

Inclusive Business Analysis

Optimising the dairy supply chain by improving sourcing and service delivery through professional farmer organisations

Meru Central Dairy Cooperative Union | Kenya

Public report

July 2025



Disclaimer

This study examines the projected (financial) performance of MCDCU's business model and explores and recommends potential improvements and opportunity pathways. The findings in this report have been used by IDH, MCDCU, and involved value chain players to shape their strategy, design project, and future business models, but these organisations cannot be held accountable for meeting any targets included in the report.

The contents of this report are intended for informational purposes only. While every effort has been made to ensure the accuracy and completeness of the information presented, the analyses in this report rely partially on projections and assumptions. The conclusions and recommendations in this report are based on our best knowledge and expertise at the time of preparation, but their applicability or accuracy in any situation or circumstance cannot be guaranteed. Therefore, no rights can be derived from the information provided in this report.

Furthermore, this report contains references to third-party sources or external websites. These references are provided for convenience and informational purposes only. We do not endorse or assume any responsibility for the content, accuracy, or availability of these external sources.

If you want to learn more, please [contact us](#).

Introduction

Smallholder livelihoods

Agriculture plays a key role in the wellbeing of people and planet. 70% of the rural poor rely on the sector for income and employment. Agriculture also contributes to and is affected by climate change, which threatens the long-term viability of global food supply. To earn adequate livelihoods without contributing to environmental degradation, farmers need access to affordable high-quality goods, services, capital, and technologies.

Inclusive Business Models

Inclusive Businesses provide goods, services, and livelihoods on a commercially viable basis, either at scale or scalable, to people living at the base of the pyramid, making them part of the value chain as suppliers and/or customers. These business models can sustainably increase the performance of farm(er)s while providing a business opportunity for the company. Using IDH's data-driven Inclusive Business methodology, IDH analyses these models to create a solid understanding of the relation between impact on the farmer and impact on the company.

Insights & Innovations

Our data and insights enable businesses to formulate new strategies for operating and funding service delivery, making the model more sustainable, less dependent on external funding and more commercially viable. By further prototyping efficiency improvements in service delivery and gathering aggregate insights across sectors and geographies, IDH aims to inform the agricultural sector and catalyse innovations and investment in service delivery that positively impact people, planet, and profit.

AgriGRADE | Graduating the cooperative landscape

- [AgriGRADE](#) is a strategic partnership initiated by a consortium consisting of Agriterra, the IDH Farmfit Fund, IDH, Oikocredit and SCOPEinsight. This pilot initiative was launched in 2024 and is currently being implemented in Kenya and Tanzania
- **Approach:** [AgriGRADE](#) seeks to strengthen farmer organisations (FOs) by delivering tailored business development services to meet specific needs and gaps. It is a standardized and data-driven approach that focusses on professionalizing FOs and connecting them to financing and markets
- **Segmentation and graduation:** FOs are categorized into four levels based on a standardized assessment carried out by SCOPEinsight:
 - Level 4:** Top-performing organisations
 - Level 3:** Advanced organisations
 - Level 2:** Advancing organisations
 - Level 1:** Emerging, informal organisations
- AgriGRADE works to support FOs progress through these levels, by building their capacity, empowering them to Level 4 working with local business development service providers such as African Turnaround Limited (ATL) and Policy Markets Options (PMO)
- **Impact:** Over a three-year period, AgriGRADE envisions to increase the number of high-performing FOs through its segmentation and graduation approach. This approach strengthens the business performance and investment readiness of farmer organisation, strengthens value chains, develops pipeline for financial institutions and complements government economic goals.



Abbreviations

AI	Artificial Insemination
EBIT	Earnings before interest and taxes
EBITDA	Earnings before interest, taxes, depreciation and amortization
FO	Farmer organisation
FTE	Full-time equivalent
GDP	Gross domestic product
IT	Information technology
KAGRC	Kenya Animal Genetics Resource Centre
MCDCU	Meru Central Dairy Cooperative Union

MT	Metric ton (1,000 kg)
NGO	Non-governmental organisation
P&L	Profit and loss statement
SACCO	Savings and Credit Cooperative organisation
SHF	Smallholder farmer
SHGs	Self Help Groups
T&E	Training & Extension
UHT	Ultra-High Temperature Milk
USD	United States dollar (currency)

Report outline

1 Executive summary

2 Business model

3 MCDCU Business case

4 FO Business case

5 Annex





1

Executive summary



Despite its significance in the Kenyan economy, the dairy value chain remains largely fragmented, with most of the milk sold in its raw unprocessed form in informal markets

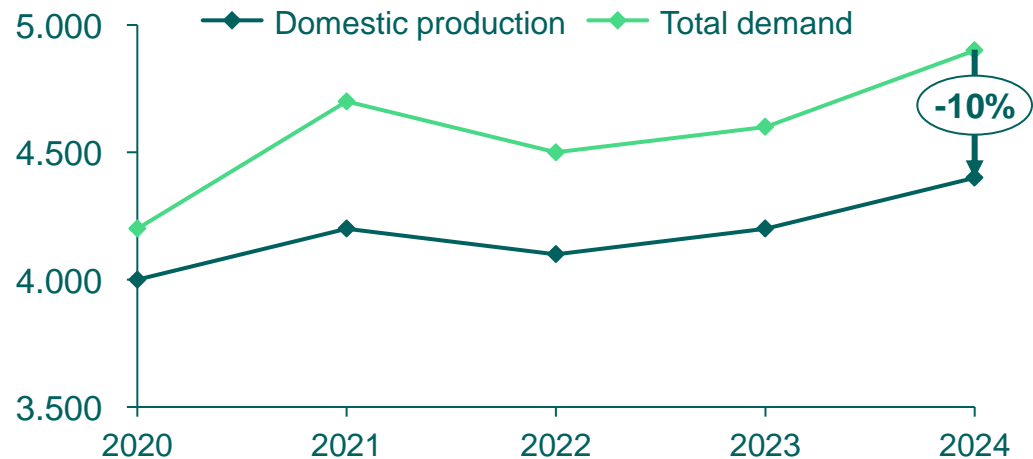
The dairy industry contributes about ~4% of Kenya's national Gross Domestic Product (GDP), ~14% of the agricultural GDP and is a source of livelihoods for **1.8Mn** smallholder farmers who contribute **80%** of production.¹ As of 2023, Kenya had **5.1Mn** dairy cattle.²

Milk production has been steady over the years averaging **4Bn** litres annually with cow milk accounting for **75%** of total production.^{2,3} Kenya's production and consumption is among the highest in Africa with a per capita consumption of **83 litres**.² The current deficit is estimated at **280Mn litres** and is projected to grow to **660Mn litres**² by 2033 driven by the growing population

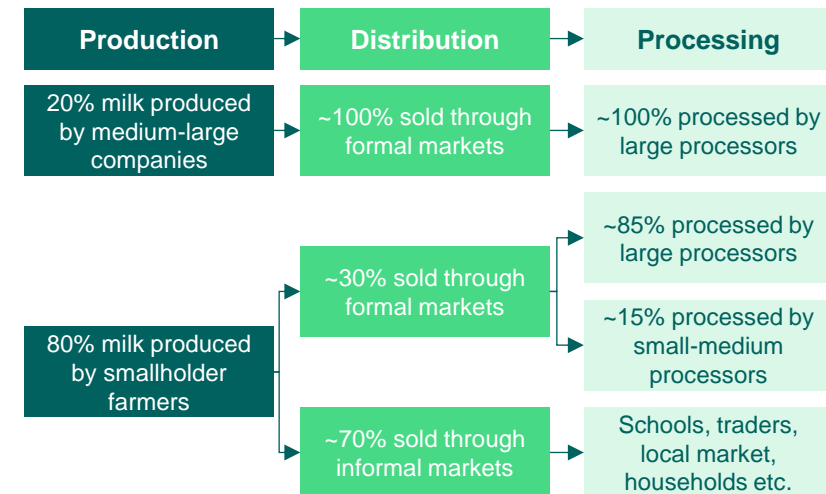
Despite its potential, the industry continues to face a myriad of challenges limiting growth and competitiveness

- The current productivity (**792kgs/cow/year**)¹ remains low and is on average **39-49%** of attainable yields.²
- High cost of production and poor-quality inputs particularly feed and AI services
- Underutilization of processing capacity (**<50%**) due to insufficient supply of milk¹
- **80%** of the milk is traded through informal markets³ limiting income potential and resulting in food safety and quality concerns

Milk demand and supply in Kenya Mn Litres²



Milk production, distribution and processing flows³

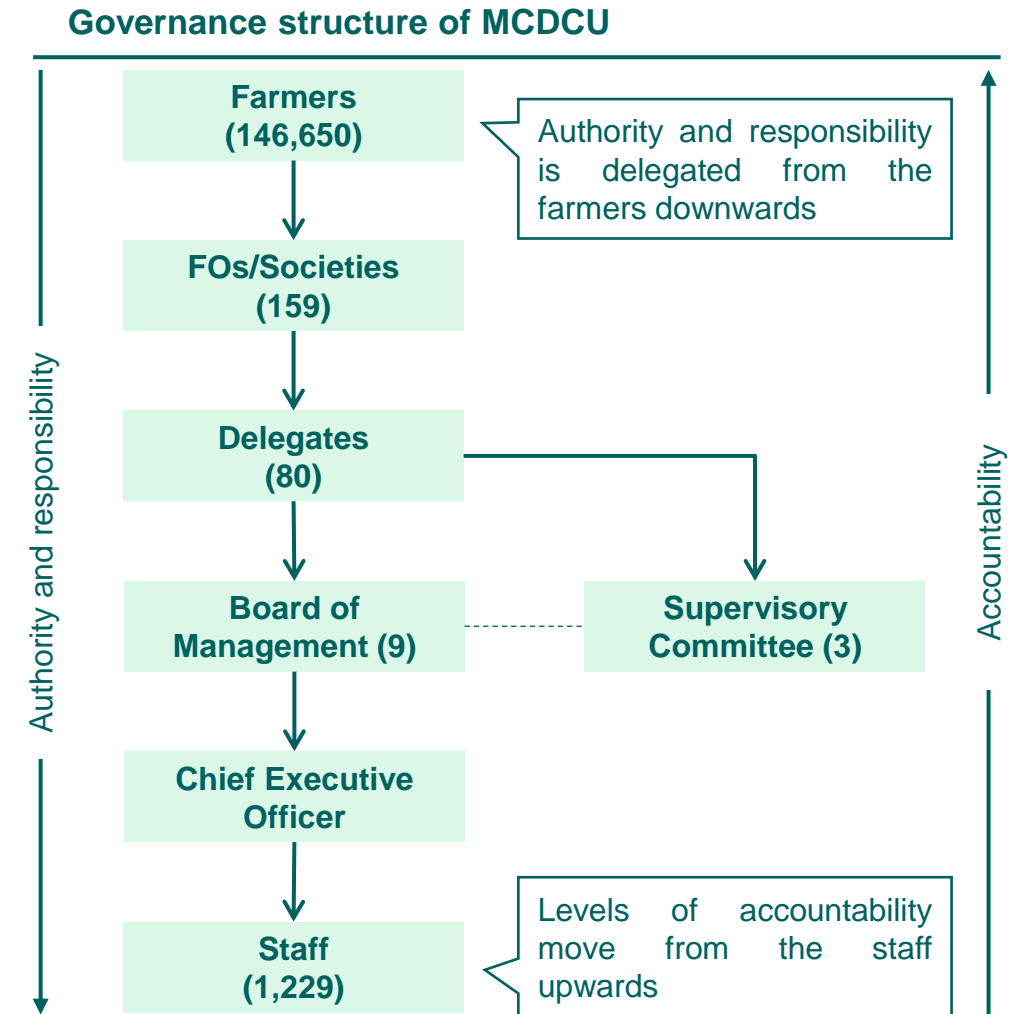


Sources: 1) [KDB: Cost of milk production 2024](#) 2) [KDB: The Kenya Dairy Industry Sustainability Roadmap 2023-2032](#); 3) [USDA: Overview of the Kenya Dairy Industry](#)



Fully farmer-owned, MCDCU is a leading Kenyan milk processor dedicated to producing quality products and improving its members' livelihoods

- Meru Central Dairy Cooperative Union (MCDCU) was established in 1967 by three FOs with the objective of milk aggregation, value addition and facilitating market access. In 1982, the Finland government supported the union to set up a 20,000 litres UHT processing plant
- It's scale of operations has significantly increased over the years. As of 2024, it had a daily processing capacity of 750k litres of milk and sourced ~560k litres of milk daily.¹ Its brand - *Mount Kenya* - is one of the leading brands in Kenya. In 2024, the union accounted for **22%**² of the total formal milk intake in Kenya
- MCDCU sources milk through three main channels – affiliated FOs (shareholders of the union), non-affiliated FOs and Self-Help Groups (SHGs) accounting for **~56%, 29% and 15% respectively** of volumes sourced in 2024. It currently has **159** affiliated FOs with a farmer base of **~146,000**¹
- While the union's primary sourcing regions are Meru and Tharaka Nithi counties, it has also been increasingly expanding to other counties like Nyandarua and Kiambu to meet its growing needs. In the next two years, it aims to double both its processing capacity and sourcing volumes
- MCDCU provides multiple services to the FOs and farmers such as extension and capacity building, transportation, cooling infrastructure, and inputs such as feed and artificial insemination (AI) services. It works with various partners to enhance service delivery
- The union has currently partnered with AgriGRADE to support the professionalization of FOs, with the objective of increasing milk supply



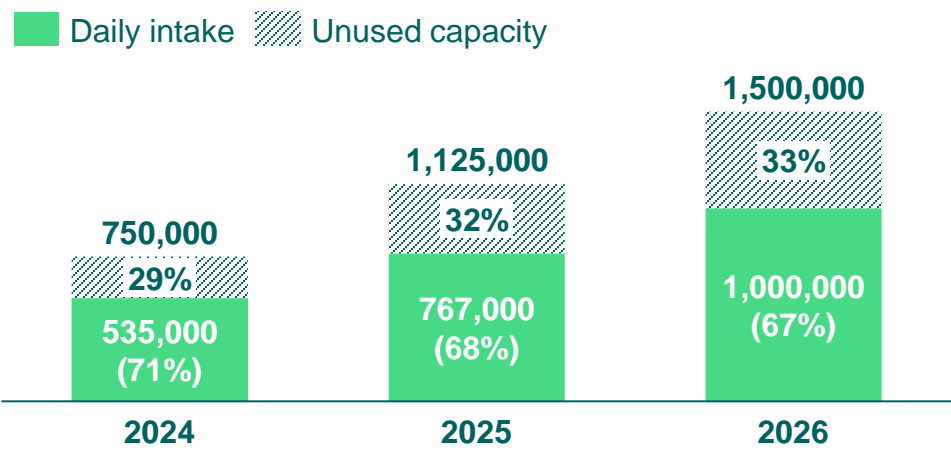
Sources: 1) Company Documents and Interviews (2024) 2) IBA analysis, Kenya Dairy Board

MCDCU intends to double its milk sourcing and processing capacity in the next two years to meet the growing demand for dairy products locally and in the export market

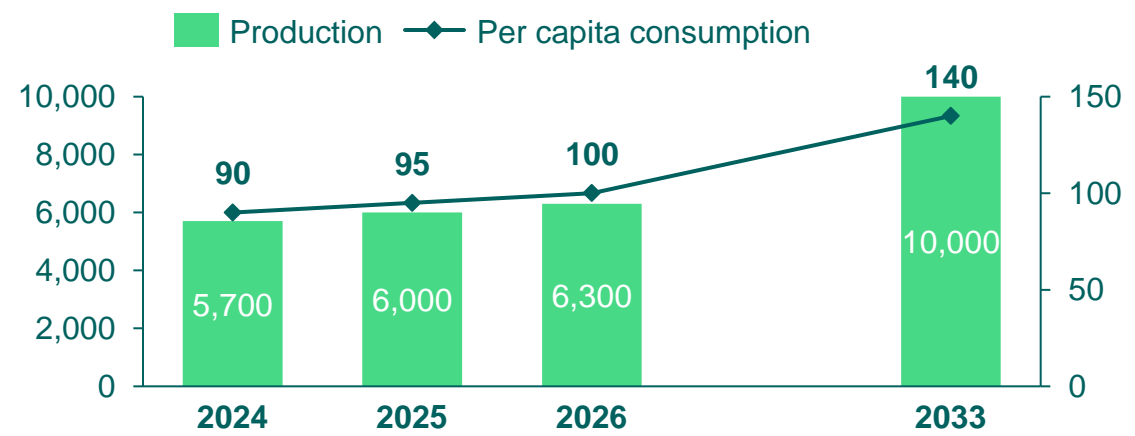
- MCDCU aims to increase its daily milk intake from 535k to 1 million litres by 2026, effectively doubling its sourcing volume within two years
- To support this growth, MCDCU will scale up its daily processing capacity from 750k to 1.5 million litres. This ensures that processing infrastructure keeps pace with sourcing ambitions
- By maintaining ~30% buffer capacity, MCDCU retains flexibility to handle peaks, absorb future supply increases, and explore new market opportunities. While this buffer may seem large, it reflects the strategic need for resilience in a highly seasonal sector, and ensures operational continuity in case of supply shocks or equipment downtime

- Kenya's milk production is projected to grow steadily from 5.7 billion litres in 2024 to 10 billion litres by 2033, in line with national targets¹
- Per capita consumption is expected to rise from 90 to 140 litres per year, driven by rising incomes, urbanisation, and increasing demand for safe, high-quality dairy products². While demand for plant-based alternatives may emerge, particularly in urban niche markets, current consumption trends still favour dairy.
- These trends confirm that MCDCU's sourcing ambition aligns with national growth patterns and is unlikely to result in oversupply, provided that investments in market access, distribution and quality continue

Milk intake and total processing capacity (L/day)



Projected milk production (Mn L) and per capita consumption (L)



Sources: 1) [Food Business Africa \(2023\)](#); 2) [Kenya National Bureau of Statistics via Eastleigh Voice \(2025\)](#)





Professionalising FOs is critical in driving sustainable growth and delivering value to farmers, MCDCU and other key stakeholders (1/2)

The Scope Assessment segmented FOs working with MCDCU into Level 2 (**92%**) and Level 3 (**8%**).¹ The segments are distinguished by the number of active members, volumes sourced, asset base and complexity of services. Level 3 FOs are observed to outperform Level 2 across all the dimensions. Significant gaps were observed across all the assessment dimensions for all the FOs.

Dimension*	Recommendations for improvement ²
Internal Management (2.6)	<ul style="list-style-type: none"> Strengthen governance by implementing proper transition mechanisms and comprehensive training of new board members Enhance business planning by developing and documenting clear business objectives and implementation plans Improve internal organisation by leveraging farmer management information systems, developing code of conduct and human resource management policies Strengthen member management and engagement by improving the participation and ownership of members in decision-making beyond the approval of annual plans
Financial Management (2.7)	<ul style="list-style-type: none"> Enhance financial planning by developing documented long-term (3-5 years) financial plans that include asset utilisation and replacement plans Improve financial reporting and monitoring by developing the human resource capacity/skills and the infrastructure capacity (accounting systems)
Sustainability (2.0)	<ul style="list-style-type: none"> Develop and implement a code of conduct and ethics policy, as well as develop strategies and programs to increase the participation of women and youth in the organisation's activities, from production to management. Promote sustainable farming practices through providing information and training to members. Develop and implement proper waste management practices, including making employees/members aware through training
Operations (2.9)	<ul style="list-style-type: none"> Ensure storage facilities meet the quality requirements. Invest in additional storage capacity for chillers and input storage. Invest in additional transport capacity to support the timely and effective aggregation of milk. Develop, document, and consistently communicate food safety and quality requirements to employees. Improve the organisation and analysis of digital records related to volumes, prices, sales, clients, and purchases.

1) Assessments were conducted on 28 Affiliated Societies between October and December 2024 as a representative for all FOs. 2) These recommendations are cross cutting across all the FOs.

* Average Scope scores highlighted in orange. Explore more insights on the professionalism of FOs across various dimensions based on the Scope Assessments [here](#).



Professionalising FOs is critical in driving sustainable growth and delivering value to farmers, MCDCU and other key stakeholders (2/2)

Area	Recommendations for improvement
Production base (2.9)	<ul style="list-style-type: none">• Develop a structured annual training plan and curriculum that addresses identified needs, including good livestock management practices, milk handling, and quality management• Strengthen the traceability system for milk and other products through digitalisation for better monitoring• Document quality procedures for inputs and ensure regular checks on input quality and expiration dates• Periodically review farm gate prices to reflect changing market dynamics• Develop internal capacity for the provision of extension services and AI services within FOs. Pilot the use of model/lead farmers as a delivery mechanism for training and information dissemination
Market (1.7)	<ul style="list-style-type: none">• Maintain regular engagement with MCDCU to gather information about product demand, quality requirements, service requirements, and other relevant market information• Review the KES 3 fixed commission structure to effectively price the different external risks faced by different FOs
Enabling Environment (2.6)	<ul style="list-style-type: none">• Strengthen relationships with government extension officers to unlock and receive more public extension services• Actively seek and engage with capacity-building service providers to address identified weaknesses• Continue to engage and strengthen relationships with sector organisations, aiming to receive relevant services and ensure the organisation's voice is well-represented within the sector• Continue to nurture positive relationships with the local community and explore opportunities for more active engagement and communication strategies
External risk (2.7)	<ul style="list-style-type: none">• Integrate risk mitigation strategies for biological and environmental risks into the extension services that the FOs provide to increase member awareness• Integrate environmental and climate risks in the overall organisational business planning. Cooperatives need to incorporate ideas and approaches to mitigating the effects of climate change into their annual plans and budgets

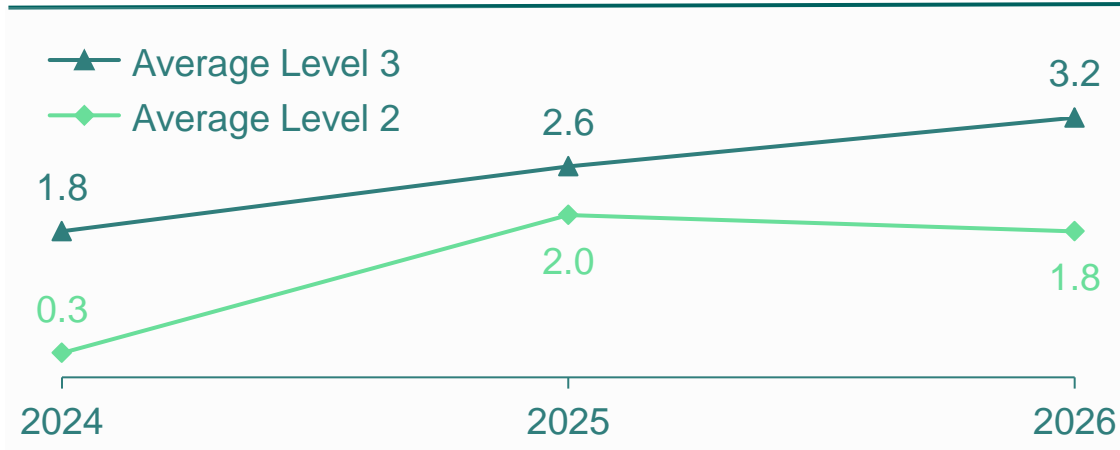
1) Assessments were conducted on 28 Affiliated Societies between October and December 2024 as a representative for all FOs. 2) These recommendations are cross cutting across all the FOs.

* Average Scope scores highlighted in orange. Explore more insights on the professionalism of FOs across various dimensions based on the Scope Assessments [here](#).



There is a notable variation in the financial and business performance of the FOs both across and within the segments; with potential for growth as productivity increases

EBIT Margins per year (%)

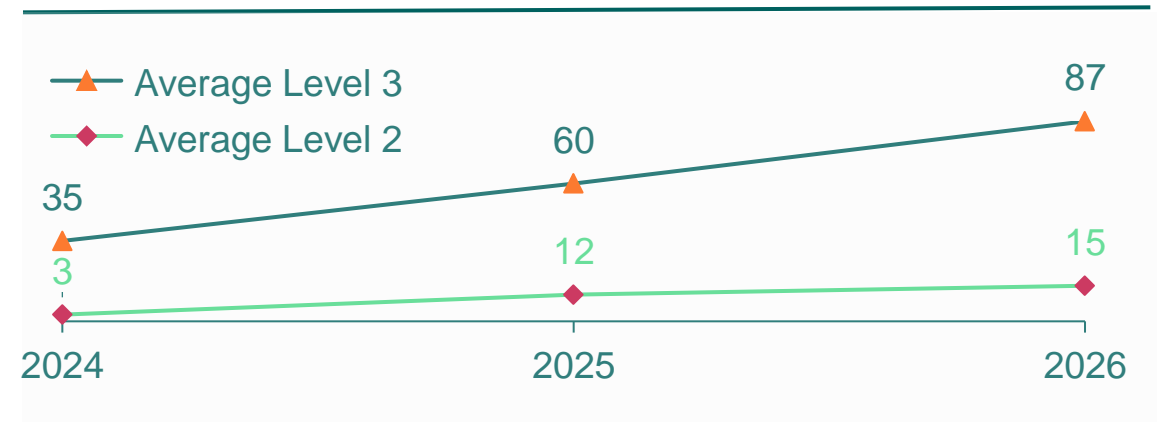


- The growth in EBIT margins across the years is due to the projected increase in the sourcing volumes with projected higher productivity and growing active member base
- The difference between the performance of Level 2 and Level 3 FOs is primarily informed by the volumes of milk aggregated. Level 3s collect up to **3.8 times** the volumes collected by Level 2s
- Variation in performance within Level 2s is attributed to the distance covered during collection and transportation to the factory intake, the availability of a cooling facility and whether the transport is hired or owned by the FO. Transportation mode is influenced by the terrain and inadequate internal capacity across FOs

Key FO Performance Considerations

- A projected **productivity per cow** growth of **50%** and **61%** for Level 2s and Level 3s, respectively, will result in the aggregation of **~ 7 MT** and **~ 25 MT** of milk per day for Level 2 and Level 3
- Currently, FOs generally operate at **full transport capacity**, while the **cooling capacity** for Level 3 FO is **overstretched**. Sustainable scaling of volumes should be accompanied by an investment in the transport and cooling capacity of the FOs
- FOs generally have limited cash reserves and internal share capital. **External financing mechanisms** are therefore necessary for capital expenditures. Level 3 FOs have a better capacity to service debt than Level 2 FOs as shown below

Potential Debt Service Coverage¹ (USD '000)



Notes; 1) Assuming a Debt Service Coverage Ratio (DSCR) of 1.5



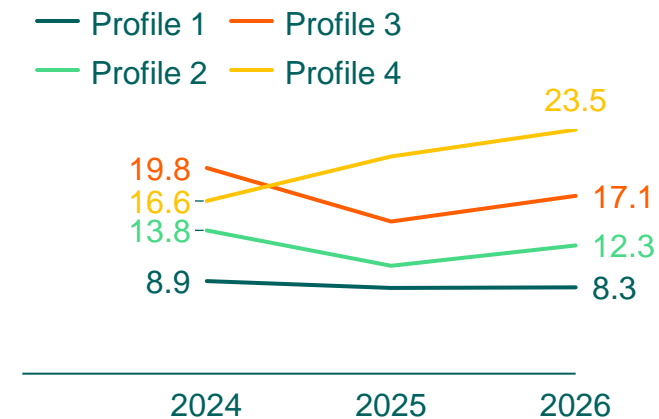
Increased sales are expected to drive the input stores towards profitability; transport costs decline with an increase in volumes for FOs that own trucks; and additional investment in transport and cooling is needed at FO level

1 Input Stores Break-Even Analysis (Level 3 and Level 2 FOs)

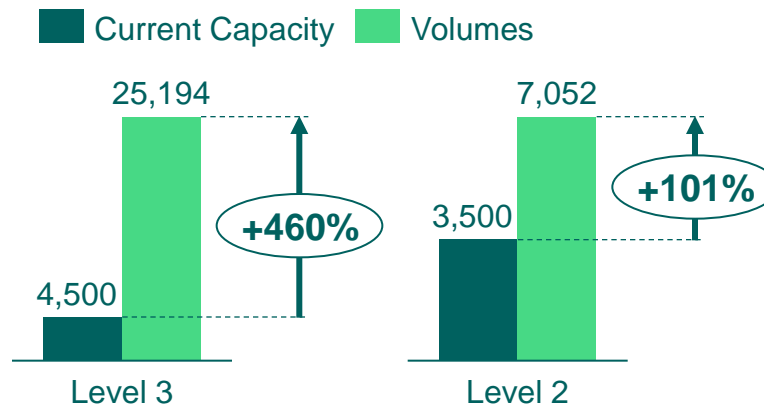
Products	Selling Price (USD/Unit)	Variable Cost (USD/unit)	Sales Mix (%)	Break Even Units (#)	Break Even Sales (USD)
Dairy Meal (bag)	23.34	22.17	93.4%	946	22,084
Mineral Salts (kg)	0.79	0.64	5.3%	1,577	1,252
Other			1.3%		299
Fixed Costs			USD 1,307		

1. Selling 946 bags of dairy meal, 1,577 kgs of mineral salt, and other inputs worth USD 299 will see the input stores break even
2. Level 3 (Profile 1) FOs have the lowest transport cost per unit of milk. Transport costs are high for Profiles 3 and 4 (Level 2s) due to transportation distance and outsourcing transport services, respectively
3. Level 3 and Level 2 FOs will be required to increase their cooling capacity by 460% and 101%, respectively.
4. Level 3 FOs will require investment in two additional transport trucks (3MT), while Level 2 FOS will need one more truck.

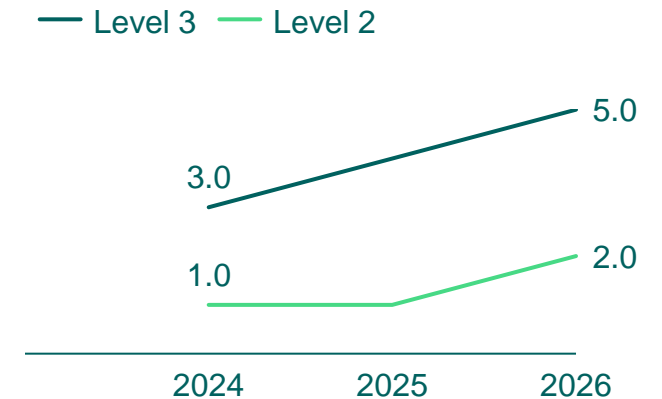
2 Transport cost (USD/MT)*



3 Cooling capacity gap in 2026 (Kgs)



4 Transport trucks required (#)



Notes: * See detailed description of the FO profiles as outlined in slides [45](#) and [46](#)



2

**Business
model**



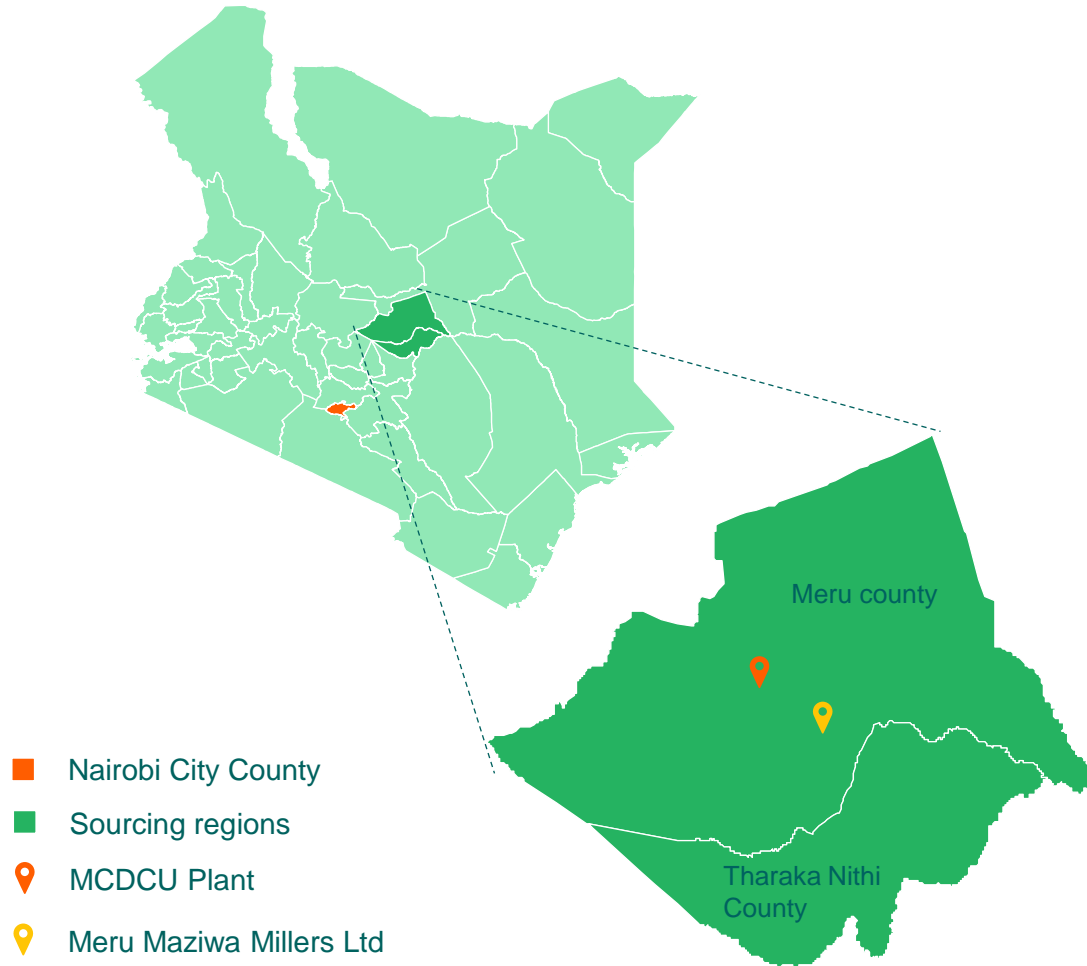
Objective | By professionalising FOs, AgriGRADE aims to transform rural economies into commercially viable, resilient and inclusive systems that drive food trade and security

		<i>Impact of the objective on the different actors in the project</i>		
		Farmer Organisations	MCDCU	AgriGRADE
Core objective	Transform rural economies into economically viable, resilient and inclusive systems that drive food trade and security through professionalising farmer organisations	<ul style="list-style-type: none"> Improve FOs' operational and financial capacity to efficiently serve farmers and drive farm-level productivity while meeting MCDCU's sourcing requirements 	<ul style="list-style-type: none"> Double the daily milk intake to 1,000,000 litres per day and increase the processing capacity to 1,500,000 litres per day over the next 2 years 	<ul style="list-style-type: none"> Graduate FOs to higher levels of professionalism, improve efficiency, strengthen the dairy value chain and facilitate access to finance
Secondary objectives	Improve income and livelihoods of SHFs and their dependants	<ul style="list-style-type: none"> Increase access to services at the farm level to spur yield improvement 	<ul style="list-style-type: none"> Provide necessary support to improve the incomes of farmers 	<ul style="list-style-type: none"> Promote the improvement of SHF livelihoods
	Increase on- and off-farm rural employment.	<ul style="list-style-type: none"> Develop the technical capacity of farmers to be gainfully engaged in dairy farming 	<ul style="list-style-type: none"> Provide market access, ensuring consistent uptake for raw milk 	<ul style="list-style-type: none"> Incentivise the creation of gainful opportunities in the rural economies
	Improve access to loans and investments for FOs.	<ul style="list-style-type: none"> Improve the capacity of the FOs to serve farmers efficiently 	<ul style="list-style-type: none"> Provide finances for capital expenditure required to scale capacity 	<ul style="list-style-type: none"> Enable access to finance for both farmer organisations and MCDCU
	Improve environmental practices, climate resilience and gender inclusiveness	<ul style="list-style-type: none"> Improve the resilience of farmers to climatic shocks and the participation of women in the value chain 	<ul style="list-style-type: none"> Improve the resilience of the union to climate-induced supply chain disruptions 	<ul style="list-style-type: none"> Establish gender inclusive and climate resilient value chains

Sources: AgriGRADE Proposal (2023)



Location | MCDCU is a dairy farmers cooperative union located in Meru town, Meru County in eastern Kenya and serving farmers within and outside of the county



Farmers' locations

- MCDCU sources fresh milk from smallholder farmers in Meru and Tharaka Nithi counties. SHFs are organised into FOs, which the union classifies as affiliated and non-affiliated.
- Farmers are in the highland and intermediate zones, which provide a conducive environment for dairy farming in terms of temperature, rainfall patterns, and soil types that can support the cultivation of fodder crops. These zones have altitudes of more than 1000m above sea level and mean temperatures range from 15-23 degrees Celsius².
- Holstein Friesian is the county's most common breed, accounting for 80% of the dairy cattle population. Ayrshire accounts for 15%, while Jersey and Guernsey breeds account for 5%. Pure breeds are primarily found in the highland regions, with crossbred cattle being reared in the lowland regions².




Factory location

- MCDCU's milk processing plant is in an industrial area in Meru town. FOs either deliver milk directly to the intake depot at the factory or the established cooling centres located in multiple locations across the catchment area.
- MCDCU, through its subsidiary Meru Maziwa Millers Ltd, is constructing a feed mill in Mitunguu, Meru.

Sources: 1) Company Interviews and Documents (2025) ;2) [MCDCU Breeding Strategy \(2018\)](#)



Sourcing Channels | MCDCU has three main sourcing channels, mainly farmer societies. 56% of raw milk is sourced from FOs that have a shareholding in the union

	Quality and Commodity Specifications	Reliability and Volumes Sourced	Contracting and pricing Mechanisms	Traceability and Compliance
 Affiliated Societies	<ul style="list-style-type: none"> Milk quality is relatively the same across all farmer organisations MCDCU has engaged 20 extension officers who train farmers on milk quality across all the sourcing channels. The farmer organisations handle any quality issues that arise at the farm level. Milk of substandard quality is rejected at the farmer organisation level 	<ul style="list-style-type: none"> Over the past year, approximately 56% of the volumes sourced were from affiliate societies. In the last three years, 99% of the milk the affiliate societies procure was sold to MDCU 	<ul style="list-style-type: none"> No contracts with the FOs The market determines milk prices. In the past year, MCDCU paid farmers KES 50 per litre of milk delivered The union paid FOs a fixed fee of KES 3 per litre of milk aggregated to support operational costs At the end of the year, MCDCU pays farmers a bonus of 2 KES for every litre of milk delivered during the year. FOs are paid a dividend based on their shareholding and MCDCU profits 	<ul style="list-style-type: none"> Individual farmers deliver their milk to collection points. From there, the union collects milk and transports it using their milk trucks to the processing factory Farmer organisations (FO) are responsible for enforcing traceability mechanisms at the farm level, although implementation and adoption are low
 Non-Affiliated societies	<ul style="list-style-type: none"> Additional quality tests are performed at MCDCU before the milk is processed Rejections at MCDCU intake depots are less than 1% of the total milk sourced daily 	<ul style="list-style-type: none"> ~ 29% of the milk sourced is from non-affiliate farmer societies 	<ul style="list-style-type: none"> No contracts with the FOs The market determines milk prices. In the past year, MCDCU paid farmers KES 50 per litre of milk delivered The union paid FOs a fixed fee of KES 3 per litre of milk aggregated to support operational costs 	<ul style="list-style-type: none"> Existing mechanisms at the FO level are focused on guaranteeing quality and addressing cases of milk spoilage
 Self Help Groups		<ul style="list-style-type: none"> SHGs account for ~15% of milk volumes sourced over the past one year 		

Sources: Company Interviews and Documents (2025)

Notes: Affiliate societies are shareholders in MCDCU, while non-affiliate societies and SHGs are not shareholders



Services | The union provides services to both FOs and individual farmers aimed at developing FO capacity, ensuring quality is maintained and herd productivity is improved

Category	Service	Impact	Delivery Mechanism	Status
Training and Information	Bookkeeping services	Ensure compliance with regulatory requirements	Union staff provide the service to FOs	Ongoing
	Staff and Board capacity building	Organisation capacity building	Union staff provide the service to FOs	Ongoing
	Extension services	Improve productivity at farm level.	Union extension officers provide the service to farmers	Ongoing
Access to finance	Capital expenditure credit	Improve the physical capacity of FOs	Facilitated through Saccos to FOs	Ongoing
	Working capital financing	Access to finance required for the purchase of farm inputs.	Facilitated through Saccos to farmers	Ongoing
	Insurance services	Minimise exposure to financial loss due to risks	Provided by CIC insurance to farmers	Ongoing
Inputs	Access to concentrate feed	Increase herd productivity at farm level	Provided to farmers through FOs Feed mill currently under construction	Ongoing
	Artificial Insemination services	Improve herd quality	Provided directly to farmers	Ongoing
Equipment and Labour	Access to cooling facilities	Minimise milk wastage and spoilage	Provided to FOs through a shared infrastructure	Ongoing
	ICT equipment support	Increase efficiency in FO operations	Provided in partnership with other development partners	Ongoing
Post Harvest Services	Transport of milk	Minimise quality deterioration and spoilage due to logistical challenges	The union picks the milk in bulk from the identified cooling centres	Ongoing

Sources: Company Interviews and Documents (2025)



Stakeholders | MCDCU works with multiple stakeholders who support the union in improving livelihoods of dairy farmers, its customers and employees

Actor	Legal status	Function (within this model)	Revenue model (within this model)	Incentive to participate (Within this model)
Input providers	Limited companies	<ul style="list-style-type: none"> Provide inputs, including feed and AI services 	<ul style="list-style-type: none"> Input sales 	<ul style="list-style-type: none"> Increase revenues
Financial Service Providers	Limited companies	<ul style="list-style-type: none"> Facilitate access to credit and insurance to farmers. 	<ul style="list-style-type: none"> Transaction costs, interest and premiums 	<ul style="list-style-type: none"> Increase revenues
Farmer Organisations	Registered societies	<ul style="list-style-type: none"> Provide services to farmers 	<ul style="list-style-type: none"> Milk Sales 	<ul style="list-style-type: none"> Facilitate market access for SHFs
Smallholder Farmers (SHFs)	Individuals	<ul style="list-style-type: none"> Rear dairy cows for milk production. 	<ul style="list-style-type: none"> Milk sales 	<ul style="list-style-type: none"> Increase income from dairy farming
Processed Milk Distributors	Limited companies	<ul style="list-style-type: none"> Sale of processed milk to consumers 	<ul style="list-style-type: none"> Volume based sales 	<ul style="list-style-type: none"> Increase revenues
National and County Government, Kenya Dairy Board	Public Institution	<ul style="list-style-type: none"> Provide extension and AI services Regulate and ensure compliance Support infrastructure development 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Develop FO and SHF capacity and improve farmer livelihoods
Veterinarians Without Borders	Non-profit	<ul style="list-style-type: none"> Provide information and veterinary services 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Promote sustainable and inclusive economic development
AgriGRADE	Non-profit	<ul style="list-style-type: none"> Provide TA and business development services 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Professionalise farmer organisations

Sources: Company Interviews and documents (2025)



Enabling environment (1 of 2) | Farm level productivity can be further improved through increasing access to breeding services and developing the skilled capacity of the workforce.

Category	Situation	Impact on business model
Technology	<ul style="list-style-type: none">Processes within MCDCU are highly automated, with the company having a fully operational modernised milk processing plant.MCDCU supports FOs with access to technologies to support quality control and milk storage and directly provides subsidised AI services to farmers.	<ul style="list-style-type: none">The adoption of technology has improved the organisation's efficiency through improved customer service, increased processing efficiency, and access to market information.
Natural environment	<ul style="list-style-type: none">Dairy production is affected by unpredictable weather patterns and, more specifically, drought and heat stress, which affect water and fodder availability and the growth of calves. Farmers, especially in the lowland zones, are predisposed to heat stress risk.¹	<ul style="list-style-type: none">Heat stress has adverse effects on feed intake, milk production and quality, and the fertility and health of the cows. Such effects at the farm level directly affect the sourcing volumes of MCDCU.
Infrastructure	<ul style="list-style-type: none">Meru County has a Rural Access Index of 78%.² Rural roads are generally in good condition, and farmers can easily access markets.Reliable infrastructure for managing breeding materials such as liquid nitrogen and semen is lacking³, coupled with limited cooling infrastructure for raw milk.	<ul style="list-style-type: none">Good road infrastructure reduces the cost of logistics and milk aggregation.Limited cooling infrastructure reduces MCDCU's capacity to effectively and efficiently source milk from farmers.
Labor & workforce	<ul style="list-style-type: none">Labour, although majorly unskilled, is readily available for farm-level utilisation and employment within the company. Approximately 60% of the labour in Meru County is engaged in agricultural activities.⁴	<ul style="list-style-type: none">An inexperienced and unskilled workforce is a significant challenge for farm-level productivity and efficiency. Bridging the skills gap will be pivotal for MCDCU in increasing its sourcing volumes.
Inputs & financing	<ul style="list-style-type: none">Farmers primarily cultivate the fodder used to feed the cows on their farms.While the union provides AI and breeding services, there is insufficient capacity to service all the farmers, limiting access and availability.Farmers and farmer organisations can access financing through Meru Dairy, Yetu and Capital Sacco, among other local saccos in the region.	<ul style="list-style-type: none">Low access to breeding services presents an opportunity for MCDCU to expand its capacity and scale the provision of these services to improve the quality of the herds.MCDCU is establishing a feed processing mill to meet the increasing demand for quality feed.

Sources: 1) [MCDCU Breeding Strategy \(2018\)](#) 2) [IPF](#) 3) [USAID](#) 4) [KIPPRA \(2025\)](#) 5) [Enabling Environment Client Survey \(2025\)](#)

Opportunity

Neutral

Risk



Enabling environment (2 of 2) | The dairy industry in Kenya is liberalised and primarily dominated by informal players who distribute over 85% of produced milk.

Category	Situation	Impact on business model
Trading system	<ul style="list-style-type: none"> Collection of milk at the farm level is dominated by farmer organisations, while processing and distribution is mainly done by New Kenya Creameries Corporation (NKCC), private companies, and Cooperative Unions.¹ The dairy industry is primarily dominated by informal players, with only 15% of the milk being processed.² 	<ul style="list-style-type: none"> Farmer organisations have improved the organisation of the milk supply and enabled them to negotiate better prices with processors The informal market channel limits the total addressable market for companies like MCDU
Pricing & competition	<ul style="list-style-type: none"> Kenya has 43 licensed milk processing companies, 4 of which account for 85% of the daily milk intake.³ The market is liberalised, and supply and demand forces determine prices; however, the government can stabilise prices through NKCC, a state-owned processor 	<ul style="list-style-type: none"> Few dominant players influence milk prices, primarily when surplus or scarcity exists Price volatility follows a seasonal pattern and has a direct impact on the earnings for farmers and the cost of raw milk for MCDU
Institutional stability	<ul style="list-style-type: none"> The dairy industry in Kenya is regulated by the Kenya Dairy Board (KDB), a state organ established under the Dairy Industry Act Cap 336. Farmer Organisations registered as cooperatives are subject to the provisions of the Cooperative Societies Act Cap 490 	<ul style="list-style-type: none"> A stable institutional environment is essential in spurring investment across the value chain. Regulation in the sector has been predictable, serving the interests of farmer s, processors and consumers.
Land tenure	<ul style="list-style-type: none"> Meru County's land sizes are declining due to the increasing population, leading to sub-divisions. Zero grazing is the primary method used for dairy production⁴. 	<ul style="list-style-type: none"> Land tenure systems determine the land use by farmers and the level of investment at the farm level. Currently, farmers in Meru County have an average herd size of 2 cows with an average land size of an acre. Intensification will primarily influence productivity growth.
Social norms	<ul style="list-style-type: none"> Social norms influence the participation of individuals in dairy farming depending on their age and gender. Dairy farming is capital-intensive, and women have low access to and ownership of capital assets.⁵ 	<ul style="list-style-type: none"> Existing social norms limit the participation of youth and women in primary production due to inadequate access to assets.

Sources: 1) [FAO](#); 2) [USDA \(2025\)](#) 3) [KDB \(2025\)](#) 4) [Kainda \(2019\)](#) 5) [CGIAR \(2021\)](#) 6) *Enabling Environment Client Survey (2025)*

Opportunity

Neutral

Risk



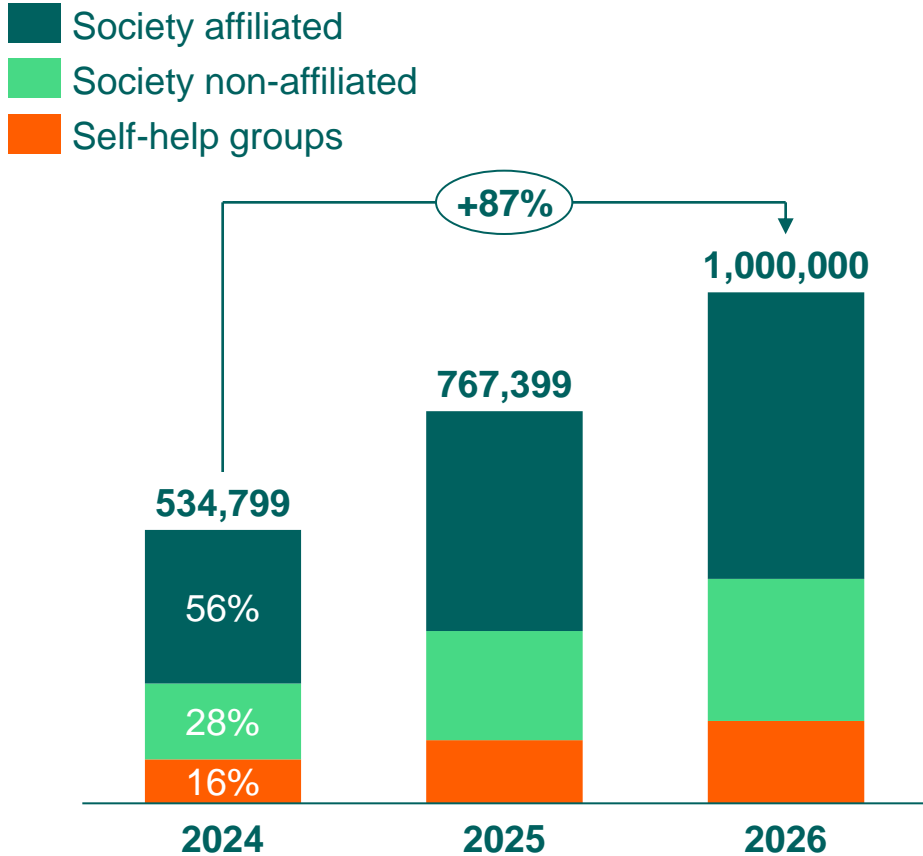
3

Business Case



Sourcing target | MCDCU aims to source 1 million litres of milk daily (+87%). To reach this, they can focus on increasing the number of farmers, cows per farmer, and/or productivity per cow

Daily milk intake per sourcing channel*



- MCDCU wants to almost double their milk intake to 1,000,000 litres per day by 2026. This is an increase of ~465,000 litres per day, and MCDCU wants to explore what levers they can pull to achieve that
- The total volume that MCDCU sources is the product of the number of (active) farmers, the number of cows per farmer, and the average productivity per cow, as per the equation below**

$$\text{Volume} = \# \text{ of farmers} \times \text{cows per farmer} \times \text{productivity per cow}$$

- In the current scenario, the equation looks as follows:

$$540,000 \text{ litres} \approx 60,000 \text{ farmers}^{***} \times 2 \text{ cows} \times 4.5 \text{ litres}$$

- The next slides show the costs, benefits, limitations and other considerations of each of these factors to drive the desired volume increase

* This assumes that the relative size per sourcing channel remains constant, but in reality, Meru will most likely focus on increasing the volumes of society affiliated FOs

** For the sake of simplicity, this equation disregards loyalty, the share of milk that farmers are willing or able to sell to MCDCU

*** This is based on the current average of the active membership across FOs, where "active" refers to farmers consistently supplying milk to MCDCU

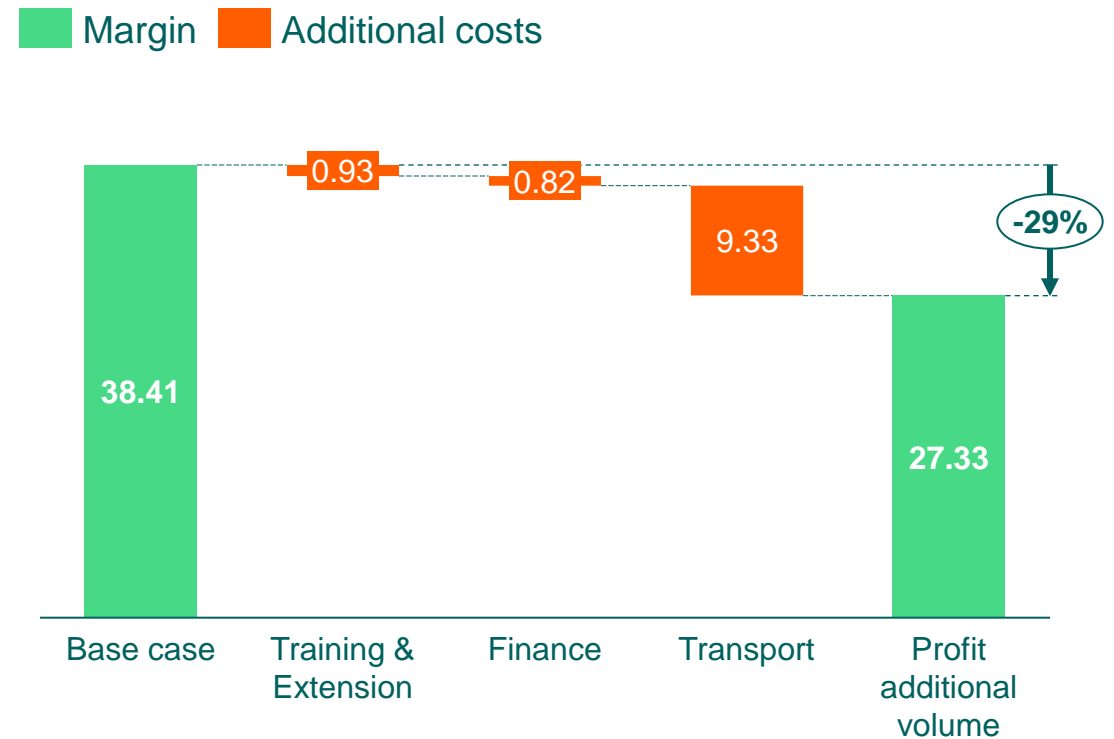


Farmer numbers | Reaching the target via new and/or reactivated farmers only would require engaging >50,000 farmers. This number, and the support they require, does not seem feasible

	Current situation	To reach 1 million litres	Difference
# of supplying farmers	60,000	~112,000	+52,000

- Assuming that new or reactivated* farmers will supply the same volume as current farmers (9 litres per day), MCDU would need to engage **over 50,000 farmers** to reach their sourcing target
- It will be easier and more cost-efficient to reactivate inactive farmers*, but competition and loyalty will remain a challenge, partly owing to MCDU's relatively long payment term of 1 month
- New farmers require access to services like Training & Extension and Finance. Based on the current cost for providing these services, this is expected to cost around **1.75 USD per additional thousand litres sourced**
- New farmers are expected to be located further away, leading to higher transport costs of around **9.33 USD per thousand litres**
- Taking all this into consideration, MCDU's average profit margin per additional thousand litres would be **27.33 USD compared to 38.41 USD** in the current situation, representing a **29% decrease**

Costs and margins for additional volumes** (USD/'000 ltr)



* The term "active" refers to farmers who consistently supply milk to MCDU. "Inactive" farmers are those who either supplied milk in the past or only do so on an irregular basis

** Assumptions and underlying data can be found [in the annex](#)



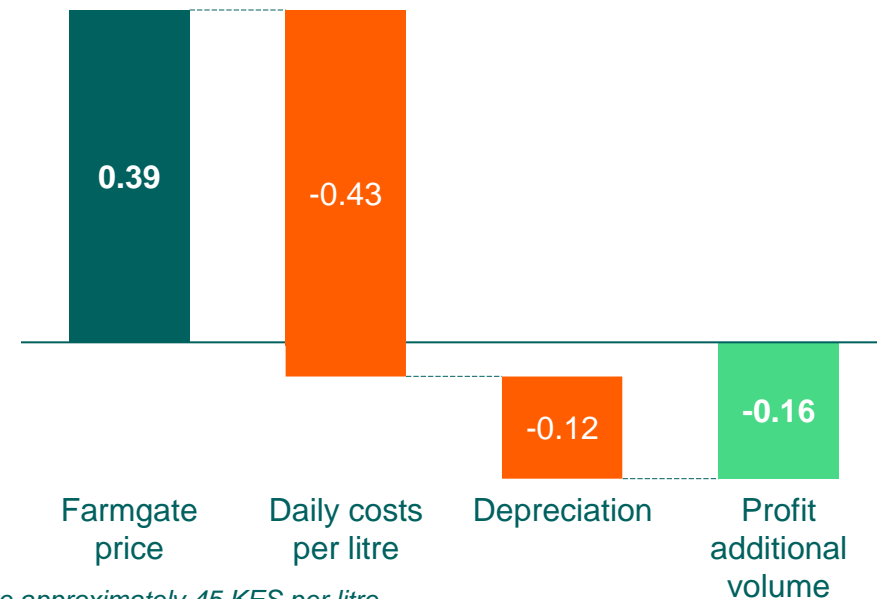
Cows per farmer | Doubling cows per farmer is only profitable at a productivity above 6.4 litres/day. High producing cows and their feed needs are costly and would require financing

	Current situation	To reach 1 million litres	Difference
Cows per farmer	2	~4	+2

- With the current average productivity per cow (4.5 litres per day), the average number of cows per farmer would need to **double from 2 to 4** to reach the sourcing target
- With **daily production costs at 0.43* USD per litre¹** and **depreciation at 0.12 USD per litre^{**}**, the total cost exceeds the farmgate price of 0.39 USD, making low-yield cows unprofitable
- As a result, purchasing a new cow only becomes profitable when it produces more than the **break-even level of 6.4 litres per day**
- More productive breeds exist, but require high-quality feed and are more expensive, so farmers would require financing support
- Increasing the number of cows per farmer can be interesting when focusing on high producing breeds (that can reach up to 20 litres per day), **but only if financing and high-quality feed are readily available**

Revenue, costs and margin for additional volumes*** (USD/ltr)

■ Revenue ■ Additional costs ■ Margin



Sources: 1) [KDB: Cost of milk production 2024](#)

* Cost estimates include imputed values for family labour and own-produced fodder. Actual cash expenses are approximately 45 KES per litre

** This assumes a purchase price of KES 200,000, a salvage value of KES 50,000, and a productive lifetime of 6 years

*** Assumptions and underlying data can be found [in the annex](#)

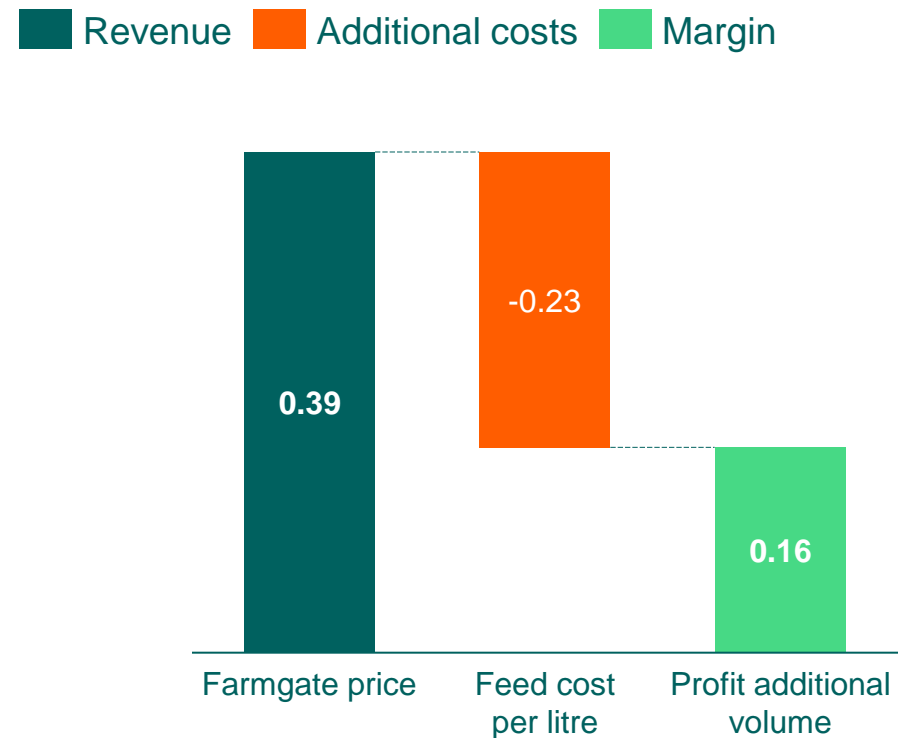


Feed | High-quality feed can triple productivity to 13.5 litres/day and increase profits by 180 KES per cow per day. To fully unlock this potential, financing and training structures need to be in place

	Current situation*	To reach 1 million litres	Difference
Farmers with high quality feed	~12,000	~37,000	+25,000

- When it comes to the cows' diet, we distinguish between feed (concentrates, supplements) and fodder (grasses, crop residues, silage), with feed playing a particularly crucial role in productivity
- High-quality feed can triple a cow's productivity **from 4.5 to 13.5 litres per day**, at an additional cost of KES 30 per litre. This results in an **additional profit of KES 180 per cow per day**
- Although some farmers have access to feed (on credit), the quality is inconsistent, leading to unreliable milk production and quality
- While feed is considered the simplest, quickest, and most efficient pathway to increase sourcing volumes, it is crucial that the availability and quality of feed is consistent, and that farmers are trained on how and when to feed for maximum result
- MCDCU would be able to reach their sourcing target if **around 25,000 additional farmers would be able to triple productivity** of their cows through high-quality feed

Revenue, costs and margin for additional volumes** (USD/ltr)



* This assumes that ~20% of active farmers have consistent access to high-quality feed

** Assumptions and underlying data can be found [in the annex](#)



4

Farmer Organisation



FO Segments | FOs are segmented into Level 2 and Level 3 majorly distinguished by number of active members, volumes sourced, asset base and complexity of services



	Level 2 (Advancing)	Level 3 (Advanced)
Description <i>Specify distinguishing characteristics</i>	Assets may include a vehicle and a motorcycle. Office premises are rented. Most of these FOs do not have coolers. The major challenge they face is timely milk transport to the factory or the central cooling point. Most of these FOs are profitable, although some are loss-making. High operational costs primarily drive losses. 92% of the FOs are in this segment.	Significant asset investments include land ownership, office premises, a milk cooler, multiple vehicles, and fully kitted AI equipment. The major challenge these FOs face is inadequate storage for feed (dairy meal). These FOs are generally profitable. 8% of the FOs are in this segment.
Scale <i>Number of members, annual sourcing volumes and turnover</i>	These FOs have an average of 375 active members sourcing approximately 3,800 litres/day, with an average of 13 collection centres. These FOs have had an average turnover of KES 40M in the last three years.	These FOs have an average of 1250 active members, sourcing approximately 15,000 litres/day, with an average of 55 collection centres. These FOs have had an average turnover of KES 150M in the last three years.
Service provision <i>Overview of services provided to farmers</i>	Provide essential services, including training and extension services, aggregation, transportation, input supply (dairy meal and mineral salts) and access to AI services.	In addition to the essential services, they also provide farmers with milk cooling services.
Service uptake <i>Overview of services received from MCDCU</i>	Services received include bookkeeping services, governance training, compliance support, infrastructure procurement, linkages to feed providers, farm extension services and AI services.	In addition to the services received by Level 2 FOs, these FOs are also supported with overhead costs to run the cooling facilities and milk transport costs from the cooling station to the factory.

Sources: 1) Company Interviews and documents (2025) 2) Farmer Organisations Interviews (2025) 3) SCOPEinsight AgriGRADE Assessments (2024)



FO Professionalism (1/4) | FOs working with MCDCU are primarily in the advancing stage of professionalism with above-average scores in all dimensions except market and sustainability

Section	Score	Description/Observations
Internal Management	2.6	<ul style="list-style-type: none">• Most FOs have documented by-laws covering a wide range of organisational aspects and responsibilities of the Board of Directors.• Annual General Meetings (AGMS) are held across FOs. These meetings are where strategic, annual, and business plans are presented and discussed. Financial statements are also reviewed during these meetings.• Across the FOs, the management has some decisional independence from BoD. Decisions are made by consensus.• Many FOs have a formal recruitment process, but several lack documented policies or comprehensive human resource management systems. Some FOs are only staffed with 1 FTE, creating a key person risk.• Most FOs lack business plans. FOs with business plans lack key elements such as annual targets, detailed operational plans, and stakeholder input.• Most FOs have paper-based membership registers. While most FOs have basic computing infrastructure, utilisation is low, with some FOs using manual inventory management procedures.
Financial management	2.7	<ul style="list-style-type: none">• FOs generally use a financial management/accounting manual but do not have digital accounting systems or software.• Many FOs lack a financial policy to guide financial operations.• FOs generally have well-documented annual budgets that outline income streams and spending categories.• Many FOs generate financial reports at least monthly, which are reviewed by management and the board.• Financial reports are reviewed by an external auditor annually, and the results are shared with the members during the AGM.• Some rely heavily on grants and donations, which might indicate financial vulnerability and a lack of self-sufficiency.• Some FOs face frequent cash shortages, with an estimated funding need between \$5,001 and \$100,000.• Some regularly receive loans from financial institutions and have collateral to secure loans.• There is a limited scope of documented asset valuation policies, suggesting an area for strengthening fixed asset management• The percentage of members complying with their financial obligations can vary, with some FOs facing risks in member contribution compliance.

Sources: SCOPEinsight Assessment Reports (2024) 2) FO Interviews (2025)

Notes: Learn more about the SCOPEinsight assessment methodology [here](#)



FO Professionalism (2/4) | FOs working with MCDUCU are primarily in the advancing stage of professionalism with above-average scores in all dimensions except market and sustainability

Section	Score	Description/Observations
Sustainability	2.0	<ul style="list-style-type: none">Lack of comprehensive or consistently documented policies or measures for various sustainability aspects is noted across several FOs.Most FOs lack a code of conduct or an ethics policy.FOs generally, have inconsistent documentation of social impact assessments, specific mitigation plans for environmental impacts, and measures for water protection and efficient use.organisations are generally aware of what agrochemicals farmers use.FOs generally implement equal pay for equal work and have zero tolerance for child and forced labour. They are also equally compliant with local laws and regulations.
Operations	2.9	<ul style="list-style-type: none">Only a few FOs have a cooling facility to chill the milk to the required temperature. Most FOs have warehouses for input storage, although the capacity is inadequate for some organisations.Many FOs have access to sufficient transport means to collect raw milk and transport inputs. Transport is, however, a significant pain point for most FOs, especially those located further from the factory.FOs often provide employees and farmers with information and training on hygiene and safe handling guidelines.FOs perform quality checks regularly.
Production Base	2.9	<ul style="list-style-type: none">All FOs rely on the union to support providing extension services to farmers. Very few FOs have internal extension teams.FOs provide input on credit to farmers using a monthly check-off system. Inputs are sourced through the union and other suppliers. FOs primarily rely on the union to facilitate access to AI services.The volumes collected from members are monitored, and all FOs maintain records. Some FOs keep a collection plan that is communicated to members.Some farmer organisations have traceability systems that cover aspects of the supply chain but are not always fully comprehensive or integrated to the farm level.Competition for members could lead to potential risks in member retention and cannibalisation of some farmer organisations.

Sources: SCOPEinsight Assessment Reports (2024) 2) FO Interviews (2025)



FO Professionalism (3/4) | FOs working with MCDCU are primarily in the advancing stage of professionalism with above-average scores in all dimensions except market and sustainability

Section	Score	Description/Observations
Market	1.7	<ul style="list-style-type: none">Many FOs know different market risks, such as changes in volume requirements, prices, and quality requirements.A common risk identified is the potential loss of product quality during storage or transport.FOs often lack breadth in their marketing strategies, perhaps due to the guaranteed market from MCDCU.Widening the membership base is a common strategy to mitigate market risks.Some FOs have invested in transport and delivery infrastructure, including trucks and motorcycles, to minimise market risk.FOs primarily rely on single revenue streams, which can be a potential source of market risk.
External Risks	2.6	<ul style="list-style-type: none">FOs are generally aware of weather, natural, and biological risks.Many FOs can explain relevant biological risks' financial, social, and ecological impacts.Many FOs know risk mitigation methods and can name at least 3 (e.g., proper insurance, crop diversification, weather forecasting, etc.). However, these strategies and awareness do not always translate into concrete action.Weather and natural disasters are often not addressed in the business/strategic plan for most FOs.FOs often lack comprehensive mitigation strategies for biological risks and the ability to implement them.The mitigation strategies deployed against weather-related risks are insufficient.FOs and their members lack adequate capacity to identify biological risks and depend on extension officers from MCDCU.
Enabling Environment	2.7	<ul style="list-style-type: none">FOs are generally aware of available capacity-building services and relevant support areasFOs are not self-sufficient in providing training to their members and staffFOs may need donor support to unlock capacity-building services and infrastructure investment.FOs generally provide employment opportunities within the local community, are seen as reliable partners, and have positive relationships with the community.Services from financial institutions are often experienced as satisfactory and enablingFOs are generally aware of the laws and regulations that apply to their businessFOS are affiliated with a higher-level farmer organisation (MCDCU), which provides services directly to the FOs and farmers.Public extension infrastructure is inefficient, and extension services are provided mainly by the private sector.

Sources: SCOPEInsight Assessment Reports (2024) 2) FO Interviews (2025)



FO Professionalism (4/4) | FOs working with MCDUCU are primarily in the advancing stage of professionalism with above-average scores in all dimensions except market and sustainability

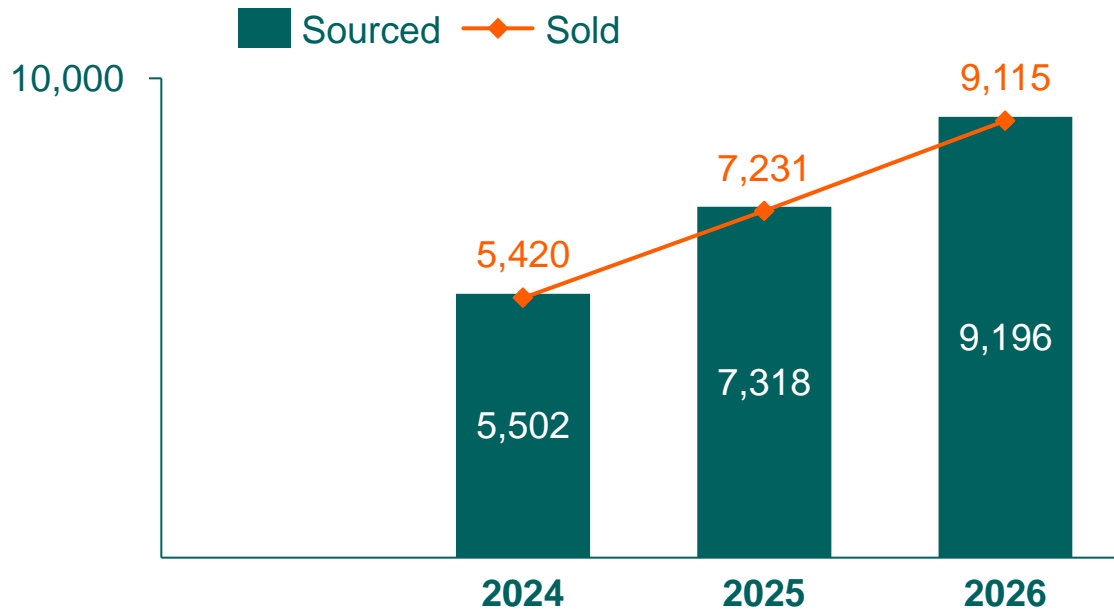
Section	Score	Description/Observations
Climate Resilience	Not Scored	<ul style="list-style-type: none">Many FOs are aware of climate-related risks to their businessFOs generally demonstrate an essential awareness of climate change and can list the financial, environmental, and/or social impacts of weather and natural hazards.Some FOs can describe the resilience of their strategy and business model to climate change.FOs can be financially unstable, with limited financial reserves for handling climate-related shocks, sometimes relying on external aid.Some FOs lack a comprehensive climate risk-mitigation assessment plan, coupled with a general lack of integration of climate-related risks and mitigation strategies into business or strategic plansWhile some FOs inform their members of risk mitigation through flyers or meetings and train them in risk mitigation, this is inconsistent across all FOs.Most FOs have not implemented diversified income sources, water conservation practices, renewable energy systems, or participated in climate risk financing initiatives.Many FOs lack greenhouse gas emission monitoring and reporting
Total Average Score	2.6	<ul style="list-style-type: none">On average, farmer organisations working with the MCDUCU score highly on production base and operations. This can be attributed to the services provided by MCDUCU, which have focused on strengthening areas such as extension services, enabling access to inputs, and facilitating essential operations such as logistics, cold storage and processing.On average, they have low scores on market and sustainability. There is less emphasis on social and environmental issues across the farmer organisations. The marketing dimension is not prioritised at the FO level, which can be attributed to the guaranteed market provided by the union. FOs focus primarily on dairy farming and have limited income diversification, creating a potential source of market risk.

Sources: SCOPEinsight Assessment Reports (2024) 2) FO Interviews (2025)



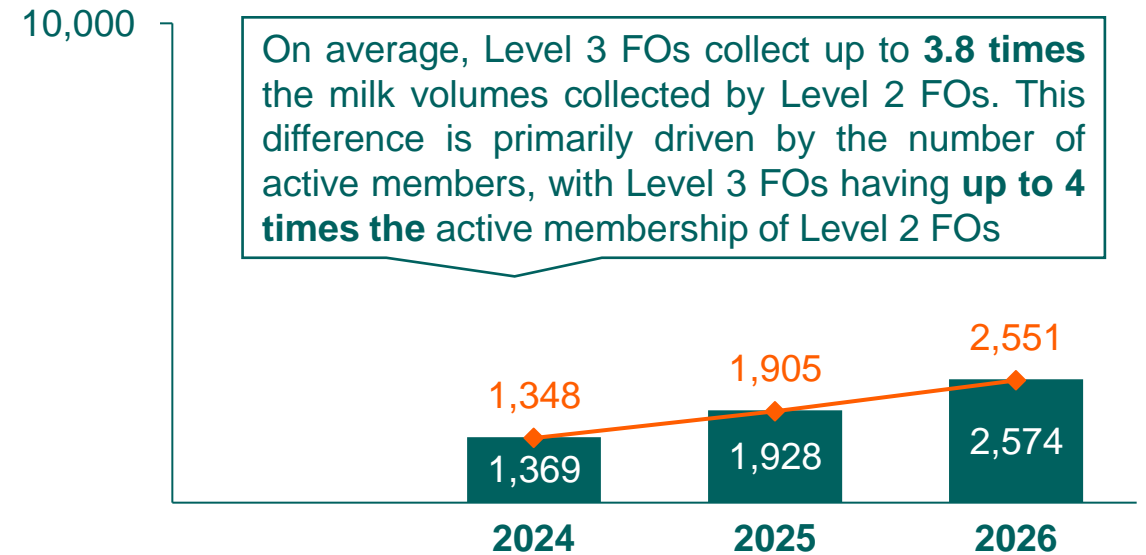
FO Performance – Scale | Improving the farmer productivity and increasing the number of active members per FO present the two pathways for achieving higher volumes

Level 3 Farmer Organisation Volumes (MT/year)



Productivity per cow (kg/day)	4.5	5.9	7.3
Rejection rate (%)	1.50%	1.19%	0.87%
Number of Active Members (#)	1,675	1,706	1,738

Level 2 Farmer Organisation Volumes (MT/year)

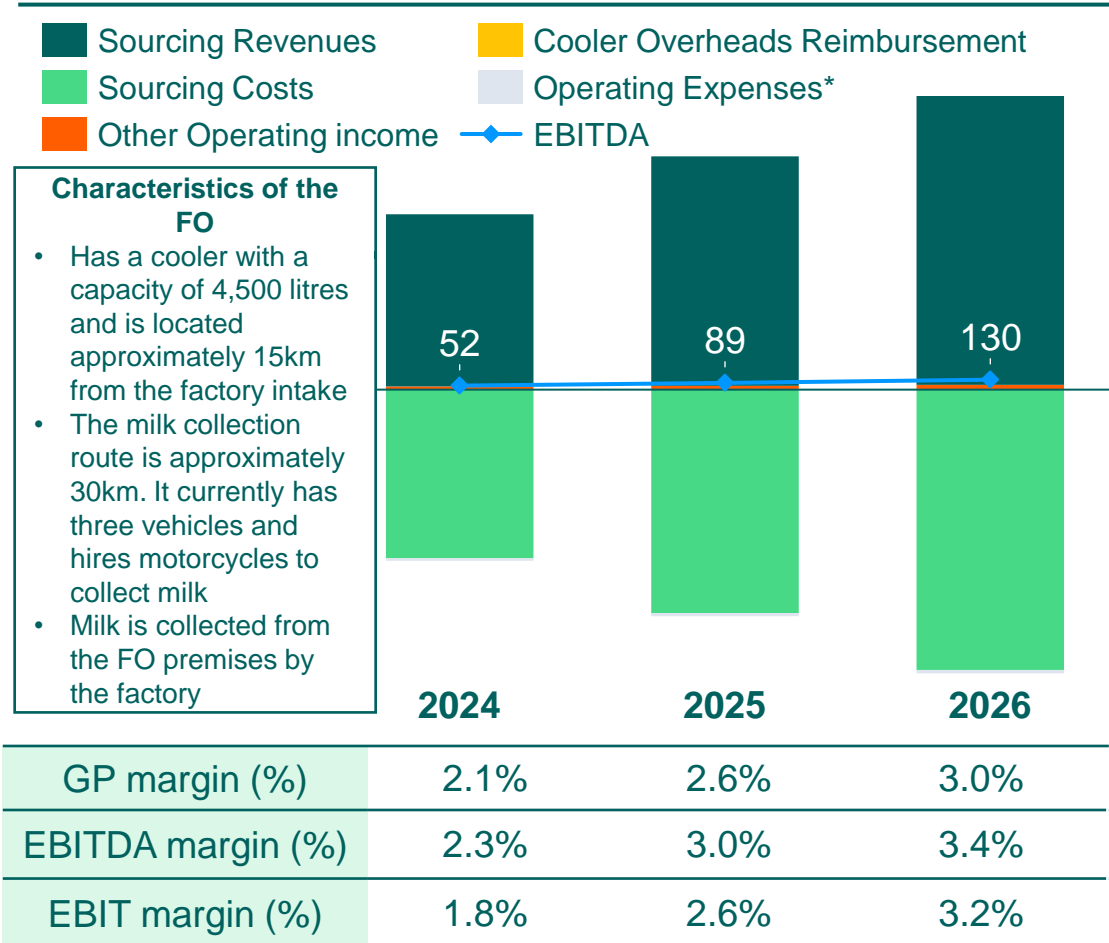


Productivity per cow (kg/day)	5	6.3	7.5
Rejection rate (%)	1.50%	1.19%	0.87%
Number of Active Members (#)	375	423	470

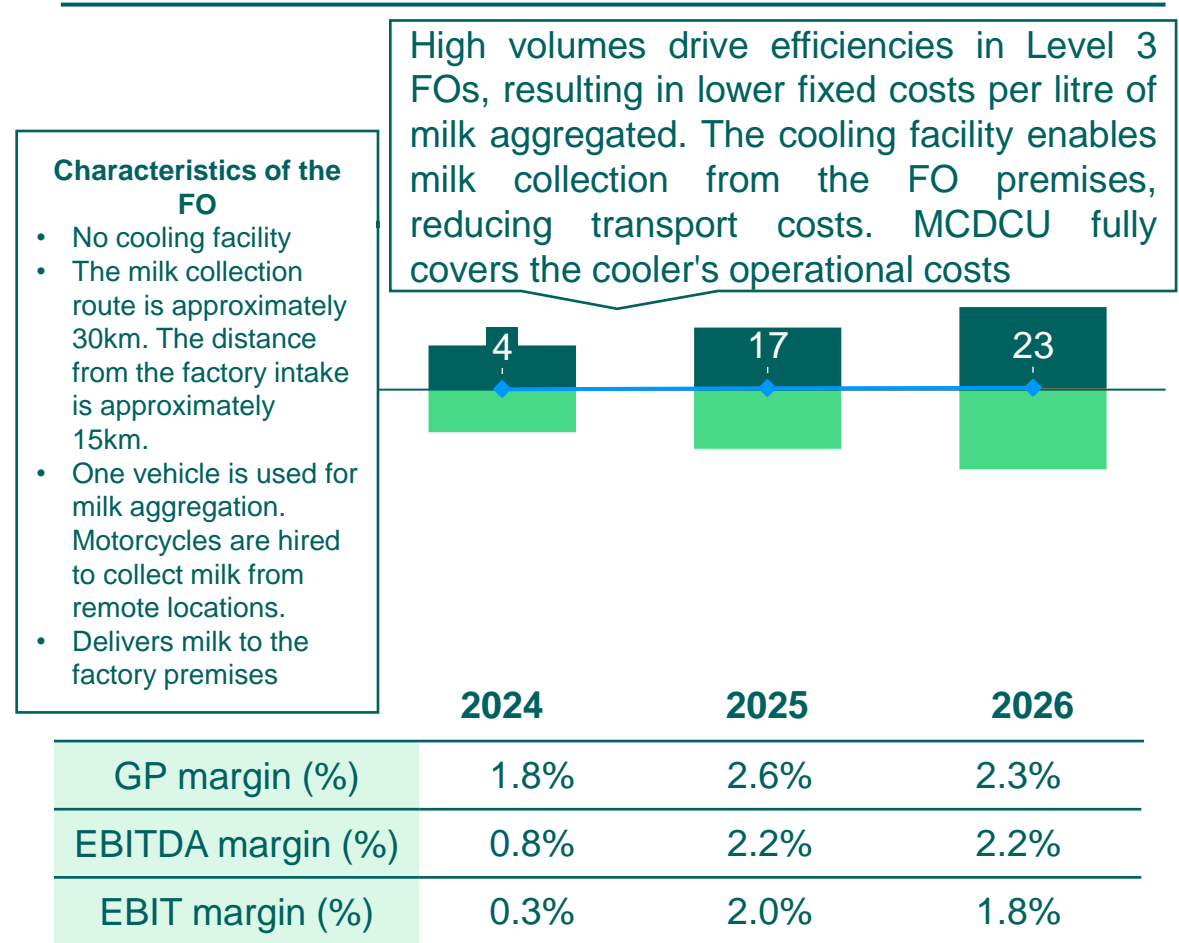


FO Performance – P&L over time (1/2) | Level 3 FOs are marginally more efficient in milk aggregation and in operations, as evidenced by the slightly higher GP and EBITDA margins

**Profile 1 Level 3 FO Profit and Loss (USD '000)



**Profile 2 Level 2 FO Profit and Loss (USD '000)

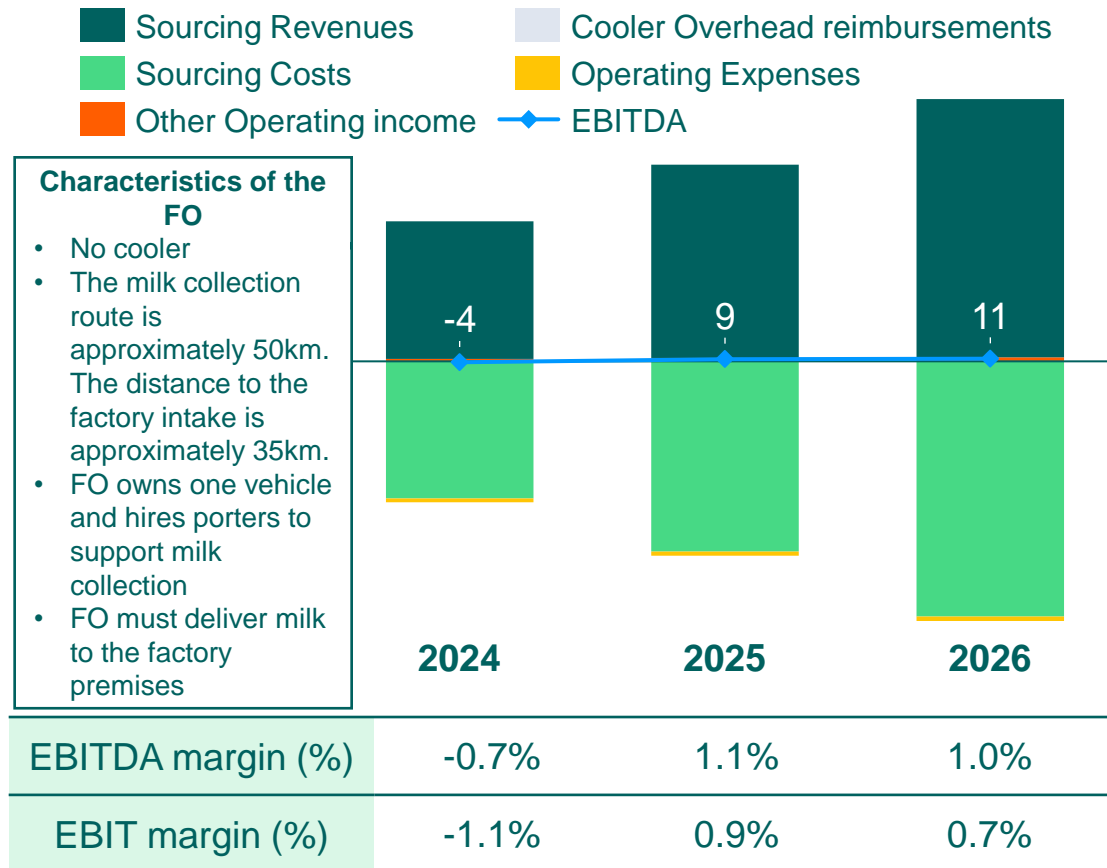


Notes: * Service provision costs have been included in the operating expenses. See [subsequent slides](#) for a detailed breakdown. ** Profiles are based on the sample FOs in the deep dive qualitative interviews. Profile 1 is the average Level 3 FO, and Profile 2 is the average Level 2 FO.

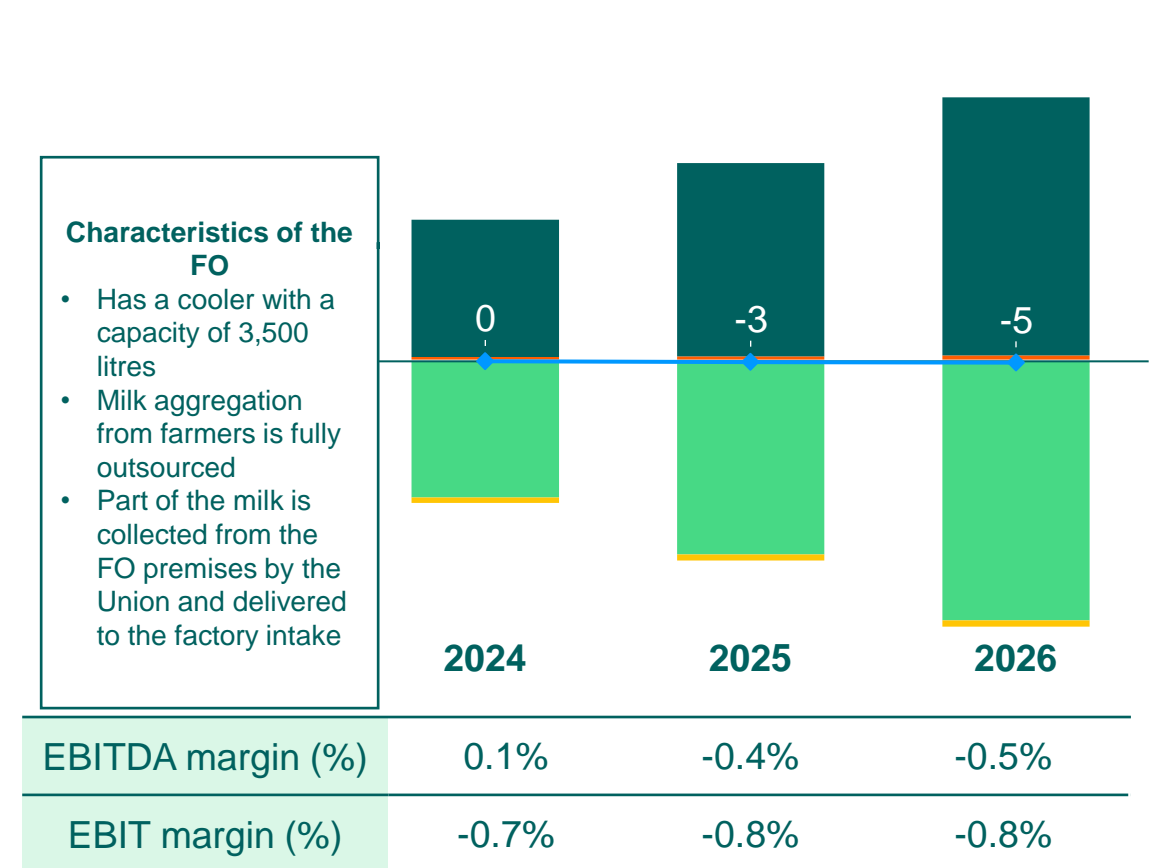


FO Performance – P&L over time (2/2) | Transport mode, ownership of a cooler, distances covered in milk aggregation and transportation to the factory intake are key drivers of efficiency

Profile 3 Level 2 FO Profit and Loss (USD '000)



Profile 4 Level 2 FO Profit and Loss (USD '000)

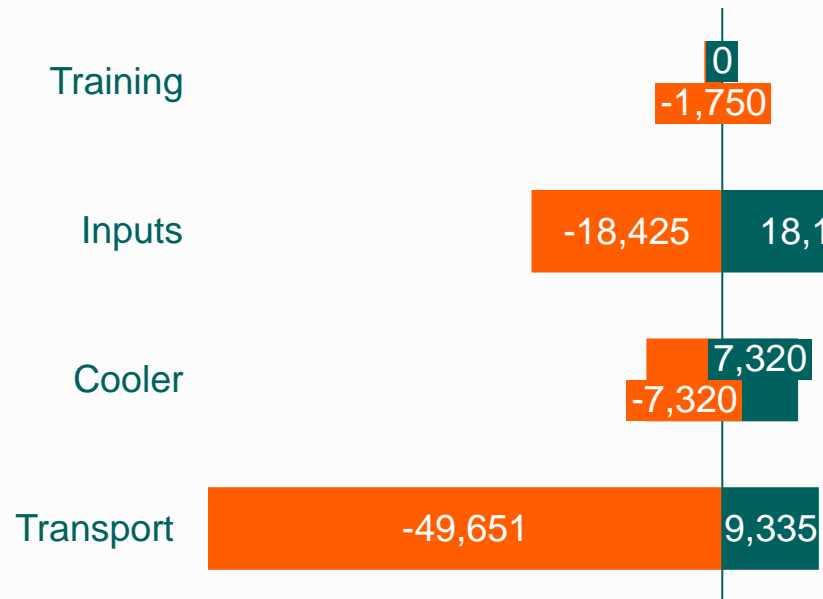




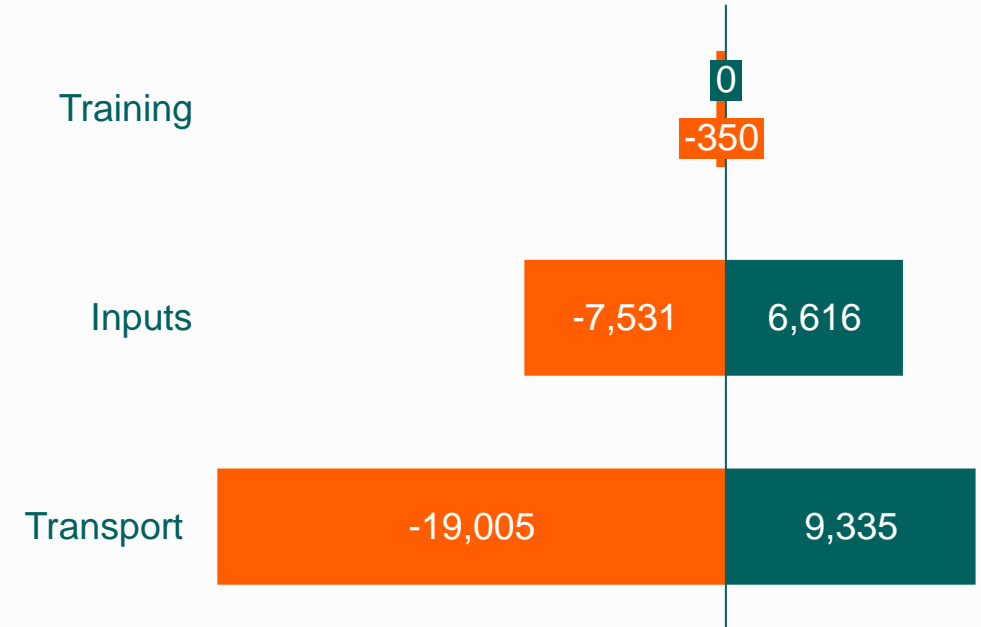
Service Provision Costs and Revenues | Service provision is cumulatively a cost centre for farmer organisations

Level 3 FOs (USD) 3-year Average

Costs Revenues



Level 2 FOs (USD) 3-year Average

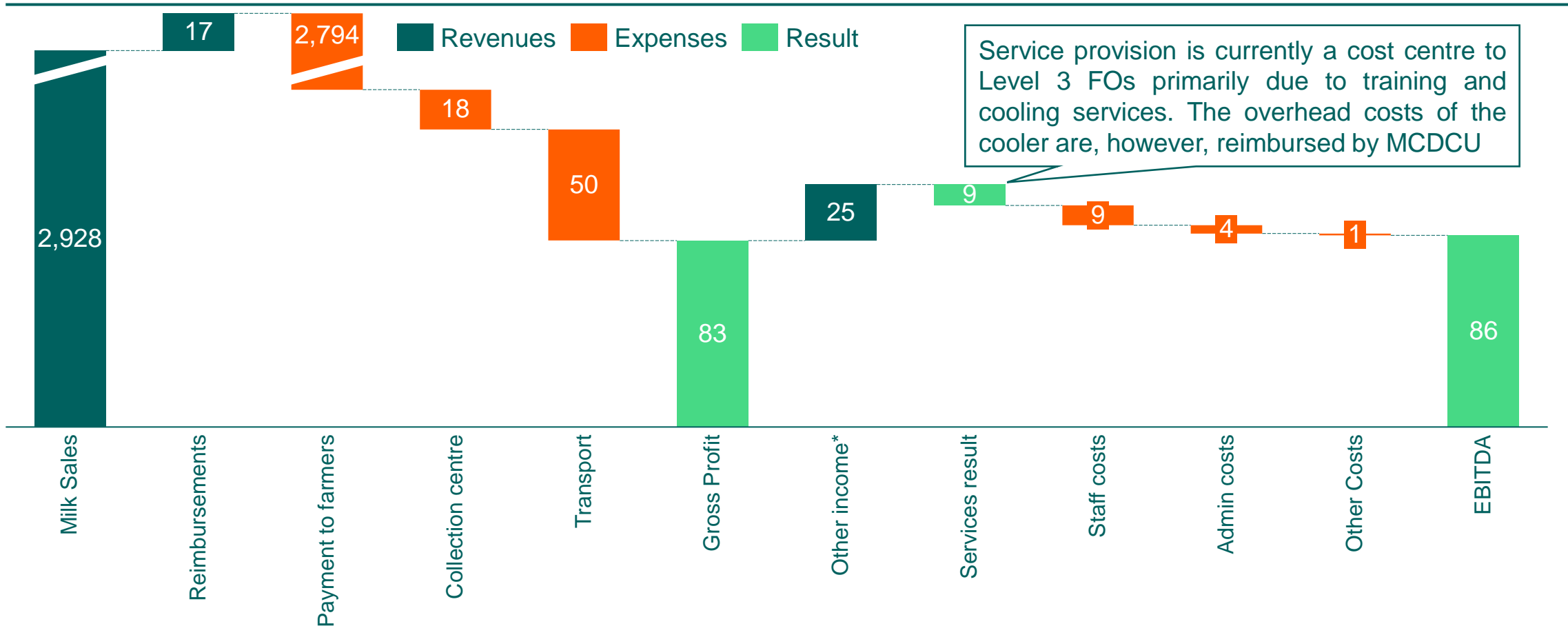


Level 2 FOs spending on training is limited to facilitation costs (transport and meals), with MCDU paying the extension officers. Level 3 FOs have 1 internal extension officer. While FOs have input stores, margins on inputs are thin and cannot currently cover the overhead costs. Level 3 FOs are fully reimbursed by the MCDU for the cooler overhead costs. MCDU covers a proportion of the transport cost, but it is minimal. Transport is a key service offering of FOs to the farmers, provided at no cost to the farmers.



Income Build-up (1/2) | FOs earn a gross margin of ~\$0.023 per litre of milk aggregated. EBITDA margins depend on the efficiency of sourcing and administration operations, income from service provision and dividends paid by MCDCU

Level 3 FO Income Build-up (USD '000) Three-year Average

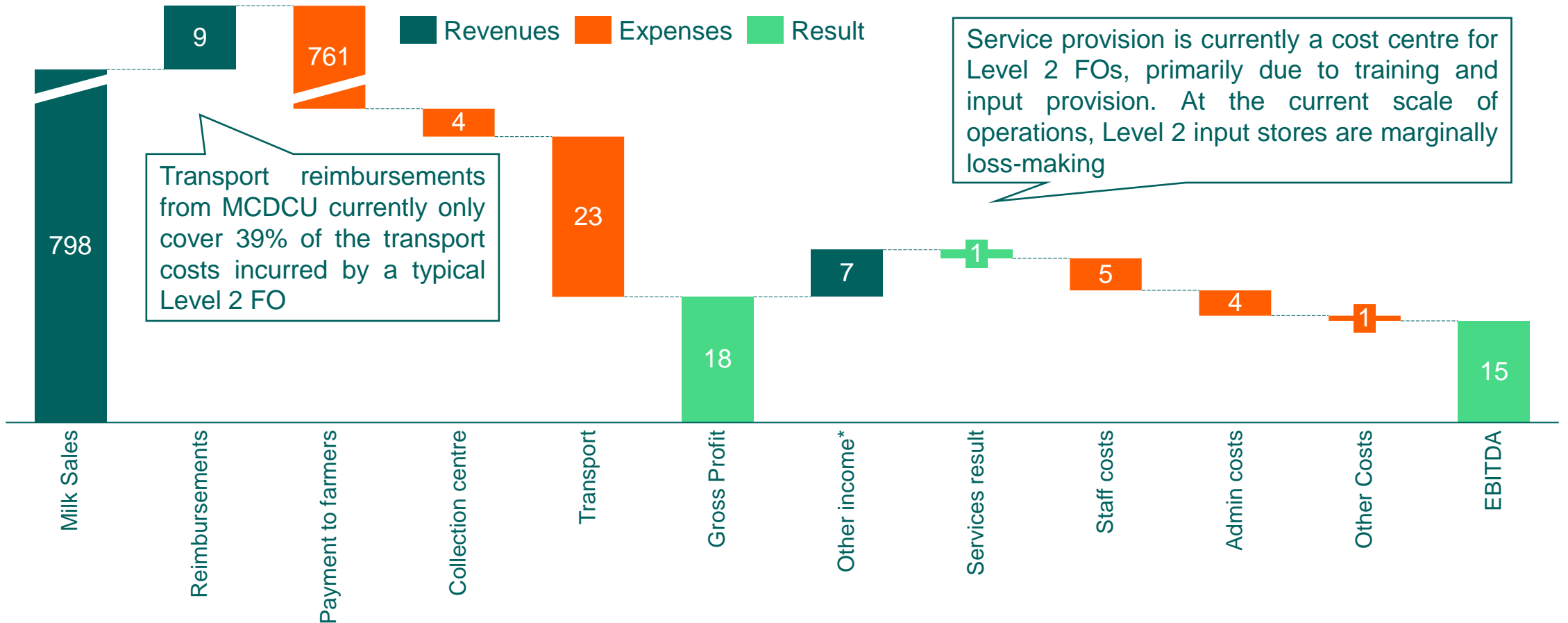


Notes: *Other income comprises dividends paid by MCDCU and membership registration fees



Income Build-up (2/2) | FOs earn a gross margin of ~\$0.023 per litre of milk aggregated. EBITDA margins depend on the efficiency of sourcing and administration operations, income from service provision and dividends paid by MCDCU

Level 2 FO Income Build-up (USD '000) Three-year Average



Notes: *Other income comprises dividends paid by MCDCU and membership registration fees

Contact us



Wangari Nduta

Project Manager

wangari@idhtrade.org



Steven de Jonge

Advisor

dejonge@idhtrade.org



Job Ondeko

Senior Analyst

ondeko@idhtrade.org



IDH Annual Report (2023)



Farmfit Insights Hub

This report was created using think-cell 

Thanks

IDH would like to express its sincere thanks to MCDCU for their openness and willingness to partner through this study. By providing insight into their model and critical feedback on our approach, MCDCU is helping to pave the way for service delivery that is beneficial and sustainable for farmers and providers



Partners



Ministry of Foreign Affairs



Swiss Confederation
Federal Departement of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO

BILL & MELINDA
GATES *foundation*





5

Annex



5.1

Underlying data & information





Level 3 FO assumptions

Variable	Unit		Actuals 2024	Projections 2025	Projections 2026
Scale, revenue and cost drivers					
Operational Days in a year		365			
Membership					
Total Number of Active Members	# of farmers		1,675	1,706	1,738
Farm Level Data					
Herd Size	#		2	2	2
Volumes delivered per farmer	Kg/farmer/day		9	12	15
Rejection Rates Collection Level			0.10%	0.10%	0.10%
Volumes Sourced					
Volumes Per day	kg/day		15,075	20,048	25,194
Rejection Rates Intake level	%		1.50%	1.19%	0.88%
Sourcing Costs					
Purchase of Raw Milk	KES/year	50	275,118,750	365,883,984	459,785,938
Number of Collection Centres	#/year		57	57	57
Cost per Collection Centre	KES/year		40,052	40,052	40,052
Transport to Factory	KES/Year		1,291,915	1,487,234	1,877,872
Fuel Costs	KES/Month		97,660	113,936	146,489
Other transport related costs	KES/Month		10,000	10,000	10,000
Approximate distance to the factory intake	Km/trip	15	90	105	135
Sales					
Volumes sold	kg/year	53	287,251,487	383,231,459	483,108,579
Transport Reimbursement	KES/Month	100,000	5,419,839	7,230,782	9,115,256



Level 2 FO assumptions

Scale and Revenue Drivers

Operational Days in a year			365			
Membership						
Total Number of Members	# of farmers		942			
Total Number of Active Members	# of farmers		375	423		470
Proportion of Female Members	%		62%			
Proportion of Active Members	%		40%	45%		50%
Registration Fees	Kes/member					
Farm Level Data						
Volumes delivered per farmer	Kg/farmer/day		10	13		15
Household Consumption	Kg/farmer/day		2	2		2
Rejection Rates Collection Level			0.10%	0.10%		0.10%
Volumes Sourced						
Volumes Per day	kg/day		3,750	3,750		3,750
Cow Milk	kg/year		1,368,750	1,368,750		1,368,750
Rejection Rates Intake level	%		1.50%	1.19%		0.88%
Sourcing Costs						
Purchase of Raw Milk	KES/year	50	68,437,500	68,437,500		68,437,500
Number of Collection Centres	#/year		13	13		13
Cost per Collection Centre	KES/year		40,052	40,052		40,052
Transport to Factory	KES/Year		510,638	510,638		510,638
Fuel Costs	KES/Month		32,553	32,553		32,553
Other transport-related costs	KES/Month		10,000	10,000		10,000
Approximate distance to the factory intake	Km/trip	15	30	30		30
Sales						
Volumes sold	kg/year	53	71,455,594	71,682,293		71,908,992
Transport Reimbursement	KES/Month	100,000	1,348,219	1,352,496		1,356,773



SCOPE Assessment Methodology (1/2)

The SCOPEinsight methodology offers a comprehensive assessment and scoring system that evaluates the professionalism of agribusinesses across multiple dimensions, all of which contribute to sustainable operations. These eight core dimensions are: 1. Internal Management, 2. Financial Management, 3. Sustainability, 4. Operations, 5. Production base, 6. Market, 7. External Risks and 8. Enabling Environment. For more advanced agribusinesses, a ninth dimension—Financial Performance—is included exclusively in the SCOPE Pro assessment.

Dimension	Description
Internal management	How an organisation manages, governs and plans its business to achieve its objectives.
Financial management	Planning, directing, monitoring and controlling the financial resources of the organisation.
Sustainability	The organisation's performance related to social and environmental practices and the way it actively tries to reduce negative environmental and social impact and increase the positive impact.
Production-base	Production base focuses on the management of the farmer base to ensure timely and sufficiently delivery of quality produce to the organisation.
Operation	All processes from the collection of the produce from farmers up to the delivery of the produce to the clients, including quality control and the transformation (processing) of the agricultural produce into the desired product.
Market	Market dimension focuses on the organisation's understanding of and ability to access and operate in a competitive market and anticipate market risks.
External risk	This dimension focuses on the awareness of biological, climate and social and politically related risks and the capacity of the assessed to mitigate these risks.
Enabling environment	The enabling environment is defined as a set of policies, institutions and support services that collectively improve or create a conducive business climate for the organisation to develop and thrive. This dimension analyses to what extent the assessed effectively relates and gets access to the services and opportunities presented
Financial Performance (Pro)	The Financial Performance dimension gives insight into how the organisation is performing financially based on the key financial ratios.



SCOPE Assessment Methodology (2/2)

Scoring Criteria

Each SCOPE assessment consists of over a hundred questions, with responses scored on a scale from 1 to 5. Scores are derived based on verified answers and supporting documentation. SCOPE tools are sector, value chain and country agnostic, ensuring wide applicability.

Scoring is dimension-weighted, meaning specific dimensions may contribute more to the final score, depending on their influence on overall professionalism.

SCOPE Score Range Interpretation:

- **1 to <2: Basic** – Indicates a very immature organisation. Minimal governance and limited market engagement.
- **2 to <3: Advancing** – The organisation has begun building structures but needs substantial support.
- **3 to <4: Advanced** – Demonstrates solid governance and market participation. Ready to scale with targeted improvements.
- **4 to 5: Top-performing** – Highly professional with strong internal systems and external engagement. Serves as a role model.

Data Collection

The data collection is meticulously designed to ensure reliability and consistency across assessments. It includes a structured interview conducted by a certified assessor, supplemented by reviewing supporting documentation and physical observations when applicable. Additionally, SCOPE Quality Reviewers perform rounds of completeness and consistency checks.

- **Interviews:** Primary information is gathered through in-depth interviews with key organisation representatives.
- **Document Review:** Verifiable evidence such as financial records, meeting minutes, organisational charts, and strategic plans is examined to confirm responses.
- **Field Observation:** When feasible, assessors conduct site visits to verify operational infrastructure and observe practices directly.