capacity Assessment interviews represented: 42 co-op leaders (23 male/19 female), all refugees expect for one interview in which the one refugee on the management committee was not available.
[14] Save the Environment Ethiopia (SEE); Women and Pastoralist Youth Development Organisation (WaPYDO); and Century Pastoralist Development Association (CPDA)

Data collection and analysis: The data were collected by TANGO's local research partner, Green Professional Service (GPS). A TANGO mixed-methods specialist traveled to Addis Ababa in February 2020 for orientation and training with the GPS team leader, survey supervisor, and qualitative researchers; thereafter TANGO provided remote support and quality assurance oversight through regular email, phone and text communications with GPS during the data collection. GPS proceeded to Melkadida, hired and trained a local team of refugee and host enumerators and interpreters to complete the baseline team, which was gender-balanced and utilised local enumerators with experience from the recent RSC study. The survey team collected questionnaire data on tablets using Open Data Kit (ODK), and the data were uploaded to a secure TANGO server when the field team had access to internet at the sub-office. The data collection took place from 26 February-8 March 2020 across the five camps. Following the completion of data collection, a debriefing session was held between the GPS field team and UNHCR Melkadida sub-office staff and leadership.

TANGO senior researchers conducted the data quality checks, cleaning, and analysis. The survey results presented in this report are primarily descriptive in nature, conducted using STATA 13 statistical software. TANGO analysed the Cooperative Capacity Assessment interviews using a matrix approach. The preliminary findings brief and draft report integrated comments and feedback from UNHCR stakeholders.

Limitations/constraints: The scope of the evaluation and time in the field were determined by resources available, as noted above, as well as timing constraints and coordination with other planned surveys (to avoid survey fatigue). As agreed with UNHCR, no further 'agricultural/livestock-related' co-ops were surveyed, so this baseline was limited to what was collected by the Oxford RSC study comprised of Meat-selling and Farming, and to the survey strategies of that data, posing the following constraints:

1) Oxford RSC selected the most well-functioning of agricultural/livestock co-ops to show progress made in the last phase. Thus, the amount of change at endline for those cooperatives may be minimal, while there will be no quantitative performance evaluation data for the other types of relate co-ops (e.g., CAHW, Milk, Livestock Traders). It also selected the Farming co-ops that were the most similar in key characteristics (e.g., in exposure to shocks, years of existence), which may not be representative of all.

2) The quantitative data will not represent the beneficiary host community members. The Oxford RSC sampling did not include host community members, and the TANGO data collection sought to align with RSC's sampling strategies. This is, indeed, a significant gap for the quantitative data considering the importance of host community inclusion for UNHCR. However, TANGO will seek to include host community qualitative data collection in the future mid-term and final evaluations.

3) The TANGO questionnaire could not be dramatically altered or improved in order to remain mergeable with the Oxford RSC dataset; and 4) there is no Farming/Meat-selling cooperative income data from RSC, only estimated household income (see further discussion of this limitation in Annex 5). The dataset is also missing the number and types of trainings received by members of the Meat-selling co-ops due to a coding error present during RSC's data collection, and there is no co-op training data for Farming.

The other important limitation to the data is the sample for the Cookstove cooperative (10 members) is too small to draw meaningful conclusions from the values at baseline—the reader should keep this in mind when interpreting results by cooperative type. **It is also important to note -** the Cookstove cooperative had not started production at the time of the survey and was the newest of all cooperatives included in the survey. In 2019, the Cookstove cooperative was establishing their business and undergoing training.

KEY RESULTS AT BASELINE

Baseline Findings (Quantitative Survey)

See Annex 2 for additional tables of baseline results from the quantitative survey.

Demographics and Enabling Environment

Demographics and Household Characteristics

The average age of the refugee cooperative member is 40.5 years, and two-thirds are female (66 percent). Their education levels are low: 89 percent have less than one year or no formal education. The average household size of the cooperative members interviewed is 7.9 (range: 5.6-8.3), including 5.4 children. There are some differences in the demographic profile of members by cooperative type (Table 2). For example, most members of the Firewood[15] and Meat-selling cooperatives are female, and most Solar and Farming members are male. The one Cookstove cooperative that has started is fairly even with male and female members. Farming members are 63 percent male and older on average.

Table 2. Demographic profile of members and their households, by cooperative

		Firewood	Solar	Cookstove	Meat-selling	Farming
Member		Most (87%) members are female	80% are male with some education	Membership is split male (6) & female (4)	Most (80%) members are female	63% male, and older on average (44 years)
Household (HH)		2 adults (1 elderly), 6 children[1]	2 adults, 4 children	2 adults (1 elderly), 2+ children	3 adults (1 elderly), 5 children	3 adults (1 elderly), 5+ children
	School-aged children in school	99%	89%	100%	92%	93%
	HH head has >1 year primary edu.	14%	62%	50%	20%	18%
	HH with >1 member with vulnerability[2]	32%	10%	23%	25%	20%

[1] Average number of household members is rounded for the infographic.
[2] Vulnerabilities include: physical handicap, visual impairment, hearing impairment, sick person, mental illness/disability, single mother, or orphan.

[15] The Energy Project determines a minimum number of female participants, which is part of the selection criteria for new cooperatives and mandatory for any trainings conducted. Source: email correspondence with the project team.

The Solar member households tend to have fewer elderly or members with vulnerabilities, and 62 percent have a household head with at least one year of formal education; the respondent is also more likely to have some education, which was a requirement of the original membership criteria according to project documents.[16] The **Firewood member households stand out as more vulnerable**, with slightly more dependents (children and elderly) to care for and more members with vulnerabilities. Nearly all school-aged children (99-100 percent) of Firewood and Cookstove households are currently attending school according to the members. This reported attendance of members' children is higher than the overall attendance rate reported by UNHCR of 88 percent (primary school) and 82 percent (secondary).[17]

Household Economy

Table 3 shows a summary of the respondents' household economic status at baseline. The median monthly household income, which is the income reported for all household members including the respondent, ranges from 500 ETB for Firewood member households to 2400 ETB/month for Cookstove households (please note the limitation on Cookstove estimates for a small sample). **Overall, members across cooperatives report much higher household expenditures than income**, which may show the extent households are relying on remittances or clan support, informal lending/trading, and debt to bridge that gap, and/or the unreliability of self-reported income data for this population (see income discussion in Annex 5). While household and livestock assets combined show Solar and Cookstove members with a larger number of owned assets, it should be noted the asset score is not weighted by actual asset value; whereas, **more Meat-selling and Farming member households own valuable animals such as cattle, donkeys, and shoats** (see Table 17, Annex 2). The loans/savings results in this table are discussed later under livelihood outcomes.

Table 3. Respondent and household economic indicators, by cooperative

	Firewood	Solar	Cookstove	Meat-selling	Farming
Median monthly **household income (ETB)**[1]	500.00	1000.00	2400.00	1200.00	1000.00
Median monthly **household expenditures (ETB)**	2911.60	3865.02	3090.90	2834.93	2296.81
Average of count of types of **major assets** owned (0-26)	6.0	9.0	8.0	6.0	6.0
Percent of respondents with a **loan**	80.0	56.4	40.0	19.7	5.2
Percent of respondents with **savings**	13.0	48.7	20.0	30.9	13.5
N (sample size)	*100*	*39*	*10*	*188*	*230*

[1] This indicator was calculated differently for the TANGO data (energy cooperatives) and Oxford RSC (Meat-selling, Farming). See Annex 5.

Wellbeing and Aspirations

Physical and mental health: A glimpse of members' physical health and functioning was gathered based on six questions borrowed from the World Health Organisation Disability Assessment Schedule (WHODAS 2.0).[18] Out of 24 possible points, and with a higher number indicating more disability, the cooperative members' mean disability score was low overall; it ranged from 3.2 (Meat-selling) to 5.3 (Firewood). In addition, **nearly one-quarter of Firewood cooperative members may have moderate to severe depression,** according to the depression assessment included in the survey.[19]

[16] According to Oxford RSC: When members were chosen for the Solar cooperatives in 2017, ARRA and the Refugee Central Committees (RCC) selected individuals based on having mathematical knowledge and basic technical competency with electrical systems, and all were male until UNHCR urged for the addition of several female members. Source: Betts, A., et al. (2020).
[17] Online indicators portal (app.powerbi.com) shared by UNHCR Melkadida in April 2020: Education – 2019 Attendance Rate.
[18] WHODAS 2.0 was developed as a single generic instrument for assessing health status and disability across different cultures and settings. Source: WHO (2018). It should be noted that the WHODAS 2.0 typically includes both a 12-item and 36-item version, so this score does not represent the full assessment. The questions were included in the Oxford RSC survey as one of various measures used to match the control group.
[19] The Patient Health Questionnaire (PHQ-9) is a nine-item depression scale of the PHQ. It is a validated self-report tool in mental health to assist clinicians with diagnosing depression and monitoring treatment response. Source: Kroenke, K. et al. (2001).

Aspirations: The survey captured information on the aspirational ideas of members. Aspirations are an important resilience capacity because belief in changed and/or improved future circumstances contributes to people's recovery from shocks and their confidence to adapt. The psychosocial measure of aspirations is considered an element of subjective resilience that influences future-oriented behaviours.[20] In this survey, there is a set of questions on aspirations and satisfaction with one's life. In one key question, the members were asked if they believe their economic situation will be better next year compared to now. Most members of every cooperative agreed that their households will be better off in the next year (Figure 1). **The lowest rate of agreement with this aspiration is with the Firewood members.**

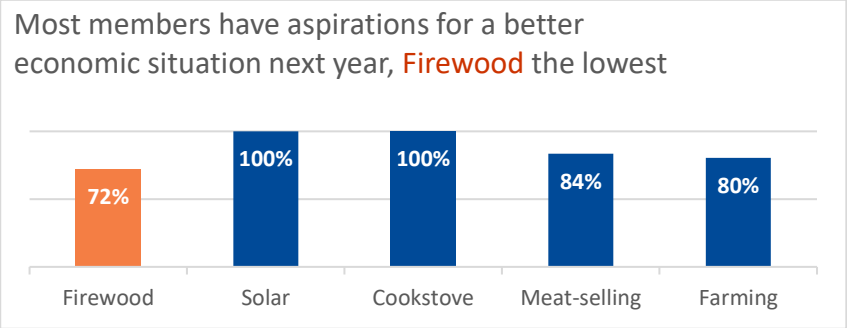


Figure 1. Percent of respondents that feel their households' economic situation will be better next year compared to now, by cooperative

Protection and Enabling Environment

Security and access to services: This sub-section is for general background as it presents perception-based responses on how respondents view their security and access to basic services; as perceptions, they are subject to personal interpretation and bias by respondents. The results for these variables by gender of co-op member may be found in Table 14, Annex 2. For basic services, perceptions of access to education remain fairly high,[21] but less for access to health care, particularly for the energy cooperatives (Table 4). There is a wide range among members in their perceived access to health care: from 49 percent (Solar) to 93 percent (Farming). There is near consensus of the refugee members that the level of security is good around their community, though Cookstove members feel they are stopped by police because of their refugee status more often; analysis by gender shows no major difference between men and women on the security question. Yet, member reports of experiencing violent incidents in the past year (see Table 16, Annex 2) shows a trend of energy members (Firewood, Solar, Cookstove) reporting more incidents than Meat-selling and Farming.

Table 4. Security and access to services, by cooperative

Indicator	Firewood	Solar	Cookstove	Meat-selling	Farming
% of co-op members who have access to **health care**	59.0	48.7	60.0	84.6	93.0
% of co-op members who have access to **education** for their children	79.0	82.5	100.0	97.8	99.1
% of co-op members who agree their level of **security** is good	97.0	100.0	90.0	98.9	98.7
% of co-op members who have been **stopped by police** because of refugee status	38.0	48.7	80.0	41.5	47.0
N (sample size)	*100*	*39*	*10*	*188*	*230*

[20] Béné, C., et al. (2016).

[21] The previous indicator presented on children attending school is a more accurate estimate for education because it is drawn from the household roster profile section, answered by the respondent in consideration of each school-aged member of the household (who may or may not be the children of the respondent). Whereas in this security and access to services section (% of co-op members who feel they have access to education for their children), the respondents would have answered the question in consideration of their own specific children, all of whom may not currently reside with them.

This **overall pattern of energy co-op members experiencing more violent incidents and having less access to health care** as compared to Farming and Meat-selling members may be explored through project monitoring, but it could also be a result of a merged dataset (i.e., different enumerator training, interpretations of questions, and survey quality assurance).

Child protection in the workplace: With increased involvement of women in livelihoods while women are also culturally expected to be the primary caregiver for children, the survey briefly explored how often children were brought to work with the female cooperative member. The data show (see Table 15 in Annex 2) that about half of the female members of the Solar and Farming cooperatives bring their children, age nine or younger, to work with them for at least one day of every month. The cooperatives with centres/or processing sites are considered safe for children (discussed later with energy cooperative results). The older children (10 years and older) accompany the female member (i.e., presumably their mother) to work less often overall, but many older children of Farming members in particular spend time on the farm—**21 percent of female Farming members brought their children (10+ years) to work with them for eight or more days in the previous month.** UNHCR and partners may need to follow up with female Farming members to explore if their older children/youth are safe on the farms, and/or facing difficulties accessing school.

Summary of key findings - Demographics and enabling environment:

- **Firewood cooperative households are more vulnerable and report less income, and the members tend to have less aspirations for the future and more experiences of physical disability or depression as compared to the other co-op members.**
- **Meat-selling and Farming cooperatives are wealthier in terms of owning high value assets (large livestock); yet, all cooperative households appear to be relying on relatives or debt to cover their monthly expenditures.**
- **General community security is reported across cooperative types. However, there is a pattern of energy members (Firewood, Solar, Cookstove) reporting more experiences of violence and less perceived access to health care, which should be explored through project monitoring.**
- **Female members of Farming cooperatives are most likely to bring their older children to their farm site, which could pose child protection concerns that UNHCR and partners should follow up.**

Project Performance Indicators

The UNHCR livelihood project aims to improve the economic outcomes, productivity, access to financial services, skills, and food security of its participants. The survey also collected common indicators across the cooperatives of other outcomes: social cohesion, confidence, physical security, and energy access.

Livelihood Outcomes

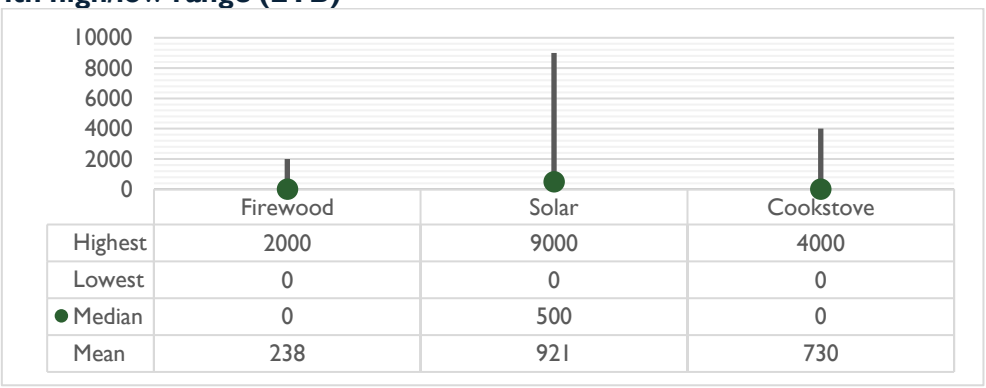
Indicator - Employment and cooperative incomes increased: Co-op income data for Meat-selling and Farming members cannot be calculated, as confirmed by Oxford RSC,[22] and the RSC survey did not collect estimates of this indicator from the member. Thus, for Meat-selling and Farming members, the best indication of this outcome indicator is household income (as reported in Table 3), as the data show that the member tends to be the sole income-earner for their household (see Table 17, Annex 2). Oxford RSC concluded the Meat-selling and Farming incomes were modest, yet better than pre-membership levels.

[22] Refer to Annex 5 for further detail on the calculation issues reported by Oxford RSC to TANGO.

Unfortunately, this important data gap cannot be filled using the current livelihood monitoring data available through the IP reports or the annual outcome survey conducted for the UNHCR global platform (Livelihood Information System, LIS). The IP reports may provide information on inputs, production, and some estimated earnings for cooperatives as a whole, but no estimates of member income. The accuracy and completeness of this data depends on how well the cooperative made manual records for all members' work (which this study's findings show are often lacking, and the study recognises it is a focus for the next phase), and depends on the competent compilation of this data by the supporting partner. The CAHWs, for example, were recording revenue, expenditures, and profit in ETB/month, but these records were not available for 2019. Regarding the second monitoring data source, the UNHCR LIS, the TANGO team finds it is difficult for deciphering any livelihood outcome results, as there is no information on the methods and sample provided, and because the LIS attempts to be globally standardised, the indicators may not be relevant or useful for the local programme. What we do know from the UNHCR LIS monitoring data is 54 percent of self-employed PoC and 42 percent of PoC in agricultural production reported increased income in 2019 compared to the previous year.

Co-op income estimates were collected in the baseline study for the energy cooperatives. The monthly mean income of energy cooperative members at the baseline of Phase 3 ranges from 238 ETB for Firewood members to 921 ETB for Solar members, with a very large range among members (Figure 2). However, given the large range of reported values, the median value is likely more accurate than the mean. **Median income is 0 ETB for Firewood and Cookstove members**. It is important to note that this finding is not surprising for the Cookstove cooperative, as it has just started its production in early 2020. Yet for the Firewood cooperatives, which were established two years prior, the reasons for lack of cooperative income are due to various production challenges after their initially successful start-up, which are discussed later in this section on Firewood cooperative-specific results.

Figure 2. Median and mean monthly co-op income for energy members, with high/low range (ETB)



	Firewood	Solar	Cookstove
Highest	2000	9000	4000
Lowest	0	0	0
Median	0	500	0
Mean	238	921	730

In comparison to the local refugee population overall, the median income among refugees with a job is 800 ETB/month according to the Refugee Economies in Dollo Ado study of 2019.[23] This indicates **the member income from energy cooperatives at baseline is still lower, even for Solar, than the median income for other refugees with work in the area**.

With zero reported co-op income for many Firewood and Cookstove members, it is not surprising that most (94 percent) Firewood members and all (100 percent) Cookstove members do not feel the income amount earned through membership is currently worth their time (Table 5). For Solar, 69 percent of members question if the income earned is worth their time. With very little income benefits thus far, **the non-income**

[23] The study found: The median reported income for people with a job is 800 ETB (28 USD/month) for refugees in all the camps except Hileweyn (in which it is 1,000 ETB). Source: Betts, A. et al. (2019).

benefits of cooperative membership (discussed later in this section) appear to retain many of the energy cooperative members.

Table 5. Perceptions of income and time-value for energy cooperatives

	Firewood	Solar	Cookstove
% of respondents who report the co-op income is enough to feel that their membership is worth the time?	6.0	30.8	0.0[1]
N (sample size)	*100*	*39*	*10*

[1] Note: the Cookstove cooperative has not started production, so the evaluation team expects this result to improve by the endline evaluation.

Indicator - Access to financial services bolstered: The project seeks to increase access to formal savings and loans mechanisms for participants. Eight in 10 Firewood cooperative members (80 percent) have a loan compared to five percent of Farming cooperative members (Figure 3). Across cooperatives, **food consumption is the primary purpose for loans**, but less so for Farming members. There is a clear distinction in lender type and amount, whereby **the Meat-selling and Farming cooperatives tend to use micro-finance institutions (MFI) for their loans and have higher average debt** (12,000 ETB), while the energy cooperatives (Firewood, Solar, Cookstove) rely on host or refugee committees for smaller loans ranging from 3,000-3,500 ETB on average.

Nearly half (49 percent) of the Solar members report having personal savings, whereas only thirteen percent of Firewood members report savings. The most common place to hold savings is an MFI (for Solar, Meat-selling, Farming), and *Ayuto*[24] (for Firewood). **Food consumption and medical care are the primary reasons for savings**, as well as for debt payments (Firewood), for productive inputs (Solar), business (meat-selling), and ceremonies (Farming). The amount of reported savings ranged from 1,300 ETB (Firewood) to 3,000 (Solar). **These results on reported savings are higher than would be expected of the general population in the camps.** The Refugee Economies in Dollo Ado study of 2019 found the overall rate of savings of the camp populations was very low, and those participating in a collective savings scheme such as *Ayuto* ranged from just two percent in Melkadida camp to 12 percent in Kobe.[25] Interviews with IP explained that creating savings mechanisms within the cooperatives and expanding access to loans for the qualifying members has been a key aspect of the project.

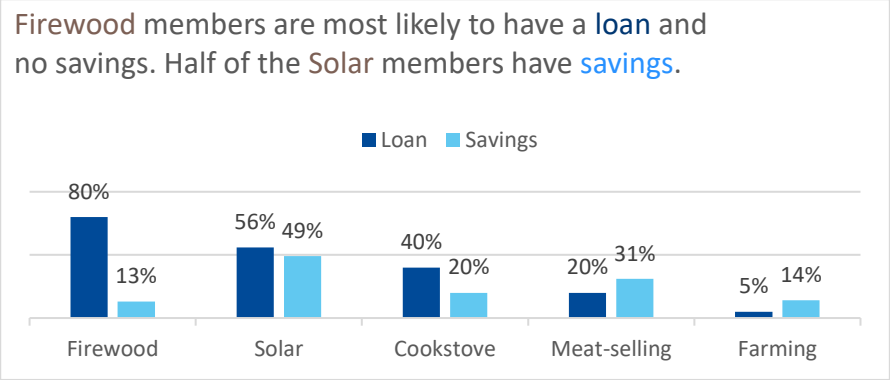


Figure 3. Percent of respondents with a loan or savings, by cooperative

Indicator – Skills enhanced: The project aims to enhance the business management and technical skills of the beneficiaries. The survey gathered information on the number and types of vocational and skills trainings the members have received in total since arriving to the Dollo Ado camps (Table 6). The Oxford RSC data shows **oddly low rates of training received since arriving at the camps for Meat-selling and**

[24] Informal collective savings group (Somalia).
[25] Betts, A. et al. (2019).

Farming members, which could be an error with the data collection unknown to TANGO, but moving forward, the project should see improvements by endline. Among the energy cooperatives, **most Solar and Cookstove members report nearly two trainings each, while just one in five Firewood members** report receiving any training since their arrival to the camps. The TANGO dataset captured trainings received as part of the cooperative, which is reported later in this section under Results for Energy Cooperatives.

Table 6. Vocational training since arriving in Dollo Ado camps, by cooperative

Indicator	Firewood	Solar	Cookstove	Meat-selling	Farming
% of co-op members with vocational training since arriving in camp:	21.0	89.7	90.0	1.6	9.6
Average number of vocational trainings participated in:	1.2	1.6	1.7	1.3	1.0
N (sample size)	*100*	*39*	*10*	*188*	*230*

Note: The training results since arriving in camp, as opposed to trainings directly from cooperative participation, are presented because the there is no data available for Meat-selling members' training since joining the cooperative; this is due to a coding error during the Oxford RSC data collection.

Household Food Security

Indicator – Food security strengthened: HFIAS: Another KPI of the Livelihood Project is to strengthen household food security. The Household Food Insecurity and Access Scale (HFIAS)[26] shows that most respondent households faced moderate to severe food insecurity in the month prior to being surveyed: ranging from 85 percent of Solar members to 100 percent for Firewood and Cookstove members. But this difference is statistically significant; **Firewood member households tend to be more food insecure** as compared to Solar, Meat-selling, and Farming members.[27] This is an indicator of perceived food insecurity about the household's daily meals. To be considered food secure, the household experiences none of the food insecurity conditions, or just experiences worry, but rarely. Whereas a household is categorised as severely food insecure if it experiences any of the three most severe conditions (running out of food, going to bed hungry, or going a whole day and night without eating), even as infrequently as rarely.[28] In other words, any household that experiences one of these three severe conditions even once in the last four weeks (30 days) is considered severely food insecure.

FCS: Figure 4 shows the mean Food Consumption Score (FCS, from 0-112) by cooperative. The diet diversity and frequency of food consumption (in past seven days), through the FCS, shows nearly all households have an acceptable level of food

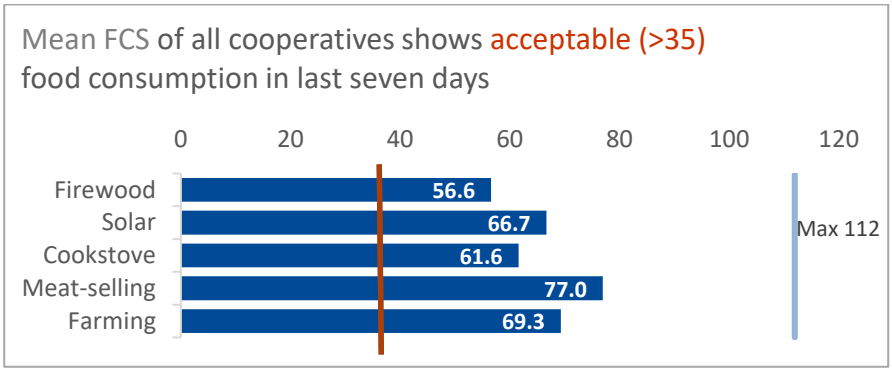


Figure 4. Mean Food Consumption Score (FCS), by cooperative

[26] Coates, J. (2007).
[27] See regression results in Table 22 in Annex 2.
[28] According to the scale's guidelines: to be considered food secure, the household experiences none of the food insecurity conditions, or just experiences worry, but rarely. A mildly food insecure household worries about not having enough food sometimes or often, and/or is unable to eat preferred foods, and/or eats a more monotonous diet than desired and/or some foods considered undesirable, but only rarely. But it does not cut back on quantity nor experience any of three most severe conditions (running out of food, going to bed hungry, or going a whole day and night without eating). A moderately food insecure household sacrifices quality more frequently, by eating a monotonous diet or undesirable foods sometimes or often, and/or has started to cut back on quantity by reducing the size of meals or number of meals, rarely or sometimes. But it does not experience any of the three most severe conditions. A severely food insecure household has graduated to cutting back on meal size or number of meals often, and/or experiences any of the three most severe conditions (running out of food, going to bed hungry, or going a whole day and night without eating), even as infrequently as rarely. Source: Coates, J. (2007).

consumption, which is a score over 35.[29] This difference in the HFIAS and FCS results reveals that the **households may be able to generally access an acceptable quality and frequency of foods, but they still have experiences of inadequate food access** over a month's time.

It should be noted that children under five years suffer from stunting and wasting at above-target rates across most Melkadida area camps.[30] According to analysis by Food and Agriculture Organisation (FAO), there is limited evidence showing a direct association between household food insecurity indicators and child undernutrition in low-income settings; yet, there are established linkages between maternal nutrition or caretaker mental state and their children's nutritional outcomes, among various other pathways from food insecurity to poor child nutritional status,[31] which could be explored by UNHCR and nutrition partners.

Other Financial, Social, and Personal Improvements

Perceived improvements as a result of the cooperative: The members were asked about their financial stability, physical security, and confidence from working in the cooperative as compared to their previous work arrangement. As shown in Figure 5, **most Meat-selling and Farming members perceive they are better off** in those areas, and just over half of Cookstove members perceive they are better off even though their production has yet to begin.

It should be noted the Meat-selling and Farming cooperatives have existed for longer than most of the energy cooperatives, which may help explain some of these observed differences. However, the Cookstove co-op is the newest, and the small number of members interviewed already perceive improvements, which could be attributed to their high level of enthusiasm as the cooperative begins (and to the limitations noted regarding the small sample). **It is unclear why most of the Solar members do not perceive improvements and may indicate the members had good work arrangements prior to joining the co-op,** which have not been exceeded despite the data showing some strides made in their co-op income and savings. This point could be explored qualitatively through project monitoring and/or at the mid-term study.

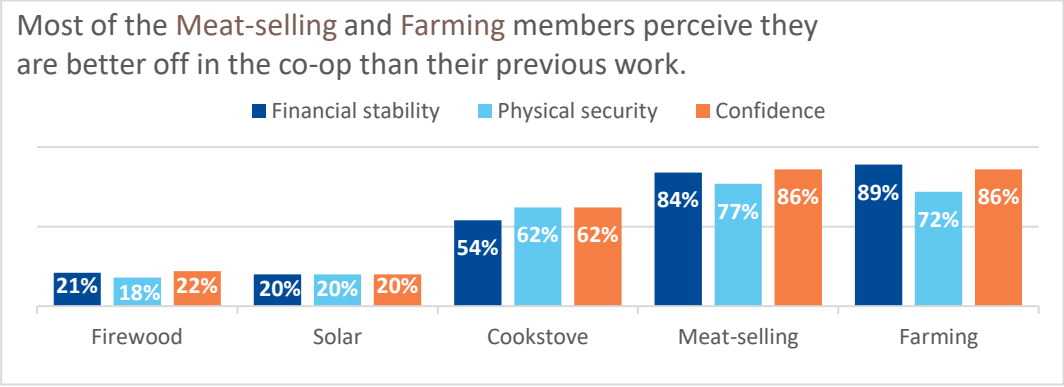


Figure 5. Percent of respondents reporting "better" or "much better", by cooperative

Social cohesion: Nearly all respondents of every cooperative type report trust of refugees in the camp where they live (Table 7). Most all of the respondents from each cooperative report trust of local host

[29] The FCS is a composite score for information on dietary diversity, food frequency, and relative nutritional importance, as reported for the previous seven days. The score is categorised as poor (< 21), borderline (21-35), and acceptable (>35). It is used as a proxy indicator of household caloric availability. Source: INDDEX Project. (2018).
[30] Online indicators portal (app.powerbi.com) shared by UNHCR Melkadida in April 2020: Nutrition – 2019 SENS Survey Data.
[31] Maitra, C. (2018).

community members as well, ranging from 80 percent (Cookstove) to 94 percent (Firewood). They also acknowledge cultural similarities with their host community and feel they are well-integrated with them.

Table 7. Trust and social cohesion, by cooperative

Indicator	Firewood	Solar	Cookstove	Meat-selling	Farming
% of co-op members who report they can **trust local** Ethiopians in the kebele:	94.0	89.7	80.0	89.9	92.2
% of co-op members who report they can **trust refugees** in the camp where they live:	97.0	100.0	100.0	93.6	98.7
% of co-op members who **feel culturally similar** to host community:	93.0	100.0	97.4	92.0	90.9
% of co-op members who indicate refugees are **well-integrated** with host community:	88.0	70.0	94.9	85.1	88.3
N (sample size)	*100*	*10*	*39*	*188*	*230*

Access to electricity: The Energy Project component of the Phase 3 investment aims to scale up access to electricity throughout the camps. At the time of this baseline, 70 percent of Cookstove and 62 percent of the Solar members reported access to electricity/solar in their households, while just one in 10 of the Meat-selling and Farming members report access (Figure 6). It should be noted that this electricity access may come from solar or generator, which was not distinguished in the survey. According to Oxford RSC's data collection, on average, 24 percent of refugee households across the camps have access to electricity.[32]

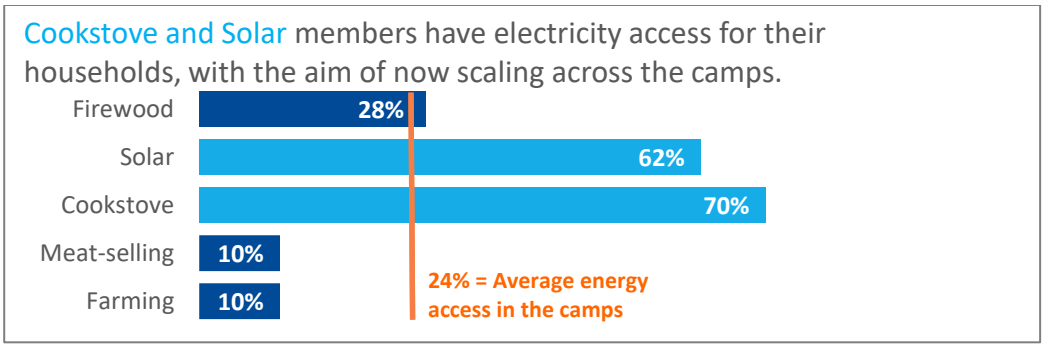


Figure 6. Percent of respondents with household electricity, by cooperative

Results for Energy Cooperatives

Indirect/other benefits for energy members: The Energy Project expects there will be various non-livelihood and indirect benefits for the energy cooperative members and for the "living conditions of people in general" in the community,[33] which is measured here through respondent perceptions of improvements since this is not a population-based study. **At the start of Phase 3, the non-livelihood benefits for energy co-ops are clear.**

As shown in Table 8, these non-livelihood benefits include improved education outcomes for children because of their ability to study with electricity in the household; less sexual and gender-based violence (SGBV) for members because of their group activities, and more safety in the camps because of streetlights; and reduced conflict among cooperative members. These are indicators for which the project aims to maintain or to see improvements at the end Phase 3. In addition, through increased women's empowerment in business and training, the Energy Project also hopes that women are perceived/and perceive themselves as essential to the cooperative—a sense of empowerment that is expected to carry over to their household. The project set a

[32] Betts, A., et al. (2020). As reported from: Thematic Update March 2019, Energy, IKEA Foundation Portal.
[33] UNHCR Ethiopia (Melkadida) (2019b).

KPI to improve the influence of women's decision making in the household on finances, child-rearing, and women's health, but the evaluation team finds this hypothesised process of change (e.g., from cooperative to household empowerment for women) is not clear in the project's Theory of Change or project documents.

Table 8. Non-livelihood and indirect benefits for energy members, by cooperative

Indicator	Firewood	Solar	Cookstove
Education, women's empowerment, safety, and co-op social cohesion			
% of respondents reporting improved **school attendance** of children because of electricity:	100.0	85.7	85.7
% of respondents reporting improved school **test scores** of children because of electricity:	100.0	85.7	85.7
n (respondents who reported having school-aged children and electricity)	*28*	*21*	*7*
% of **females** who report influencing household decisions on child-rearing:	86.2	75.0	100.0
n (female respondents who are married/partnered and have children)	87	8	3
% of **females** who report making decisions about her physical health:	82.8	75.0	100.0
% of **female** members contributing to household financial decisions:	91.9	33.3	85.7
n (female respondents who are married/partnered)	87	8	4
% of respondent who perceive **less SGBV** because of their membership:[34]	61.0	n/a	100.0
% of respondents who report the co-op has reduced **conflict with host** and refugee members:	73.0	94.9	90.0
% of respondents who report the co-op has reduced **conflict among refugee** members:	80.0	97.4	90.0
N (sample size)	*100*	*39*	*10*

n/a indicates the question was not included in the module for this cooperative.

Firewood cooperative-specific results: The survey module for Firewood members gathered information on the production, equipment/training, additional benefits, and challenges of the cooperatives. About one-third of the respondents (34 percent) have received a training since joining the cooperative, which for most was a technical training (74 percent) and some members who report training also received business management (44 percent) or accounting/financial management (18 percent) trainings. **This result on low levels of training in the cooperative is surprising** given that the project intended that all members receive training upon joining, according to Oxford RSC's qualitative interviews.[35] About one-third of respondents (31 percent) report that all of the tools and machinery of their Firewood cooperative are currently working, and **the working status of equipment and availability of tools are also noted as challenges below**. In addition to the outcomes and benefits already reported in this report, the Firewood cooperative members report the following:

- 92% report the cooperative/centre is a **safe** area to work;
- 70% report the cooperative/centre is a **safe space for children** of members while they work;
- 66% report being a member helps **reduce walking** long distances to collect firewood.

Table 9. Firewood co-op main challenges

Main Challenges	Lack of inputs (Prosopis)	59.0
	Lack of business planning	49.0
	Don't have the right tools	45.0
	Equipment is not working	35.0
	Not enough clients/demand	34.0
	Not enough help by the NGO	30.0
	Lack of markets	28.0
	Transporting the wood/inputs	24.0
	Conflict between cooperative members	20.0
	No challenges	12.0
	N (sample size)	*100*

The Firewood cooperative members report that the main challenges they face are lack of inputs, lack of business planning (which is discussed further in the Cooperative Capacity Assessment section), and that they don't have the right tools (Table 9). The firewood cooperatives have largely depended on the IP to deliver their inputs, but with a price spike due to demand for Prosopis in

[34] The members answered this question generally, in consideration of all members of their cooperative.
[35] Betts, A., et al. (2020). All references to Oxford RSC findings hereafter refer to this source/study.

the last 2-3 years by refugees and hosts, the inputs have been limited.[36] The Prosopis tree is considered a pest and the GoE permits its harvest,[37] but this is difficult for refugees considering their restricted movement.[38] UNHCR will start Phase 3 with a study on the adequacy of Prosopis supply to support the expected increase in demand by the Firewood and Cookstove cooperatives.[39]

The survey asked the members how often inputs (e.g., Prosopis) were available in the last 30 days and what they do for income when there are no cooperative inputs. When Prosopis is not available for co-op production: 39 percent of members report doing no other income-generating activity; 25 percent collect Prosopis to sell; 20 percent collect other types of firewood to sell; and 17 percent find an alternative source of income. Those members who continue to collect Prosopis/firewood mostly collect with other cooperative members (79 percent) and they largely transport the firewood by carrying it on their backs (79 percent). Thus, for about half of the members, **they have had to return to the risky practice of collecting Prosopis/firewood because the cooperative is not productive**. These results are coherent with qualitative findings by Oxford RSC:

> "While most beneficiaries acknowledge the positive impact the cooperatives have on protection outcomes…a majority of the cooperatives had limited operations at the time of the evaluation, either because their activities were paused due to the non-availability of Prosopis wood, defunct machinery, or low demand."

Solar cooperative-specific results: The survey module for Solar members explored their training, services, and main challenges. Of the members surveyed, 87 percent report they are **trained as solar technicians**. Other trainings received include business management (87 percent), other technical training (84 percent), and accounting/financial management (68 percent).

The main service they have provided is maintenance of streetlights, for which they collect payment from the community (through ARRA[40]), as reported by most members (87 percent). Other services they offer include: maintenance of home solar systems (75 percent), maintenance of solar mini-grids (44 percent), installations of new home solar systems (44 percent), and providing solar charging stations (26 percent). Nearly all of the surveyed Solar members agree that energy access (and provision of streetlights) has **benefitted the community** by increasing a sense of personal safety and decreasing violence within the community:

- 100% perceive **more safety** in their community as a result of energy access, and
- 97% perceive **less violence** in their community as a result energy access.

The main challenges faced by Solar cooperatives are lack of inputs/materials (72 percent), lack of mini-grids (36 percent), and a perceived lack in business planning (21 percent) (Table 10).

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[36] According to the UNHCR Operations Plan, a supply gap in fuel distributions forced refugees to resort to firewood and charcoal use, negatively impacting negatively impacting the fragile environment and causing price hikes for firewood and charcoal. Source: UNHCR Ethiopia (2017). According to Oxford RSC, another reason for the price spike is increased demand for Prosopis wood for building in Dollo Ado town per the Dollo Ado Master Plan for Development. Source: Betts, A., et al. (2020).
[37] UNHCR Ethiopia (Melkadida) (2017).
[38] According to Oxford RSC: It can be harvested in identified regions along the Genale River; however, refugees cannot typically do this work due to restrictions to their movement and political dynamics that limit harvesting activities to host communities.
[39] UNHCR Ethiopia (Melkadida) (2019b).
[40] According to Oxford RSC: While community funds have been devised and collected by ARRA with the intention that money collected from beneficiaries (at 10 birr per household) would be used to pay cooperatives for sourcing replacement parts locally and carrying out the repairs, there are few instances in which this is reported to be operational. Funds have been collected by the community energy committees but have not yet been dispersed to fix broken street lights.

This is consistent with the qualitative findings from Oxford RSC that electricity sources have improved community members' sense of confidence and security, educational attainment, and supported their development of additional income sources. The challenges noted by RSC also find: Self-reliance for the Solar cooperatives **requires strengthening the cooperatives' ability to source and purchase on their own** the expensive inputs and replacement materials, as well as their ability to do effective marketing to increase their business income.

Table 10. Solar co-op main challenges

Main Challenges	Lack of inputs/materials	72.0
	Lack of mini-grids	36.0
	Lack of business planning	21.0
	Don't have the right tools	18.0
	Equipment is not working	15.0
	Lack of clients/demand	7.7
	Fees from services are too low	7.7
	(Only listed if >5%)	
	No challenges	7.7
	N (sample size)	*39*

Cookstove cooperative-specific results: The Cookstove cooperative has focused on training and formation in 2019; and at baseline, 8 of 10 members reported having received a technical training as part of the co-op. Other trainings from the co-op include business management for six members and financial management for two members. The Cookstove survey module also explored the perceived benefits and challenges of the fledgling cooperative, which is due to begin production in 2020. In addition to the benefits and income results already reported, the Cookstove members report the following:

- 100% (i.e., all 10 members surveyed) report the cooperative/centre is a **safe** area to work;
- 80% report the cooperative/centre is a **safe space for children** of members while they work;
- 100% report being a cooperative member helps **reduce walking** long distances to collect firewood, as they are involved in the work of the cooperative instead;
- 100% report being a cooperative member reduces the **hazards** of traditional cookstoves (with the assumption that they have early access to the cleaner fuel and fuel-efficient stoves, which will reduce carbon dioxide and smoke particulate exposure in the household[41]).

The main challenges facing the Cookstove cooperative are: lack of clients/demand (reported by 7 of 10 members), which is not surprising given that production and sales had not yet begun at the time of the survey. Indeed, as noted by the Oxford RSC report, both the Firewood and Cookstove cooperatives **face the challenge of creating demand for an unfamiliar product**: due to the small size of the cookstove, which is not suitable for the average Somali household; the cost of the briquette; and the general lack of awareness of the product. The other challenges faced by the cooperative thus far, noted by two members (each topic) are perceptions of lack of business planning and conflict between cooperative members.

Resilience Capacities

A resilience framework is relevant to UNHCR's objectives because it links the work of supporting refugees' economic inclusion, protection, and durable solutions for refugees. This conceptual framework has also been integrated into UNHCR's forthcoming livelihoods strategy (see box below).

What is resilience?

UNHCR **defines** resilience as the ability of individuals, households, communities, national institutions and systems to prevent, absorb and recover from shocks, while continuing to function and adapt in a way that supports long-term prospects for sustainable development, peace and security, and the attainment of human rights. Fostering resilience requires strengthening **resilience capacities** at the individual, household, community, and systems levels. Initiatives to foster refugees' economic inclusion, whether implemented by UNHCR or other actors, should work to reinforce existing capacities and build new capacities as needed to ensure the long-term sustainability of refugees' economic activities. Source: UNHCR (2019b).

[41] UNHCR Ethiopia (Melkadida) (2019b).

This report includes a brief analysis of the resilience capacities and member characteristics at baseline contributing to their well-being outcomes, namely food security. See Annex 6 for further description of Resilience Capacities. It should be noted this analysis was an abbreviated resilience analysis based on the variables available in the survey.[42] TANGO conducted a regression analysis of HFIAS scores (inverse), as the dependent variable, and its relationship with key variables that contribute to resilience capacity (see Annex 6 for further description of resilience capacities) as well as household and member characteristics. The regression results can be found in Table 24 (Annex 2).

The variables with **statistically significant and positive associations** with household food security are:

- a larger number of household assets (which may indicate more wealth),
- household savings,
- trust of the host community (also referred to as bridging social capital),
- smaller household size (e.g., less mouths to feed), and
- greater physical health of the cooperative member.

The analysis indicates that member households that are more food secure tend to have more household assets, savings, bridging social capital, and human capital by way of physical health. Notably, these variables are all part of **adaptive capacity**, that is, the ability to make proactive and informed choices about alternative livelihood strategies. As shown in multiple impact studies of humanitarian and development programmes across East Africa region, these are crucial capacities that help households maintain their wellbeing in the face of shocks or stressors.[43]

Summary of key findings – Project performance indicators and other survey results

- **The Solar cooperatives' work is providing some monthly income for members, but it has not provided perceived financial stability. Most Firewood and Cookstove members earned nothing at the time of the baseline. Cookstoves is not yet producing, but the Firewood co-ops have stalled production in recent months.**
- **Many Farming, Meat-selling, and Solar members are accessing formal financial services for credit and/or savings. While debt is largely for food consumption, there are promising levels of savings (formal and informal) reported by members across co-ops.**
- **Very few Meat-selling and Farming members report receiving skills trainings since arriving to the camps, which could be a data error that should improve by endline. Most Solar and Cookstove members report trainings, but it lower for Firewood.**
- **While member households face instances of food insecurity during a month's time, especially Firewood households, they report acceptable levels of food consumption.**
- **Energy co-ops clearly report various non-income benefits from the project: above-average access to household electricity, which they say improves their children's educational outcomes; less risk of SGBV and more safety in their work; and reduced conflict among fellow refugees and with the host community members.**
- **The energy co-ops face unique challenges to address in Phase 3; a common theme is lack of inputs or adequate access to materials and working equipment/tools, as well as inadequate business planning.**
- **The resilience analysis indicates that member households that are more food secure tend to have more assets, savings, bridging social capital (with host community), and human capital of the member in terms of their physical health. These are key variables strengthened by the project and with integrated development programming.**

[42] For further resilience capacity measurement guidance, see: https://www.fsnnetwork.org/sites/default/files/GN03_Resilience%20Capacity%20Measurement_Final1211508_0.pdf
[43] Smith, L. et al. (2019); Martin, S. (2019).

Baseline Findings (Qualitative Interviews)

Cooperative Capacity Assessment

As a key theme for this phase of the Ikea Foundation investment is sustainability, the qualitative component of the baseline focused on the processes, functioning, and organisational capacity of the cooperatives that will enable their continued and/or future success for both refugee and host communities; this includes the ability of the IP (with UNHCR's support) to capacitate the cooperatives to this end. The Cooperative Capacity Assessment interview was conducted with cooperative leaders (CL) of 38 cooperatives, representing nearly all cooperatives across the five camps. The capacity rubric[44] (found in Annex 4) includes six dimensions with sub-dimensions (points/pts possible), including:

- **D1: Legal Status, Cooperative Planning & Procedures**: a) Legal status & by-laws (2 points); b) Cooperative planning and administrative procedures (7 pts)
- **D2: Management Structure and Accounting System:** a) Management structure & human resources policies (including conflict resolution) (8 pts); b) Financial management systems (7 pts)
- **D3: Production & Services/Inputs for Members:** a) Services & inputs for members (including training, input distribution, quality checks, contingency planning) (7 pts); b) Cooperative production and perceived value-add (2 pts)
- **D4: Market Linkages and Value Chains**: a) Market linkages and marketing strategies (5 pts); b) Value chain linkages (3 pts)
- **D5: Membership & Learning Strategies**: a) Recruitment and member retention strategies (8 pts); Opportunities for members learning together (2 pts)
- **D6: Social Capital & Concern for Community Development**: a) Perceptions of social capital and cooperative social cohesion (5 pts); Perceptions of cooperative contributions to community development and other impacts (health, environment, protection) (4 pts)

Table 11 shows the BL results by dimension, and overall, for the Cooperative Capacity Assessment rubric conducted with cooperative leaders. The scores show the critical areas for which to focus capacity building and formalisation efforts in Phase 3. The cooperatives are **highly developed in their social cohesion and concern for community issues** (Dimension 6); yet, cooperative capacity is **least developed around market and value chain linkages** (Dimension 4), as well as business planning and administrative procedures (Dimension 1). Scores by cooperative and sub-dimension may be found in Annex 2.

Table 11. Cooperative Capacity Assessment scores, by dimension & cooperative

Dimension (points possible)	Legal Status & Planning TOTAL (9)	Management & Accounting TOTAL (15)	Production & Inputs TOTAL (9)	Marketing & Value Chains TOTAL (8)	Membership & Learning TOTAL (10)	Social Capital & Community Development TOTAL (9)	SCORE TOTAL (60)
Meat-selling	5.0	9.4	6.4	4.2	6.8	8.0	**39.8**
Solar	5.6	9.4	6.6	2.6	6.0	8.2	**38.4**
Milk	4.0	9.2	6.0	3.0	6.8	8.2	**37.2**
CAHW	2.6	7.4	7.2	4.0	6.6	8.8	**36.6**
Livestock/Trader	4.0	8.6	5.2	3.4	5.6	8.8	**35.6**
Farming/Ag	3.7	8.1	5.3	3.1	6.4	8.4	**35.1**
Firewood	2.2	9.0	4.8	2.6	6.4	8.4	**33.4**
Cookstove	3.0	7.0	7.0	3.0	2.0	9.0	**31.0**

Score metre by cell colour: red =0-0.24% of points possible; orange = 0.25-0.49; yellow = 0.50-0.74; green = 0.75-all points

[44] Rubric adapted from: USAID/Higa Ubeho Rwanda and CHF International's Cooperative Performance Index (CPI); with insights also from: Overseas Cooperative Development Council's METRICS tool, and ILO Cooperatives Assessment Tool.

The rubric is a tool to develop the foundational capacities (e.g., skills, systems, plans, and procedures) necessary for each cooperative in order for the cooperative to have the most potential to be an effective business. However, it should be noted that a higher score in this rubric is *not* a reflection of cooperative productivity and business viability; rather, **a higher score indicates the cooperative has the minimum capacities and procedures in place to function** as a business organisation.

D1: Legal Status, Cooperative Planning & Procedures

The first subdimension is: 'Legal status & by-laws' worth just two points. The cooperative leader reported if the cooperative has been legally registered and if they possess copies of the legal documents (e.g., official by-laws, charter and/or stamp). 26 of the 38 cooperatives received both points. In some cases, the cooperative is reportedly registered, but the legal documents for registration are not in the management committee's possession. There are also cooperatives that UNHCR reports are registered, yet, the cooperative leader is unaware. **These issues may reflect miscommunication:** on the part of 1) the supporting IP—who may have failed to communicate registration to the management committee or to provide copies of key documents; or 2) the management committee, in particular the chairperson or host community member under whose name the cooperative is legally registered—who may not have adequately shared legal status updates and documents with the others.

"We have many challenges buying medical products from just anywhere because our business is not legalised yet." ~CAHW CL

The sub-dimension for 'Cooperative planning and administrative procedures' for seven points includes: management committee trained in financial management and ability to develop budgets, action plan developed (even if orally) and voted on by general members, written business plan, and long-term sustainability plan/strategy. Most cooperatives earned few points, ranging from 1.2 of 7.0 (Firewood) to 3.6 (Solar). **Achievements**: Many CL report being trained in financial management and having an action plan voted on by members. **Gaps**: Most cooperatives do not have a written business plan or sustainability plan, and the management committees generally lack the ability to develop budgets or budget reports. **The low scores overall for D1 are mostly attributed to very few points earned in this sub-dimension.**

In assessing points, the evaluation team noted the limitations for cooperatives in writing, printing, and copying documents and in low literacy among members. The short-term operations/action plan and the sustainability plan, for instance, did not have to be in writing or shown to the interviewers in order to receive the point; but, the CL had to be able to articulate clearly the devised plans. The quote below by a Meat-selling CL explains their ideas for a sustainability plan.

"Yes, we have a long-term sustainability plan, as we know UNHCR support will not continue, so we save more money in order to expand our business in the future." ~Meat-selling CL

D2: Management Structure and Accounting System

'Management structure & human resources policies' for eight points includes: the cooperative has both an active Chair and Vice Chair, cashier/accountant, and paid security (even if paid by the IP), the management and members have clearly documented roles, members follow by-laws, and complaints and conflict resolution mechanisms are in place. The Meat-selling and Solar cooperatives scored on average 7.0 of the 8.0 points for this sub-dimension, and the CAHW cooperatives scored the lowest at 6.0 points. **Most cooperatives scored the majority of possible points for this subdimension,** thus, the biggest loss of points for D2 is for the second subdimension on financial systems.

In the second subdimension, 'Financial management systems', most **cooperatives struggled to earn points** (seven possible) related to: regular financial reporting that is shared with members, membership decision-making on savings, clear financial procedures, accounts/leger book-keeping, and internal and external audits. Figure 7 shows the scores for this subdimension by cooperative type. The interviews revealed that while most cooperatives were given a leger book by the IP, many were not systematically using it. Regarding external audits, some cooperatives noted that this was previously the IP's role, but with the support of that IP ending, they were not sure who would conduct regular audits for them moving forward.

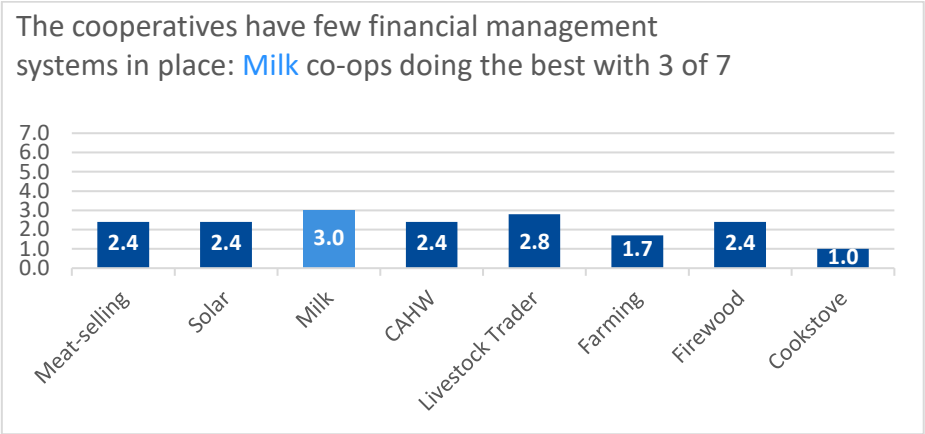

Figure 7. Financial management systems subdimension scores, by cooperative

D3: Production & Services/Inputs for Members

Overall, many cooperatives are making progress on the components of D3. The 'Services & inputs for members' subdimension covers training/technical support for members, distribution and storage systems for inputs, quality checks, savings/credit mechanisms to support maintenance, and crisis contingency plans (seven points possible). All cooperatives scored on average 4-6.0 points for this subdimension. **Achievements**: Most cooperative members have received technical training and/or basic business management training according to CL; most cooperatives have determined a process for safely storing and fairly distributing inputs to members; and for conducting quality checks of inputs or products. **Gaps**: While some have succeeded in establishing savings/or credit mechanisms to be used for crisis contingency support (e.g., crop failure during drought/floods, see quote below) or for maintenance of equipment, these are gaps for most cooperatives; this is not surprising given that many cooperatives have not yet been able to create a surplus or savings.

"We have a support system in crisis time. We contribute money and give to the members facing the problem." ~Farming CL

The short 'Cooperative production' subdimension includes two points: if the amount of production by the co-op has increased in the past year and the perceived value-add to members' production. The Farming cooperatives' average score of 0.7 of 2.0 was the lowest, and many of the Farming CL noted **climate or other challenges** in the previous year that caused a decrease in their production (see quote below).

"Last year due to heavy rain we lost it all, but this year we are expecting an increase [in production]." ~Farming CL

Many cooperative leaders described the **value-add to production** by the cooperatives. For example: The division of labour increased their efficiency to allow more production in the minimum amount of time. The Farming cooperatives noted that the forthcoming motorised pumps will boost their production. The CAHW perceive the value-add of sharing risk and advise around treating animals (see quote below). The Meat-selling

cooperatives add value by ensuring the meat that goes to the market is healthy and properly inspected, and the Milk cooperatives note the added value of refrigeration provided through the co-op.

"If crises or loss are encountered it is hard for a person alone to recover, but when you are working in a cooperative the risk decreases." ~ CAHW CL

D4: Market Linkages and Value Chains

D4 is a dimension where focused capacity building with cooperatives is needed in the next phase. The 'Market linkages and marketing strategies' (five points) and 'Value chain linkages' (three points) subdimensions are comprised of: market information provided to members and use of that information to adapt to market changes/demand, marketing materials, development of marketing plans or committees, selling products outside the camp market, and developing relationships with suppliers and new buyers, business distributors or wholesalers.

Figure 8 shows an example of responses for two points under value chain linkages: a point if the cooperative developed relations with new suppliers in the past year and a point if the cooperative developed relations with new buyers in the past year. 80 percent of CAHW cooperatives have developed new relationships with suppliers and buyers. The CAHW leaders explained that members are making new contacts with pastoral communities in the area and with drug suppliers in nearby towns and into Kenya (see quote below). Some Milk cooperatives have identified suppliers from the host community in rural areas, and some Meat-selling cooperatives are selling to new buyers who own restaurants. The Solar and Farming cooperatives have no new supplier contacts, as they largely depend on all inputs provided by the project. **Overall, most cooperatives have not developed relationships with suppliers in the past year, but they report some new buyers.**

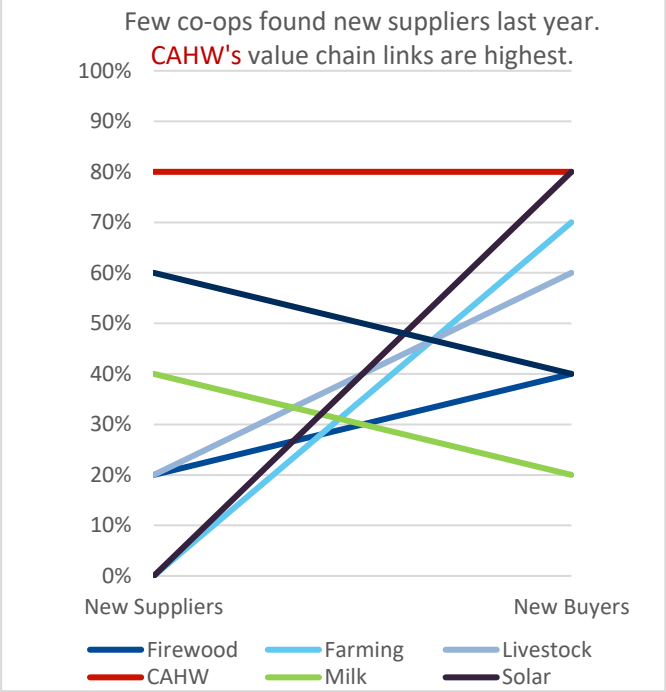

Figure 8. Percent of cooperatives that have new suppliers or buyers in past year (D4 points)

Note: Cookstoves not included because production has not started.

"Before we used to buy the medicine from Dollo and Moyale, but in the past year we made a relationship with a supplier from Mandera (Kenya)." ~CAHW CL

"No [supplier relationships], all the inputs are freely provided to us by UNHCR." ~Farming CL

D5: Membership & Learning Strategies

The 'Recruitment and member retention strategies' subdimension (eight points) has some variation in what points are earned by cooperative, **but most have some membership retention and recruitment strategies in place.** The newest of all cooperatives, Cookstoves, has not yet established strategies for membership (Figure 9). This subdimension includes establishing membership selection criteria and a strategy/committee for recruitment (with intentional AGD focus), member payment of initial shares, regular assessment of members' current needs and integrating needs into planning, recording of member activities, and retention of members in the past year.

'Opportunities for members learning together' (two points) is **a subdimension where many cooperatives earned both points.** It is an achievement at baseline, that most cooperatives report providing opportunities for sharing lessons learned among members and for training of trainers, which ensures new members can be trained (see quote below).

"We transfer the knowledge and experience gained with the members to other members." ~Firewood CL

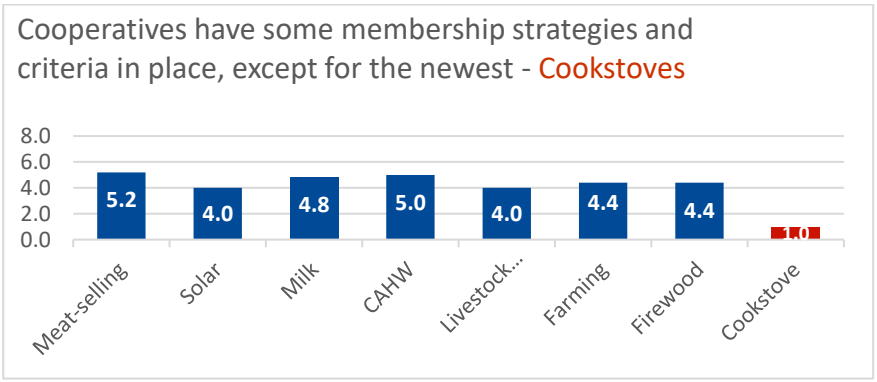

Figure 9. Recruitment and member retention strategies subdimension score, by cooperative

D6: Social Capital & Concern for Community Development

This last dimension captures subjective perceptions of the CL about 'Social capital and social cohesion' (five points) and 'Cooperative contributions to community development and other impacts' (four points). The first subdimension asked about the relationships that have been strengthened among refugees and between refugees and host community members as a result of working together in the cooperative, about the trust that exists within the management committee and between the management and members, and about group identity. **Nearly all cooperatives scored full points for social capital and social cohesion**.

"We are proud of our co-op." ~CL (of multiple co-ops)

The second subdimension explores the cooperative's concern for community development, health/safety, and environmental/natural resource impacts of their work; it also includes the cooperatives' coordination or networking with other cooperatives. Again, most CL reported agreement with these topics and the full points were earned. The quotes below elucidate these perceptions:

"We buy animals from the community and have increased the market for their products." ~Meat-selling CL, explaining how they promote community development

"The community in our area is accessing 18 hours of electricity per day as a result of the cooperative's service." ~Solar CL, explaining how they promote community development

"We don't cut the trees, which may cause deforestation, but we do cut and clear Prosopis, which damages grazing and agricultural land." ~Firewood CL, explaining concern for natural resources

"We follow the guidance the NGO provided us to ensure the sanitation and hygiene of the milk." ~Milk CL, explaining concern for health

"We coordinate with livestock traders; they buy Sudan grass [fodder] from us." ~Farming CL, explaining their coordination with other co-ops

Path Toward Self-Reliance

The CL interviews went on to discuss their ideas of sustainability for the cooperative. **Most CL estimate their cooperatives need 2-3 more years to become self-reliant** (see quote below). To move toward self-reliance, the leaders cite the **need for market linkages, increased savings, and business guidance and training as key factors for self-reliance** and those for which they need IP support. Some CL discussed the internal strengths of their co-op such as members' hard work and trust as contributors toward their sustainability, as well as the gaps in the management skills and knowledge of the management committees. Many of the leaders also ask specifically for IP technical and financial assistance, i.e., through access to loans and financial support, to help build their self-reliance; this was not further explored in this study, but is a good point for follow-up in monitoring.

"It [self-reliance] will be realised after three more years, as the co-op needs to get more trainings on financial management and business development plus technical coaching." ~CAHW CL

The IP interviews also provided insight into how they see the cooperatives transitioning to sustainability. All three partners explained that one of the biggest challenges of the last phase was the **mindset shift** that had to occur with members, from receiving direct/free assistance to participating in a market-based activity. As noted from the CL interviews above, there is still a consistent request for financial assistance from the cooperatives even as they envision their self-reliance. This will affect their path to sustainability, noted an IP, particularly if other projects (of UNHCR or other donors) around the cooperatives continue with the hand-out approach. Additionally, the IP interviews all noted the **importance of member selection and member commitment for the success of the cooperative**. Specifically, that members selected because of their high motivation combined with relevant skills or business experience were more likely to engage with the cooperative's work; whereas there is an issue many co-ops face with members who devote most of their time to other activities outside of the cooperative. Thus, the ability of cooperatives to recruit and retain motivated and productive members is critical for the coming years.

What the IP say they need from UNHCR in order to better support the cooperatives is increased **staff numbers and capacity**. The IP report they need more staff to adequately coach and monitor the cooperatives in the "software" components of the next phase, as well as better trained staff. The burden of paperwork and reporting required by UNHCR was also noted as detracting from implementation, especially as some IP do their reporting manually because they have inadequate computer software. Finally, at the time of the interviews, two of the IP reported they have no other funding to continue work with the cooperatives if the UNHCR-supported project ends. The sustainability of the partners is thus another important consideration for the next phase. TANGO did not conduct a full review of the capacity of IP from the past phase, but the evaluation team finds that the IP who offered technical support in past phases may not be the best fit, in terms of expertise, capacity, and ability to sustain activities, for the business support needed in Phase 3.

Melkadida Solar cooperative

Summary of key findings – Qualitative interviews

- **According to cooperative leaders, the co-ops are highly developed in their social cohesion and concern for community development. Cooperative capacity is least developed around market and value chain linkages, as well as business planning and administrative procedures. At baseline, the Meat-selling and Solar cooperatives scored highest in the Cooperative Capacity Assessment.**
- **Most cooperative leaders estimate they need 2-3 more years to become self-reliant, citing market linkages, increased savings and access to capital/loans, and more business guidance and training, including for management committees, as key factors for which they need IP support.**
- **The next phase will build on the mindset shift for market-based self-reliance. The ability of cooperatives to recruit and retain motivated and productive members is critical in coming years.**
- **IP report that what they need from UNHCR to better support the cooperatives is increased staff numbers and capacity, in particular, capacity which matches the cooperative business-building aims of the next phase. More reporting capacity is also noted. The organisations interviewed would not be able sustain these activities without UNHCR support.**

KEY IMPLICATIONS FOR PROGRAMMING

Baseline Conclusions

KEQ on relevance and responsiveness of design, programming, and monitoring modalities: The member demographics and household characteristics at baseline show Firewood members are more vulnerable overall, while the Solar and Meat-selling members and their households are better off in various ways. It is not surprising, then, that the Solar and Meat-selling cooperatives also showed higher capacity to function as a cooperative, according to the Cooperative Capacity Assessment.

The project has promoted AGD considerations in the cooperative member selection to ensure women and vulnerable households had the opportunity to participate, however, that approach can have an impact on the effectiveness of the cooperative that must be considered in the design. **To include vulnerable PoC in a livelihood project means a longer, integrated and tailored investment is needed to bolster basic employment and job-readiness capacities of the vulnerable members before they can contribute successfully.** This might include a cash-based safety net that allows them to focus on their training while starting with numeracy and basic literacy, financial literacy, and life skills before progressing on to business management and technical training. They may also need integrated support for their psychosocial and physical health. The issue of childcare for female members should be addressed for each cooperative to ensure females are not disadvantaged in their productivity compared to male members, as well as to ensure cooperative spaces remain safe for children if they are present. Thus, to be a livelihood project that is relevant to the most vulnerable as well as to those better-off and job-ready, two tracks for supporting participants to join the cooperative are needed along with integrated support from operational partners.

TANGO commends UNHCR in commissioning a baseline for the next phase of programming and seeking to limit the number of beneficiary surveys, but the merging of two different studies (i.e., using endline impact evaluation data from one study as part of the baseline conducted by another) has posed numerous constraints to the baseline study. Most importantly that the key indicator of co-op income data for the Meat-selling and Farming members is not available, among others. These baseline data gaps cannot be filled using the livelihood monitoring available through the partners (as this information has not been reported thus far, and cooperative accounting and records will need to improve first), nor the UNHCR global livelihood monitoring system, which the TANGO team finds is difficult for interpreting livelihood outcome results and not useful for the sub-office as currently presented. **Yet, adequate monitoring is a critical component of responsive and effective programming.** Project monitoring conducted directly by the sub-office and partners during this phase and

via the midpoint process evaluation will need to follow-up on various data gaps, incongruent findings, and queries of this study to ensure progress in implementation is leading to the desired outcomes.

KEQ on effectiveness of implementation: The livelihood project outcomes at the baseline of Phase 3 include income, financial services, skills, and food security indicators. First, related to **income** and access to **financial services**: The household income and assets data from Oxford RSC indicate that the Meat-selling and Farming members have modest economic gains from their cooperative work. Members of these cooperatives are accessing formal financial services through MFI, and they report improved financial stability and confidence from participating in the project. With the momentum of the last phase, it is important that the cooperatives become viable livelihoods for the members during Phase 3. The income from Solar cooperative work varies significantly and is not considered adequate or stable for many members, yet, many members are managing to save for productive purposes; Phase 3 should aim for continued improvement in their income and productive savings/loans opportunities. There is very little, if any, income currently being earned by Firewood members, who also report high amounts of debt for food needs. However, the non-income benefits thus far for energy project members are important, particularly improved safety of members and social cohesion among members. Next, **skills** (via business management and vocational trainings) have been bolstered for most Solar and Cookstove members since their arrival to the camps, but much less so for Firewood, Meat-selling, and Farming members, which should improve by endline as cooperative trainings and capacity building continue. The **food security** results show that while households may face instances of food insecurity in a given month, Firewood member households more so than others, the respondents report acceptable levels of food consumption overall.

Additional positive outcomes to build on during the next phase include: Access to household electricity is higher than the camp-average for the energy cooperative households, which has improved the educational outcomes of their school-aged children, according to members. Cooperative members and leaders report **improved protection and development outcomes for their communities** as a result of their contributions to community development through the co-ops. For example, the energy members report the increased street lighting has reduced violence. The Meat-selling, Milk, Livestock, and CAHW cooperative leaders are proud to boost the local markets through their business, and to provide a healthy product to their communities. There are high levels of trust and **social cohesion** perceived by members and leaders, both among refugees and with host community members.

KEQ on contributions to results: **Resilience capacities of members:** The direct and indirect cooperative impacts around social capital (both among refugees and refugee-hosts), informal safety nets among members, women's empowerment in livelihoods and decision-making, improved security, access to financial services, and shared productive assets are all key resilience capacities strengthened across the cooperatives. Regression results at baseline suggest that the more food secure members tend to have more household assets, savings, trust with the host community, and the member has better physical health. UNHCR activities and partnerships, for example, should continue to strengthen savings and access to financial services, both of the cooperative and of individual members, to build productive relations between refugees and host community members, and to ensure access to basic services (healthcare, electricity, education, etc.)

Gaps and vulnerabilities of members: The lack of income generation for some cooperatives and ongoing experiences of food insecurity among members will continue to lead to negative coping strategies and diversion of members' attention from the cooperative work if the co-ops are not adequately productive. Human capital development should remain a focus area for management and members, including the readiness and support for vulnerable members as discussed above, as well as increased business and technical skills, which will support cooperatives with the capacity to implement proper cooperative planning and systems.

Cooperative capacity strengthening: Cooperative leaders yearn for more management and technical expertise, access to credit, and market linkages. Most cooperatives lack financial management systems, business planning, and strategic planning for sustainability, among other basic administrative procedures. According to evidence from this study, these gaps may be attributed to low capacity and skills among members, as well as to that of the partners. The IP in past years have focused on the mobilisation of members around a new market-based approach, the registration process, and the installation of cooperative facilities and equipment. Yet, basic business systems and procedures are lacking and require follow-up; for instance, as observed in numerous reports that co-ops have received a ledger/book of accounts from the IP but it is not used. These partners may not have sufficient staff capacity and resources to conduct the close monitoring and mentoring necessary and to ensure these systems are in place and operationalised within each cooperative, nor are the partners able to sustain any continued activities on their own beyond the current funding.

Recommendations for Phase 3

TANGO acknowledges that the newly formed Joint Working Group (JWG) SOMEL between UNHCR and IKEA Foundation will conduct a joint review of the Dollo Ado investments, also in light of the effects of Covid-19, in order to identify refinements to the current programme that will strengthen self-reliance and livelihood outcomes for refugees.[45] The following are four recommendations for key areas of focus for the Phase 3 implementation to be considered by UNHCR stakeholders and the JWG.

1. **Identify/support the right partner(s) to boost cooperative capacity in business planning and systems, and to ensure the backbone of business data is available.**

Cooperatives are struggling with long-term planning, administrative procedures, and financial systems. UNHCR should identify/support the partner that can best address these issues in the next phase, and that has the potential to sustain these services after the program ends. TANGO advises that UNHCR consider alternative options (to the previous local NGO IP) to fill this role to ensure the partner(s) both specialises in cooperative/business development and has the capacity or potential to continue to offer these services in the region after the UNHCR programme ends. For instance, the partner approach may include a mix of several implementing and operational partners and government as a business support unit. TANGO suggests this partner approach formally includes the local government cooperative agencies, as this can be an opportunity for building longer-term capacity of these institutions to support the cooperatives in the future.[46] The partners/or partner unit will provide the backbone of business data (balance sheets, audits, member tracking) needed by UNHCR to track progress on key indicators (see Rec. 4).

Beyond accounting and financial systems, the partner(s) should also have good capacity to develop basic documents/policies with cooperative management. Some documents are crucial for the cooperatives to have copies in their possession in order to refer to and explain to other members (who may be illiterate) for orientation, to ensure consistency with member and management turn-over, and in case of disputes or misunderstanding; these include: by-laws with role descriptions for all personnel, a long-term business plan, an annual budget, and others. Even with illiteracy among many members, the evaluation team notes the need for this documentation; it should be developed with co-op management and members taking the lead in its formulation to ensure they know and understand what is in their paperwork even if they cannot read or write it fully themselves. **Who:** UNHCR Melkadida (Project Management with Senior Leaders), with JWG support; **Timing**: begin partner search by June 2020 and onboard by January 2021.

2. **Assess business viability, particularly for Firewood and Cookstoves, and provide vulnerable members the integrated support needed**. **Viable cooperatives need to ramp up market and value chain linkages.**

[45] JWG SOMEL (2020).
[46] See references: Tesfamariam, 2015.

There is a conclusion of the recent Oxford RSC study that the Firewood and Cookstove cooperatives may not be able to be profitable enterprises due to numerous challenges they face with reliable inputs, market demand, etc. With UNHCR's study on Prosopis supply planned for this phase, there should be an accompanying study on how to expand the demand for the briquettes and cookstoves. Then, a clear decision will need to be made with IKEA Foundation on whether these cooperatives (or others) will be able to become viable businesses under this investment. This decision should also take into consideration the vulnerability status and capacities of those cooperatives' members, and accordingly, the additional training and support that may be needed to strengthen them on par with other cooperatives. If a cooperative is deemed 'unviable for business' during this phase, it may need a re-branding of sorts to focus on women's empowerment and protection outcomes with small supplemental income benefits in order to metre the expectations of members around the potential for it to be a sufficient livelihood. For those cooperatives with real business potential, they need to rapidly establish and expand their own market network and value chain connections. Cooperatives in each camp may be able to learn from and better coordinate with one another to this end, such as from the successes of CAHW in developing their own supplier contacts. **Who:** UNHCR Melkadida (Energy Project with Senior Leaders), with JWG support; **Timing**: issues to be addressed June-December 2020.

3. **Sustainability planning tailored by cooperative should be a high priority early in this phase, for both cooperatives and partners.**

The evaluation team recognises sustainability discussions are ongoing and reiterates the importance of this activity on multiple levels. Only a handful of cooperatives can currently comprehend and articulate their path toward self-reliance. As the findings of this study suggest, there are unique capacity differences across every cooperative. Thus, the sustainability plan cannot be generic, but developed separately with each cooperative. UNHCR may need a sustainability strategy with partners who continue to offer support to the project as well. This strategy should be multi-year and outline the hand-over and phase out of IKEA Foundation and UNHCR support. In some future cases where UNHCR direct support has ended, it may be appropriate for UNHCR to advocate with other donors or co-fundraise for continued funding for the partners. As sustainability is also linked to Government partners (Agriculture, Energy, etc.), these counterparts should be strongly involved in the sustainability planning of this phase. **Who:** UNHCR Melkadida (Project Management with partners); **Timing**: ongoing through June 2021.

4. **Enhance monitoring of livelihood project outcomes through business development partner and supplemental qualitative monitoring of indirect outcomes and other elements of cooperative capacity building.**

UNHCR Melkadida needs relevant and actionable monitoring data, including livelihood outcome monitoring to supplement the global Livelihoods Information System. The sub-office information management will need to work closely with the business development partner(s), identified in Rec. 1, to build a standardised accounting, member activity tracking, and internal/external audit system in every cooperative that provides all necessary monitoring data on a monthly basis. This data should allow the sub-office to track progress on the KPI, including average co-op income per member. In addition to the data from cooperative records, the sub-office should outline a strategy to conduct regular participatory qualitative monitoring to explore other indirect outcomes of interest related to protection, access to basic services and education, women's empowerment and decision-making, access to financial services, etc. The participatory monitoring would also seek to follow-up on both unexpected results of quantitative/or cooperative data, as well as monitoring the indicators of the Cooperative Capacity Assessment, such as investigating the discrepancies in this study's results on low levels of reported training among cooperative members, and the lack of cooperative management awareness of their legal status. **Who:** UNHCR Melkadida (Project Management with partners); **Timing**: develop and begin enhanced monitoring plan by end of June 2021.

<u>Ongoing consideration</u>:

UNHCR Melkadida's current livelihood strategy extends through 2021; thus, the operation should ensure the strategy revision (and role in livelihoods) is aligned with the new/

forthcoming UNHCR global strategy on Livelihoods and Economic Inclusion. This will be followed up in more detail in the mid-term and endline evaluations.

TANGO recognises that UNHCR Melkadida's livelihood strategy has sought to align with the Global Strategy Concept Note[47] released in 2019 in advance of the final, full strategy. To align with UNHCR's new global livelihoods strategy, there are some important considerations for UNHCR Melkadida and how it will proceed with future livelihood programming. The new UNHCR strategy advises operations to envision its role in livelihoods as increasingly in facilitation, capacity building, and advocacy. TANGO provides the following general guidance for UNHCR Melkadida to begin considering for its next strategy: The experience and achievements of the IKEA Foundation livelihood and energy projects have laid the groundwork for economic development and can be used by UNHCR to attract development actors and further investments (or commitments from Government) that can take these projects to scale. This advocacy with donors and development actors may require UNHCR to be able to provide/share and jointly collect quality, population-based data to inform future programming among development actors (including government, NGO, and private sector). UNHCR also has a crucial role in building local government capacity to support refugee economic inclusion under the new strategy, which includes engaging with Government for the cooperative business support (Rec. 1) and the sustainability planning noted in Rec. 3. Advancements in these areas will be followed up in more detail in the mid-term and endline evaluations.

Next steps for this evaluation series partnership with TANGO:

-Identify approximate timing for mid-point process evaluation[48] (no quantitative survey)

Tentatively planned for April 2021.

-Identify a strategy at mid-point for gaining consent from Oxford RSC's portion of the data to be contacted at endline for potential panel survey.

-If needed during this evaluation series, TANGO can coordinate with UNHCR on a strategy for remote and pandemic-sensitive data collection, e.g., if the Covid-19 situation worsens/returns over the coming years.

[47] UNHCR (2019c).
[48] A process evaluation focuses on the implementation process and whether program activities have been implemented as intended and resulted in certain outputs that should allow the project to be on track for accomplishing its stated outcomes.

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Annex 2: Additional Results Tables

Quantitative Survey Data at Baseline

Table 12. Demographic indicators, by cooperative

Indicator	Firewood	Cookstove	Solar	Meat-selling	Farming
Household level					
Mean age of household head	38.2	31.2	33.5	39.1	44.1
Percent of hh members 60 years or older	12.0	20.0	5.0	15.4	16.1
Percent of household head with at least one year of primary education	14.0	50.0	61.5	20.1	18.1
Mean household size	8.0	5.6	6.2	8.0	8.3
At least one hh member with a vulnerability	32.0	23.1	10.0	24.5	20.4
Mean number of children	6.1	2.7	4.0	5.4	5.5
Percent of school-aged children in school	99.0	100.0	88.9	91.5	93.0
Cooperative member					
Gender of cooperative member					
% male	13.0	60.0	79.5	20.2	63.0
% female	87.0	40.0	20.5	79.8	37.0
Mean age of cooperative member	38.2	31.2	33.5	39.1	44.1
Percent of cooperative members with at least one of year primary education	13.0	7.0	82.0	8.5	12.2
N	100	10	39	188	230

Table 13. Aspirations and Well-Being indicators, by cooperative

Indicator	Firewood	Cookstove	Solar	Meat selling	Farming
Aspirations and Satisfaction					
% respondents satisfied with life overall	35.00	20.00	53.80	72.30	50.40
% respondents satisfied with life before joining cooperative	34.00	20.00	30.80	69.70	0.00
% agree hh's economic situation better compared to last year	49.00	60.00	92.30	84.60	87.00
% agree hh's economic situation will be better next year compared to now	72.0	100.0	100.0	83.5	80.4
Well-Being					
% respondents with none to mild depression (PHQ-9)	77.0	80.0	84.6	87.8	91.3
mean disability score (0=no disability and 24=full disability)	5.3	5.1	3.4	3.2	3.5
N	100	10	39	188	230

*Note: mean disability score is based on 6 items of the WHODAS 2.0 version of the WHODAS2.0 12-Item scale.

Table 14. Security and access to services, by gender of respondent

Indicator	Male	Female
% of co-op members who have **access to health care**	76.8	83.2
% of co-op members who have **access to education for their children**	93.4	92.1
% of co-op members who agree **level of security is good**	98.7	98.2

% of co-op members who have **been stopped by police because of refugee status**	50.6	38.8
% of co-op members who report **better "physical security"** from being in the cooperative	66.7	58.7
% of co-op members **experienced sexual violence** in past 12 months	2.2	3.6
N	216	329

Table 15. Promoting child protection of workers, by cooperative

Indicator	Firewood	Cookstove	Solar	Meat-selling	Farming
% female members brought children 9 years or younger to work in last 30 days					
Never	81.2	100.0	42.9	76.4	52.4
1-7 days	16.5	0.0	42.9	10.7	22.6
8 or more days	2.4	0.0	14.3	12.9	25.0
% female members brought children 10 years or older to work in last 30 days					
Never	84.9	66.7	85.7	85.0	59.5
1-7 days	15.1	33.3	14.3	5.0	19.1
8 or more days	0.0	0.0	0.0	10.0	21.4
N	87	3	7	132	81

Table 16. Safety and violence indicators, by cooperative

Indicator	Firewood	Cookstove	Solar	Meat selling	Agriculture
Safe working conditions					
% respondents know others feel unsafe working outside the camp	15.0	30.0	7.7	1.1	2.2
% respondents feel unsafe working outside the camp	15.0	40.0	7.7	1.7	7.4
Violence					
% respondents who experienced violence in the past 12 months...					
theft	18.0	30.0	18.0	2.1	2.2
physical threat	19.0	20.0	25.6	5.9	3.1
physical harm	11.0	10.0	12.8	5.3	2.2
sexual violence	8.0	10.0	12.8	0.5	0.9
N	100	10	39	188	230

Table 17. Economic indicators at baseline, by cooperative

Indicator	Firewood	Cookstove	Solar	Meat selling	Agriculture
Median household income (Birr)	500.00	2400.00	1000.00	1200.00	1000.00
Mean number of income-earning adults in household (other than respondent)	0.90	2.00	1.10	0.26	0.18
Median household expenditures (Birr)	2911.60	3865.03	3090.90	2834.93	2296.81
Mean count of types of major assets owned (0-26)	6.0	9.0	8.0	6.0	6.0
Mean count of types of household assets (0-19)	3.0	5.0	5.0	2.0	2.0
Mean count of types of livestock assets (0-9)	3.0	3.0	4.0	4.0	4.0
% of hh owning at least one…					
cattle	14.0	30.0	26.0	43.0	31.0
donkey	34.0	30.0	33.0	57.0	60.0

	camel	15.0	30.0	26.0	43.0	31.0
	goat	88.0	60.0	97.0	93.0	91.0
	sheep	48.0	50.0	72.0	72.0	62.0
	chicken	64.0	80.0	74.0	77.0	74.0
	dove	15.0	30.0	26.0	48.0	34.0
Percent of respondents with a loan		80.0	40.0	56.4	19.7	5.2
	N	100	10	39	188	230
Lender type: MFI		0.0	0.0	0.0	62.2	58.3
Lender type: Refugee committee		67.5	75.0	45.5	0.0	8.3
Lender type: Host committee		35.0	25.0	40.9	0.0	0.0
Primary reason: Food consumption		97.5	75.0	86.4	91.9	66.7
Average amount (Birr)		3000.00	3500.00	3500.00	12000.00	12000.00
	n	80	4	22	37	12
Percent of respondents with savings		13.0	20.0	48.7	30.9	13.5
	N	100	10	39	188	230
Savings institution: Bank		7.6	0.0	15.8	10.3	9.7
Savings institution: NGO		0.0	0.5	5.3	19.0	12.9
Savings institution: MFI		38.5	0.0	63.2	53.4	45.2
Savings institution: SACCO		0.0	0.0	5.3	0.0	0.0
Savings institution: Ayuto		53.8	0.0	10.5	3.4	0.0
Primary reason: Food consumption		53.8	0.5	42.1	50.0	51.6
Primary reason: Medical		46.2	0.0	47.4	15.5	29.0
Primary reason: Ceremony		15.4	0.0	26.3	22.4	22.6
Primary reason: Debt		53.8	0.0	26.3	1.7	12.9
Primary reason: Business		0.0	0.5	10.5	44.8	6.5
Primary reason: Inputs		15.4	0.0	52.6	12.1	12.9
Primary reason: Transportation		0.0	0.0	0.0	1.7	6.5
Primary reason: Durables		0.0	0.0	0.0	1.7	0.0
Primary reason: House		0.0	0.0	5.3	1.7	0.0
Primary reason: Lending		0.0	0.0	0.0	9.0	9.7
Primary reason: Labour		0.0	0.0	0.0	9.0	3.2
Primary reason: Travel		0.0	0.0	5.3	1.7	0.0
Primary reason: Dwelling		0.0	0.0	0.0	0.0	0.0
Primary reason: Public education		7.7	0.0	10.5	5.2	9.7
Primary reason: Private education		7.7	0.0	0.0	10.3	16.1
Primary reason: Religious education		0.0	0.0	0.0	3.4	3.2
Primary reason: Save for old age		0.0	0.0	5.3	34.0	19.4
Primary reason: Future medical costs		7.7	0.0	5.3	8.6	6.5
Primary reason: Harvest		0.0	0.0	0.0	5.2	6.5
Primary reason: Leave Ethiopia		0.0	0.0	0.0	0.0	0.0
Average amount (Birr)		1300.00	2645.00	3000.00	2350.00	2620.00
	n	13	2	19	58	31

Table 18. Food consumption and food security indicators, by cooperative

Indicator	Firewood	Cookstove	Solar	Meat selling	Agriculture
1. Food Consumption Score (mean; 0-112)	56.6	61.6	66.7	77.0	69.3
1a. Food Consumption Status					
Acceptable	95.0	100.0	97.4	100.0	98.3
Borderline	3.0	0.0	2.6	0.0	1.3
Poor	2.0	0.0	0.0	0.0	0.4
2. Household Food Insecurity Access Score (HFIAS)	13.5	16.6	17.0	17.1	16.7
2. Percent moderate to severe food insecure (HFIAS)	100.0	100.0	84.6	86.2	86.1
N	100	10	39	188	230

Table 19. Common indicators, by cooperative

Indicator	Firewood	Cookstove	Solar	Meat selling	Agriculture
% of co-op members who report electricity/solar access in their household	28.0	70.0	61.5	9.6	10.0
% of co-op members who report better "financial stability" from being in the cooperative	21.0	20.0	53.9	84.0	88.7
% of co-op members who report better "physical security" from being in the cooperative	18.0	20.0	61.5	76.6	71.6
% of co-op members who report more "confidence" from being in the cooperative	22.0	20.0	61.5	86.2	85.6
% of co-op members who report they can trust local Ethiopians in the kebele	94.0	80.0	89.7	89.9	92.2
% of co-op members who report they can trust refugees in the camp where they live	97.0	100.0	100.0	93.6	98.7
% of female co-op members who report contributing to household financial decisions	91.9	33.3	85.7	62.2	30.4
% of male co-op members who report household financial decisions include spouse	20.0	100.0	50.0	6.9	24.4
N	100	10	39	188	230

Table 20. Cooperative income results for energy project cooperatives

Firewood	
Median co-op income	0
Mean co-op income past 30 days	73.00 (44.71 - 101.29)
Mean monthly income before joining co-op	282.10 (192.47 - 371.73)
Percent of respondents who feel membership is worth the time	6
N	*100*
Solar	
Median co-op income	500
Mean co-op income past 30 days	412.82 (278.77 - 546.87)
Mean monthly income before joining co-op	1123.80 (637.11 - 1610.48)
Percent of respondents who feel membership is worth the time	30.8
N	*39*

Cookstove	
Median co-op income	17.5
Mean co-op income past 30 days	78.3 (-6.40 - 162.00)
Mean monthly income before joining coop	635.80 (103.98 - 1167.62)
Percent of respondents who feel membership is worth the time	0
N	*10*

Table 21. Firewood cooperative module - additional results

Machinery	Percent
Processing centre available	81.0
N	100
Current status of tools and machinery	
All working	30.9
Some working	53.1
None working	14.8
n	81
Received training	34.0
N	100
Type of training	
Business management	44.1
Accounting/financial management	17.7
Technical training	74.3
n	34
Availability of Prosopis	**Percent**
Prosopis available in last 30 days	
Never	41.0
One or two times in the last 30 days	30.0
One or two times per week	28.0
Almost every day	1.0
Activities when prosopis is not available	
Do nothing	39.0
Collect prosopis to sell	25.0
Collect other types of firewood to sell	20.0
Find alternative source of income	17.0
N	100
Collection of Prosopis/Firewood	**Percent**
Percent of members who collect prosopis/firewood	19.0
N	100.0
Collection group	
With other cooperative members	79.0
Alone	15.8
With family members	5.3
Transport of collected prosopis/firewood	
Carry on my back	79.0
Carry with someone else	10.5
Someone else carries it	5.3
Donkey cart	5.3
Pay someone to transport	5.3
N	19
Perceived Benefits	**Percent**
The cooperative/processing centre is a safe area to work.	92.0
The cooperative/processing centre provides a safe space for members' children while they work.	70.0
Being a cooperative member helps…	

reduce walking long distances to collect firewood.	66.0
reduce the hazards of traditional cookstoves.	64.0
reduce the risk of sexual and gender-based violence.	61.0
helped to increase my household income.	53.0
reduce conflict among the host community and refugee members.	73.0
reduce conflict among refugee cooperative members.	80.0
N	100

Table 22. Cookstove cooperative module - additional results

Challenges	Percent
Lack of clients/demand	70.0
Lack of business planning	20.0
Conflict between cooperative members	20.0
Working relationships/approvals with the governing bodies in camps and kebele	10.0
Equipment is not working	10.0
Lack of inputs/materials	10.0
Don't have the right tools	10.0
Not enough help from NGO to manage the work	10.0
Proceeds/Fees from services are too low	0.0
No challenges	10.0
N	10
Perceived Benefits & Trainings	**Percent**
The cooperative/processing centre is a safe area to work.	100.0
The cooperative/processing centre provides a safe space for members' children while they work.	80.0
Being a cooperative member helps…	100.0
reduce walking long distances to collect firewood.	100.0
reduce the hazards of traditional cookstoves.	100.0
reduce the risk of sexual and gender-based violence.	100.0
helped to increase my household income.	60.0
reduce conflict among the host community and refugee members.	90.0
reduce conflict among refugee cooperative members.	90.0
Type of training received	
Business management	60.0
Accounting/financial management	20.0
Technical training	80.0
N	10

Table 23. Solar cooperative module - additional results

Challenges	Percent
Lack of inputs/materials	71.8
Lack of a Mini Grid	35.9
Lack of business planning	20.5
Don't have the right tools	18
Equipment is not working	15.4
Lack of clients/demand	7.7
Proceeds/Fees from services are too low	7.7

Working relationships/approvals with the governing bodies in camps and kebele	5.1
Conflict between cooperative members	5.1
Not enough help from NGO to manage the work	5.1
No challenges	7.7
N	39
Cooperative Structure	**Percent**
Services cooperative provides to community	
Selling electricity	43.8
Maintenance of mini-grid	43.6
Maintenance of street lights	79.5
Maintenance of home solar systems	74.5
Solar charging stations	25.6
Cooperative collects payment from community for maintaining street lights	87.2
Percent who are trained technicians	87.2
Received additional training	91.2
Business management	87.1
Accounting/financial management	67.7
Technical training	83.9
N	39

Table 24: Regression results of resilience capacities and food security outcome

Dependent Variable: Food Security[1] (GREY rows represent significant, positive association with more food security)	**coefficient**	**p**
Select resilience capacities		
Household asset count	0.5	***
Member has savings	1.5	**
Bridging social capital (trust_host)	2.1	**
Bonding social capital (trust_refugee)	0.9	
Aspirations (finance_future)	-0.2	
Livestock asset count	-0.2	
Demographic controls:		
Family size	-0.2	**
Member has at least 1 year formal education	-2.2	**
Physical health of member (higher WHODAS = more disability)	-0.4	***
Psychological health of member (higher PHQ9 = more anxiety/depression)	-0.1	
Vulnerable members in household	0.7	
Years in camp	0.0	
Other income-generating adults in HH	0.4	
Number of vocational trainings since arriving in camp	0.7	
Cooperative		
Solar	1.8	**
Cookstove	1.7	
Meat	3.8	***
Agriculture	3.7	***
Constant (Firewood)[2]	12.5	***

Note: Asterisks represent statistical significance at the 0.01 (***), 0.05 (**), and 0.10 (*) levels.
[1] Higher score = more food secure (inverse of HFIAS)
[2] Except for Cookstove (likely because of too small sample), the other co-ops' food security differs significantly from Firewood (the reference group).

Cooperative Capacity Assessment

Cooperative	Camp	Total Score
Daryelayasha Xoolaha CAHWs	Bokolmanyo	27
Bur Yarey Farm/Agriculture Cooperative	Buramino	27
Bukuraley Agriculture Cooperative	Melkadida	28
Haragiyo Hola Livestock Traders Cooperative	Hilaweyn	28
Hormud Cookstove Cooperative	Melkadida	31
Al-Amin Prosopis Cooperative	Melkadida	32
Iftin Energy Cooperative	Kobe	32
Al-Amin Prosopis Cooperative	Hilaweyn	32
Canabadan Milk Cooperative	Bokolmanyo	32
Iman Livestock Traders Cooperative	Bokolmanyo	32
Kulmis Livestock cooperative	Buramino	33
Al-Amin Prosopis Cooperative	Buramino	33
Daryelayasha Xoolaha CAHWs	Melkadida	33
Al Amin_Prosopis Cooperative	Kobe	34
Hawlwadaag Meat Cooperative	Hilaweyn	34
Iskufilan Agriculture Cooperative	Hilaweyn	34
Dayax Nuura Agriculture Cooperative	Melkadida	35
Horsed Energy Cooperative	Buramino	35
Tawakal Milk Cooperative	Kobe	35
Khairat Meat Cooperative	Bokolmanyo	35
Hal Abuur Prosopis Cooperative	Bokolmanyo	36
Towfiq Milk Cooperative	Melkadida	36
Tayo Milk cooperative	Buramino	37
Kobe Agriculture Cooperative	Kobe	37
Iftin Energy Cooperative	Melkadida	39
Daryelayasha Xoolaha CAHWs Cooperative	Hilaweyn	40
Muruqmal Energy Cooperative	Hilaweyn	40
Daryelayasha Xoolaha CAHWs	Kobe	41
Tawakal Meat Cooperative	Melkadida	41
Daryelayasha Xoolaha (Tawakal) CAHWs Cooperative	Buramino	42
Towfiq Livestock Cooperative	Kobe	42
Wabari Agriculture Cooperative	Melkadida	42
Raha Meat cooperative	Buramino	43
Hawlwadag Agriculture Cooperative	Buramino	43
Alla-Amin Livestock Cooperative	Melkadida	43
Wadajir Meat Cooperative	Kobe	46
Hilac Milk Cooperative	Hilaweyn	46
Iftin Energy Cooperative	Bokolmanyo	46

Annex 3: Project Results Frameworks/Evaluation Matrix

Phase 3 Livelihood Project – planned outcomes and key indicators

Livelihood Outcome	Key Indicator
Self and wage employment are increased in the agriculture, livestock and enterprise sectors	KPI1: % of targeted PoC who are a member of a cooperative, association, network or social group due to UNHCR/partner support.
Incomes from agriculture, livestock, and services sectors increased	KPI2: % of targeted PoC who self-report increased income compared to the previous year.
Business activity through access to financial services is bolstered.	KPI3: % of targeted PoC who currently access formal loan services.
	KPI4: % of targeted PoC who currently access formal savings services.
	KPI5: % of targeted PoC who currently access micro-insurance services (in 2021 only).
Business management and technical skills in the agriculture, livestock, and services sectors are enhanced.	KPI6: % of targeted PoC who have completed training related to agricultural production (without a nationally recognised certificate).
	KPI6: % of targeted PoC who have completed training related to livestock production (without a nationally recognised certificate).
	KPI6: % of targeted PoC who have completed training related to business management (without a nationally recognised certificate).
Food security of households are strengthened	KPI9: Land productivity per targeted self-employed PoC
	KPI10: # of livestock owned by the targeted self-employed PoC
UNHCR will also track: sales volumes and revenues generated by cooperatives; cost of production for agriculture and livestock; production and productivity per unit area of land cultivated; increase in livestock herd size; increase in livestock sales; performance of microfinance loans; establishment of new businesses connected to the project investments/multiplier effects.	

Phase 3 Energy Project - baseline indicators and evaluation matrix

Note: many of the indicators suggested below by the Energy Project are seeking community-level improvements, which would require a population-based study and cannot be measured in this performance evaluation series. The 'actual indicator' that can be measured is provided in the last column.

Energy Outcome	Key Indicator (proposed by Energy Project)	Actual Indicator (from available data) Baseline Tool and Measure:
Increased development of the local economy from microloans, energy access and UNHCR's capacity building	Economic development measured: 1. % change in # or scale of local enterprises operating between baseline and endline 2. % change in employment levels 3. % change in local production in the local economy between baseline and endline	1. Quant – Household Roster: Number of working age/non-disabled household members with IGA, triangulated with secondary data from UNHCR market studies and Oxford Refugee Economies report, where possible. 2. Quant – Income/Other Sources and Cooperative-specific Income 3. Quant – Expenditures: Average HH expenditure, as proxy for supporting local economy
Increased capacity of energy cooperatives to support energy initiatives	Capacity measured as: 1. Average default rate on loan repayment 2. Healthy functioning of the energy cooperatives (meeting regularly, charter, set leadership roles, business management, accountability mechanisms, financial management, etc.)	1. Not measured in survey, but can provide: Quant-Finances: % of beneficiary HH with access to loan/credit 2. Qual – CL interview: Cooperative capacity ratings; IP interview: perceptions of co-op functioning

Improved education outcomes from having access to electricity	1. Changes in academic performance between previous class without electricity and classes with electricity over time (trend analysis) 2. Changes in test scores or graduation/transition rates from primary to secondary school	1.Quant – Expenditure Module: % of co-op respondents with school-aged children and access to electricity reporting improved attendance because of access to electricity, triangulated with secondary data of local school records/attendance rates, if this information can be provided by UNHCR/partners. 2. Quant – Expenditure Module: % of co-op respondents with school-aged children and access to electricity reporting improved test scores because of access to electricity.
Increased safety in the community from energy access	1. % change in reported SGBV cases before and after (trend analysis) 2. % change in community perception of personal safety	1. Quant –Cookstove & Firewood Module on perceived benefits: % of co-op respondents who perceive less SGBV because of their membership; also from core module reports of sexual violence (disaggregated by sex of respondent) 2. Quant – Solar Module on perceived benefits: % of co-op respondents who feel their community has more security/less violence as a result of energy access; also from core module threats of violence/feelings of safety (disaggregated by sex of respondent)
Increased self-sufficiency and independence of refugees participating in the cooperatives	1. % change in household income 2. % change in number of households with stable employment 3. % change in number of households with energy access 4. % change in number of households able to meet basic needs (health, food, education, household expenses)	1. Quant – Core Module: Average personal income of respondents; and average household income 2. Quant – Cooperative-specific modules: % of respondents who report a sense of "financial stability" from being in the cooperative, as compared to their previous work arrangement. 3. Quant – Expenditures: % of respondents who report electricity/solar access in their household 4. Quant –Module 13 and FCS/HFIAS: % of respondents who report household's access to healthcare and education; and food security indicators
Increased empowerment in females participating in the cooperatives	1. % change among females with ability to influence decisions on household finances 2. % change among females with ability to influence decisions on child-rearing 3. % change among females with the ability to make decisions about what happens to her own body	1. Quant – Household Dynamics: % of female respondents who report contributing to household financial decisions. 2. Quant – Household Dynamics: % of female respondents who report influencing household decisions on child-rearing. 3. Quant – Household Dynamics: % of female respondents who report making decisions about her physical health.

Annex 4: Study Tools

Quantitative survey tool – core modules

UNHCR_Baseline_Core Modules.pdf

Qualitative tools/outlines

Cooperative Assessment Tool_TA

Implementing Partner_KII Outline_

Annex 5: Income Data Limitations

No baseline co-op income data for Farming and Meat-selling: It is not possible to calculate members' cooperative income from the Oxford RSC data. In email correspondence with the Oxford RSC team, it was explained that the survey intended to calculate cooperative income using results from units sold, hours worked, etc. However, the data have too many inconsistencies and errors to calculate this indicator due to various reasons such as differing use of measurement units for products, some giving estimates of price per unit and others price for total amount, and the inability of members to weigh their products without scales. Thus, only self-reported household-level income data are available, which presumably includes potential household income sources other than the cooperative. Following Oxford RSC's analysis method, the data for income have been winsorized to eliminate extreme values.

Household income calculation differs between Oxford RSC and TANGO: It should be noted that the household income indicator is calculated differently for the agricultural (Farming and Meat-selling) versus energy (Firewood, Solar, Cookstove) cooperatives. TANGO's standard method for calculating household income is through the household roster section of the survey, which asks about the income sources for every household member, including the respondent, and provides a sum for household income. However, Oxford RSC's roster did not include the respondent, and thus, because the respondent's co-op income could not be calculated as noted above this calculation was not possible because it would be missing the member's income; instead, RSC asked the respondent for an overall estimate of their total household income, which is the value reported in their report and in this report.

General limitations with self-reported income, and the need for proxy indicators: There is general acknowledgement in the literature that self-reported income is prone to inaccuracies for various reasons such as the respondent's lack of knowledge of earnings, problems remembering income amount with longer recall, and providing incorrect estimates due to social desirability bias.[49] While this survey did not ask for income recall longer than 30 days prior, there is potential for bias in self-reporting that requires the use of proxy indicators to gain the most accurate picture possible of household income. Total household expenditure is typically an acceptable alternative to household income in low-income country settings. However, TANGO notes that the difference seen between reported monthly income and expenditures is particularly high for this survey (expenditures are 3-4 times higher than income for most cooperatives, whereas in TANGO's experience the average difference is 30 percent), which also may indicate the income data are unreliable. The future project surveys and UNHCR monitoring should seek to understand the proxy indicators that will best represent income for these project beneficiaries, or identify other data sources such as assessment of cooperative records (as record-keeping is expected to improve).

[49] Moore, J., Stinson, L., & Welniak, E. (2000). [among multiple other sources]

Annex 6: Resilience Capacities

1. Absorptive capacity is the: Ability of households and communities to minimise exposure to shocks if possible and to recover quickly after exposure.

- Informal Safety Nets (e.g., involvement in savings groups, *zakat*, mutual help groups, civic or charitable groups, religious groups, women's groups)
- Asset Ownership (e.g., productive assets and livestock gained through the programme)
- Local shock preparedness plan or protection structures in place and disaster risk reduction (DRR) (e.g., awareness of disaster preparedness plans (for natural hazards) and about their awareness of how to prevent protection risks such as SGBV trainings or through conflict management committees, or how to report abuses.
- Household savings (e.g., use savings to cope with shock, not negative coping strategies such as distress sale of productive assets, withdrawing children from school to work, or taking on consumptive debt)
- Bonding Social Capital (e.g., connected to informal safety nets, above, it is seen in the bonds between community members. It involves principles and norms such as trust, reciprocity and cooperation, and is often drawn on in the emergency context, where PoC work closely to help each other to cope and recover)

2. Adaptive capacity is the: Ability of households and communities to make pro-active and informed choices about their lives and their diversified livelihood strategies based on changing conditions.

- Livelihood diversity (e.g., what have been the opportunities for PoC to diversity their livelihoods and income sources? What livelihoods can be sustained in the face of different kinds of risks/shocks?) and asset ownership (same as above)
- Human capital (e.g., basic literacy, primary or higher education, trainings received)
- Access to financial services (e.g., access to bank accounts, loans, micro-credit)
- Psychosocial adaptations (e.g., confidence, perceived ability to adapt and be self-reliant)
- Bridging social capital with the host community and to others in different risk environments (e.g., those with social ties outside their immediate community can draw on these links when local resources are insufficient or unavailable. Some PoC may heavily depend on remittances, for example. For this evaluation, it may also mean ties to the host community indicating greater social inclusion.)

3. Transformative capacity is the: System-level changes that ensure sustained resilience, including formal safety nets, access to markets, infrastructure, and basic services.

- Access to basic services (e.g., nearby health centre, primary school, security services, etc.)
- Policy changes regarding work permits and mobility.
- Access to formal safety nets (Government, NGO, or UN- provided food or cash assistance for relief or for the most vulnerable)
- Access to infrastructure (e.g., water and sewerage systems, shelter, electricity, telecommunications, paved roads)
- [For rural areas] Access to livestock services or natural resources (e.g., grazing land)
- Access to markets (e.g., regulations and policies allow PoC to access work permits, land, formal employment in all sectors)
- Linking social capital (e.g., a refugee group leader is designated to participate in local government decision making)

Annex 7: Terms of Reference

Annex A_ToR_decentralisec