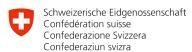




Better cheese, better work:

The Alliances Caucasus Programme's Impact on Informality and Working Conditions in Georgia's Dairy Sector





Swiss Agency for Development and Cooperation SDC

With funding from





This study has been commissioned by the International Labour Organization (ILO) with in-kind contributions from ALCP, made possible by its development partners. The Alliances programme, a market system development programme working in the livestock market system in Georgia, is a Swiss Development Cooperation (SDC) project in cooperation with the Austrian Development Cooperation (since January 2020), implemented by Mercy Corps Georgia, which began in 2008 in Samstkhe Javakheti (SJ), Georgia. For more information go to www.alcp.ge

Copyright © International Labour Office 2020 First published 2020

Publications of the International Labour Office enjoy copyright under Protocol 2 of the Universal Copyright Convention. Nevertheless, short excerpts from them may be reproduced without authorization, on condition that the source is indicated. For rights of reproduction or translation, application should be made to ILO Publications (Rights and Licensing), International Labour Office, CH-1211 Geneva 22, Switzerland, or by email: rights@ilo.org. The International Labour Office welcomes such applications.

Libraries, institutions and other users registered with reproduction rights organizations may make copies in accordance with the licences issued to them for this purpose. Visit www.ifrro.org to find the reproduction rights organization in your country.

ISBN: 978-92-2-032227-7 (print)

978-92-2-032228-4 (web PDF)

The designations employed in ILO publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the International Labour Office concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its frontiers.

The responsibility for opinions expressed in signed articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by the International Labour Office of the opinions expressed in them.

Reference to names of firms and commercial products and processes does not imply their endorsement by the International Labour Office, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

Information on ILO publications and digital products can be found at: www.ilo.org/publns.

Printed in Switzerland

Contents

Acknowledgements	V
Executive Summary	vii
Acronyms	xiii
1. Introduction	1
2. Value chain development, formalization and working conditions	3
3. Methodology and limitations	5
4. Context and regulatory framework	6
5. ALCP's interventions	11
6. Change in the market system	17
7. Formalization	24
8. Working conditions	31
9. Conclusion	38
Annex 1: Characteristics of formality and indicators for improved working conditions	40





Milken LTD Before, 2014 year **Rustavi city**



Milken LTD After, 2019 year **Rustavi city**

Acknowledgements

This report emerged from the ambition to identify how value chain/market systems development initiatives can contribute to formalization and decent work among operators in the chain. As most development projects do not explicitly aim to formalize small-scale operators, it took quite some preparatory work to identify one where positive results could be found. Matt Ripley (ILO Lab consultant) suggested to consider the work done by the ALCP in Georgia. A discussion between Judith van Doorn (ILO Specialist, Enterprise Formalization) and Helen Bradbury (ALCP Team Leader) led to the identification of the ALCP's work in the dairy sector as the focus for the study.

The study was coordinated by the ILO (Judith van Doorn). Field research was conceptualised by Judith van Doorn, the ILO consultant (Roel Hakemulder) and the ALCP. It was conducted by ALCP staff, initially supported by the ILO consultant. The report was written by Roel Hakemulder and has benefitted from contributions from ALCP (Helen Bradbury, Giorgi Sadunishvili, Lela Kobakhidze, Nona Samkharadze, Marika Bayramian, Nana Giorgadze, Ana Pogosian, Maia Lomidze, Alexandre Jishkariani) and ILO (Severine Deboos, Merten Sievers and Najati Ghosheh). The contributions to the research from the ALCP team are gratefully acknowledged.



Executive Summary

This study explores the relationship between interventions in the dairy market system in Georgia, carried out by the Alliances Caucasus Programme (ALCP), and formalization of actors and relationships in the dairy value chain, with a focus on positive implications for incomes and other working conditions for owners of economic units and their employees. The ALCP is a Swiss Agency for Development and Cooperation (SDC) market development programme in cooperation with the Austrian Development Cooperation since January 2020, implemented by Mercy Corps Georgia. It has successfully gone through the Donor Committee for Enterprise Development (DCED) audit of its results measurement system in 2014 and 2017. The project started in 2008 in the Samstkhe Javakheti region of Georgia and gradually expanded to other regions in the South of the country (Kvemo Kartli, Ajara, Kakheti). Since 2017 it has been supporting the SDC's South Caucasus Strategy 2017-2020 which covers Armenia, Azerbaijan and Georgia. The project will be completed by March 2022, by which time the total budget since 2008 will amount to CHF 23.5 million, of which 2.7 million USD (CHF 2.638 million at current exchange rates) are direct costs related to the dairy sector. It aims to increase incomes for Livestock and Honey Producers (LHP's) in the livestock and honey sectors, and applies the Market Systems Development (MSD) approach, which considers value chains as part of a wider market system. MSD projects aim to facilitate sustainable change at scale in such systems that benefit the poor. Formalization of economic units, relationships and employment could be part of such systemic change, or result from it. In Market Systems Development projects, as in the ALCP, it is usually considered as a means to the goal of poverty reduction, not the goal itself.

Field research was conceptualised jointly by the ILO and ALCP and was carried out in October and November 2019, by ALCP staff, initially supported by an ILO consultant. It comprised interviews with 57 actors in the value chain, seven service providers and a representative of the Ministry of Environmental Protection and Agriculture (MEPA). The ILO consultant also conducted in-depth interviews with ALCP staff. Given the qualitative nature of the field research, the study makes extensive use of ALCP's reports, studies and data from its Monitoring and Results Measurement system, for triangulation and to complement the findings.

The Theory of Change, which provides the conceptual framework for this study, is as follows: MSD interventions contribute to sustainable change at scale in the targeted market system that provide incentives for economic units to formalize. This in turn contributes to formalization of economic units in the value chain and the relationships between them, which contributes to better working conditions (including higher incomes) for workers and independent workers without employees (see Chapter 2 of the report for more information on the Theory of Change). The study uses a broad definition of formalization, going well beyond business registration and formal employment contracts, and accepts that formality-informality is a continuum rather than a dichotomy.





The ALCP has implemented a wide range of interventions with various private and public sector partners. The interventions targeted actors in the value chain itself, farmers and dairy enterprises foremost, supporting functions (improving or developing new service providers to actors in the value chain), and to some extent the regulatory environment and social norms (the formal and informal norms that affect the value chain). This took place in a context of increased consumer demand for quality cheese products and increased regulation of the dairy sector. The latter has been advanced by the Government of Georgia since 2012 and with the EU-Georgia Association Agreement, which includes provisions on Food Safety and Hygiene standards and labelling, playing a major role since 2015. The Government has thus been establishing the regulatory framework for formalization and reducing opportunities and incentives for informality. This is taking place in other sectors as well.

The study found that the ALCP's interventions contributed to a fundamental, sustainable and large-scale change in the Georgian dairy market system, which is still ongoing.

At the start of the ALCP, farmers produced cheese which they either marketed themselves or sold to informal intermediaries. They also sometimes sold uncompliant milk to informal aggregator 'dairy enterprises'. Today an estimated 23,528 farming households (70 per cent) in areas affected by the project have been incentivized (through the development of the dairy enterprise and its need for clean milk and supported by tailored trainings in Food Safety and Hygiene) to switch from producing and selling cheese to selling liquid milk to the dairy enterprise. This shift from producing and selling cheese to selling milk has allowed the farmers to save 3 hours a day in making cheese. It also saves the transaction costs associated with cheese production and sales.

Informal dairy enterprises, were incentivised to formalize and become Food Safety and Hygiene compliant. The key driving force behind this shift has been regulatory change, in particular the adoption of Hazard Analysis and Critical Control Points (HACCP) standards for the food sector in 2015, following the conclusion of the 2014 Association Agreement between the EU and Georgia. Once this quality standard was enforced, non-compliant enterprises would risk having their business closed down and workers would risk losing their jobs. Other incentives for dairy

enterprises to formalize their operations relate to the entrepreneurs' desire to grow the business, develop a commercial identity and operate legitimately, access finance and seize new market opportunities by selling to formal entities in the domestic or international market. New market opportunities arose as the compliant cheese made from the now available compliant milk could be sold to increasingly formalized shops and supermarkets. Another incentive to formalize relates to the ALCP's requirement to sign contracts with dairy enterprises that are formally registered, have a bank account and maintain formal records, which unlocked access to co-investments and services.

After a careful selection of partner dairy enterprises, the ALCP provided facilitation, comprising of co-investment, consultancy services and training, which enabled dairy enterprises and farmers to comply with the new regulations and ongoing mentoring. ALCP also facilitated relationships with banks. The project was the only source of such support for several years, and many dairy enterprises would have closed without it according to some of those interviewed. ALCP support enabled enterprises to become compliant with earlier Food Safety and Health legislation (2012) and later HACCP requirements (2015) and grow by accessing increasingly formal markets that required compliance. It partnered with 39 enterprises that are still operational, 17 of which have been HACCP certified, while 6 are being certified and the remaining 16 are in the process of implementing the standards.

Demand for raw milk increased due to the increase in compliant dairy enterprises selling to the growing number of formal mini- and supermarket outlets in larger towns and cities. In response to regulation and growing consumer demand, these outlets required packed, labelled and smartly marketed cheese, delivered by dairy enterprises and distributors able to fulfil orders regularly and on time. Farmers shifted from cheese making to supplying raw milk to these dairy enterprises. To do so they had to improve the quality of milk, hygiene in particular. This was made possible by training and advice from dairy enterprise milk collectors and the enterprises themselves, whose capacity had been built by ALCP through consultancy and training firms, which the project had strengthened or supported the establishment of.

The increased demand for compliant cheese and therefore the raw milk to make it and the stability

provided by the lasting relationships between farmers and dairy enterprises led to farmers investing in the expansion of their farms and adopting measures to improve productivity. This was also facilitated by ALCP, e.g. through support to improved breeds, development of distribution channels for better cattle feed and improved veterinary care through new veterinary pharmacies. Other newly available services built with ALCP support include machinery services (for haymaking), biosecurity points along the route of the twice-yearly transhumance¹ of hundreds of thousands of cattle and sheep, where animals are disinfected and treated if necessary, agri-media programmes, and training and consultancy services in particular for the dairy enterprises.

All farmers interviewed for the present study had increased their sales and profitability and planned to continue selling milk to the enterprises. All standard-compliant dairy enterprises interviewed also increased sales and profitability, most had diversified their products (to butter, cottage cheese, sour cream, ghee, cheese with herbs, bottled milk) and all planned to continue processing compliant cheese. Farmers have invested in more cows (from an average of 2.5 in the 2008 - 2011 period to 10 in 2019), improved breeds and feed and better animal health care, raising production and productivity. Most farmers and dairy enterprises had plans for expansion. An ALCP study assessed the enterprises to have "high" sustainability, with a score of 88 per cent (out of 100) on an ALCP-developed sustainability indicator². An ALCP study of systemic change found that since 2015, 23 dairy enterprises it had not supported in five regions in Georgia, had 'crowded in' (i.e. followed the example of the supported enterprises)3. Farmers not linked to ALCP-supported enterprises had also started selling milk instead of making cheese. Tailored services initially supported by the ALCP, to farmers and enterprises, are now available throughout the country and are sustainable. The level of sustainability and scale achieved, including through 'crowding in', are strong indications that systemic change has taken place.

The changes in the market system have brought with them a significant degree of formalization, especially regarding business and tax registration

of dairy enterprises, the adoption and increasingly effective enforcement of standard procedures for producing goods and services that economic units deliver, quality certification and vertical integration of the value chain. The adoption of HACCP standards and the fact that registration and HACCP certification permit formal market access, including potentially in the EU, has provided the enabling regulatory framework for these changes. Whereas three out of the five dairy enterprises covered by the study obtained a tax exemption, the other two considered that benefits of formalization outweighed the costs of tax compliance.

While dairy farms, which are not legally required to register as economic units, show fewer characteristics of formalization than other actors in the value chain, the strong trust between farmers and small, local dairy enterprises appears to be an effective alternative to formal, written arrangements.

Informal, non-compliant cheese production is still widespread, though, since farm-based cheese making and marketing it through informal channels is not regulated and taxed, leading to unfair competition with formal enterprises. This is expected to change with new legislation to be adopted in 2020. Producers owning more than five milking cows and more than 15 small ruminants will have to register with and become subject to inspection by the National Food Agency, like formal dairy enterprises. The extent to which this can be enforced remains to be seen, since it will seriously overstretch the NFA's capacity.

The effect on farmers' working conditions of the changes in the market system, including formalization, has been substantial. The shift from producing cheese at home to selling raw milk and raising production and productivity contributed to more than 23,500 farming households increasing their incomes. Per capita per day income increased from an estimated average of USD 1.98 at baseline to USD 6.42 in 2019. While this change is not due to the increase in dairy income or to the changes facilitated by ALCP alone (the project uses an attribution rate of 40 per cent), it can be concluded that the project has contributed to

¹ Transhumance refers to the move of livestock from one grazing ground to another in a seasonal cycle.

² ALCP, 'Visualizing the ALCP in Infographics Book II' September 2019.

³ Ibid, page 2.



lifting thousands of rural households well above the poverty line. As several studies have shown, it has also made an important contribution to rural development well beyond the dairy sector as dairy income is spent and invested in local communities⁴.

In addition to better incomes, working conditions for farmers improved with respect to savings in time (three hours per day on average) and heavy work on cheese making (for women in particular), income stability and a sense of security. Additional gains were achieved with respect to access to training and business services and greater gender equality. The latter resulted from women, who are responsible for most dairy-related tasks, having control over the income they generate and having independent access to information and other dairy-related services. Farmers are independent workers and therefore do not have employment contracts. Their agreements with milk collectors or dairy enterprises are adhered to.

Large-scale employment creation among farmers has not taken place. Poverty reduction rather than employment creation was ALCP's prime goal. Farmers' work has improved in quality rather than quantity, though it is likely that their livelihoods would have been lost without ALCP's interventions. The project's interventions ensured access to information on new regulations and support on meeting them, which ensured that market access was maintained and enhanced.

Two-hundred sixty-one full-time equivalent jobs were created in dairy enterprises that even for the lowest earners pay USD 4.04 per day. They provide employees with a sense of income security, employer-employee written or verbal agreements that are adhered to, access to training and information, a safe working environment, and equal pay for women and men. While both among farmers and employees room for improvement remains, especially with regard to leave, working hours and participation in the country's new pension fund, this is significant progress.

Whereas farmers reported spending less time on dairy farming, reports on this from dairy enterprise employees are mixed. Overall, about half of the employees probably work more than the 40 hours per week stipulated in the Labour Code. Dairy enterprise employees have paid annual leave and sick leave. It should be noted however that the actual arrangements for annual leave vary and are not always in compliance with the Labour Code. At present, in a situation where contracts are unlikely to be enforceable, the rootedness of dairy enterprises in local communities and adherence to informal norms of fairness seem to provide an adequate protection to unjust practices in supplier and employment relations.

In conclusion, farmers, enterprises and distributors formalized to meet the requirements of the evolving regulatory framework and gain and expand access to the formal market for their products. ALCP's facilitation enabled them to do so. The support to the dairy enterprises was critical, as it leveraged change elsewhere in the value chain, among farmers in particular.

The study therefore demonstrates that the Theory of Change that market systems development can contribute to formalization, which can contribute to better working conditions, is valid overall. However, it also found that in ALCP's case formalization was not a further result of a changed dairy market system, but an integral and critical part of the change in the market system. It was at the core of what ALCP's facilitation was intended to achieve in a context of overall formalization of the economy, not as an end in itself but as a means to poverty reduction and safeguarding and expanding a critical source of rural incomes. The improved regulatory environment and the strong demand for compliant cheese and therefore raw milk were the conditions that enabled the project to facilitate systemic change, including formalization. Interviews for the current study confirmed that conversely without ALCP support it is likely most dairy enterprises would not have been able to meet the new requirements and farmers would have lost a main source of income.

⁴ Leveraging Economic Opportunities, 'Testing Tools for Assessing systemic Change; Outcome Harvesting, ALCP in the Georgian Dairy Industry', USAID, 2016; ALCP, 'Impact in the Livestock Sector in Khulo 2014-2018'.

This case study also indicates that Market Systems Development is an effective approach to reducing rural poverty, facilitating rural economic development and improving working conditions through support to enterprise formalization in situations where:

- ➤ A Government is engaged in establishing and implementing the legal and regulatory framework for formalization at different levels and in a broad range of sectors in the economy (e.g. not just the introduction of HACCP standards for processors, but formalization of commercial outlets as well);
- Access to formal markets is conditional on the formalization of processors and producers;
- ➤ The potential formal market for rural produce is expanding and demand for standards-compliant produce is increasing, so processors and producers have a strong incentive to formalize.

The study also indicates that:

- Depending on the specific conditions in a sector's market system, projects may have to support improvement or development of a wide range of services to value chain actors, and to facilitate change in formal and informal rules or norms, to achieve an effectively functioning and sustainable system;
- Depending on the availability of affordable finance, projects may have to provide costsharing or co-investment to a relatively large number of individual enterprises and service providers before scale is achieved through broader market uptake.

Acronyms

ADC	Austrian Development Cooperation
ALCP	Alliances Caucasus Programme
FSH	Food Safety and Hygiene
GEL	Georgian Lari
GMM	Georgian Milk Mark
НАССР	Hazard Analysis and Critical Control Points
ILO	International Labour Organization
MEPA	Ministry of Environmental Protection and Agriculture
MSD	Market Systems Development
NFA	National Food Agency
SDC	Swiss Agency for Development and Cooperation
VCD	Value Chain Development

▶ 1. Introduction

This study explores the relationship between a particular set of related value chain development interventions and formalization of economic units, with a focus on positive implications for income generation and improved working conditions for owners of economic units, and/or their employees.



The economic units concerned are those in the dairy value chain in Georgia, from dairy farmers to dairy processing enterprises to retailers. The interventions are part of the Alliances Caucasus Programme (ALCP), a Swiss Agency for Development and Cooperation (SDC) project in cooperation with the Austrian Development Cooperation (ADC) implemented by Mercy Corps Georgia. The project started in 2008 and is expected to be completed by March 2022. Its total budget for that period amounts to CHF 23.62 million, of which 2.7 million USD (CHF 2.638 million at current exchange rates) are direct costs related to the dairy sector⁵. The project applies the Market Systems Development (MSD) approach, which considers value chains as part of a wider market system. MSD projects aim to facilitate sustainable change at scale in such systems that benefit the poor.

The research for this study was funded by the Enabling Environment for Sustainable Enterprises & Formalization Team of the International Labour Organization's Enterprise Department. It was designed by the ILO Enterprise Formalization specialist and an international consultant, in

collaboration with and with substantial contributions from the ALCP. Field research, carried out in October and November 2019, was conducted by ALCP staff, initially supported by the consultant. ALCP also made significant contributions to the report.

Chapter 2 presents the conceptual context for this study. Chapter 3 summarises the study's methodology and main limitations, while Chapter 4 provides sector background and the main elements of the regulatory environment that are relevant to it and therefore to its formalization. The remainder of the report is structured to follow the Theory of Change that is the basis for this study: **Chapter 5** describes the ALCP's interventions to facilitate change in the dairy market system, **Chapter 6** considers what the results were in terms of market system change, **Chapter 7** considers how this change contributed to formalization in the value chain and Chapter 8 looks at the impact on working conditions in the value chain, including income. Chapter 9 provides the main conclusions.

⁵ These direct costs relate to dairy enterprises, business development services and the Georgian Milk Mark.

2. Value chain development, formalization and working conditions

2.1 Definitions and terminology

The ILO uses the classic definition of a value chain, i.e. "it describes the full range of activities that are required to bring a product or service from conception, through the intermediary phases of production and final delivery to final consumers, and final disposal after use".6 Like the ALCP, it considers value chains as part of a market system, which includes public and private sector actors fulfilling 'supporting functions' (often in service provision) for economic units in the value chain and actors who set and enforce formal and informal 'rules' (e.g. legislation and social norms respectively) that affect how the value chain operates (see Chapter 5 for a market system diagram).⁷ Value chain development is the support to the process of making value chains more effective, competitive and inclusive. Improving 'supporting functions' and 'rules' is a key part of this process. The ILO has an interest in value chain development to the extent that it contributes to the large-scale creation of more and/or better jobs in sustainable enterprises for women and men, particularly the poor and other disadvantaged groups.

The ILO uses the following criteria for formal economic units:

- ➤ They produce goods or services at least partially for sale or barter (e.g. purely subsistence agriculture does not meet this criterion), and;
- ► They are registered at relevant national institutions (which includes social security authorities, sales or income tax authorities) or;
- ► They maintain a set of accounts required by law (e.g. balance sheets) or keep some official accounts⁸.

Informal employment refers to working arrangements that are - de facto or de jure - not subject to national labour legislation, income taxation or entitlement to social protection or certain other employment benefits (e.g. advance notice of dismissal, severance pay, paid annual or sick leave). Annex 1 provides the defining characteristics of formality in enterprises and employment.

2.2 Conceptual framework

In line with ILO Recommendation 204 concerning the Transition from the Informal to the Formal Economy, this study recognises that apart from these criteria, formality in a broader sense is a more complex phenomenon with a variety of aspects in economic units, relations within value chains and the market systems in which economic units operate. In addition to fully formal, and fully informal economic units, there are those that exhibit features of both. In other words: formality-informality is a continuum rather than a dichotomy.

The list of characteristics of formality in Annex 1 includes those of formality in a broader sense that the study considers. Some of these reflect statistical criteria of formality whereas others, such as increased trust amongst key actors in the value chain and effective Government regulation, should rather be seen as conditions that can enable formalization.

The changes in working conditions the study has considered are those that, based on discussions with the ALCP and its reporting were thought to be most likely to be affected, though they were not limited to these. They are also listed in Annex 1.

⁶ ILO, 'Value chain development for Decent Work': 3, quoting Kaplinski & Morris 2003: 4

⁷ Ibid: 4

⁸ International Labour Office, 'Women and men in the informal economy: A statistical picture', Geneva 2018; page 8

▶ Box 1. Theory of Change

A VCD/MSD programme's **interventions** contribute to:



Changes in the market system that provide incentives for businesses that encourage formalization.

Such changes may be the result of changes within the value chain (e.g. access to business opportunities for formal economic units) and/or access to (improved) services or regulation.

This contributes to:



Economic units adopt one or more aspects of formalization that enable them to make use of new opportunities and so increase sales and profits.

(Such aspects of formalization may for example be food safety standards, business registration, contractual relationships)

This contributes to:



Higher incomes, more employment and better working conditions for economic units, their workers and independent workers without employees.

The study's design is based on the general Theory of Change which is reflected in Box 1.

This is the hypothesis that the analysis aims to test. It also provides the outline for this report, which starts by considering the ALCP's interventions, and then looks at what changes in the dairy market system this has contributed to, whether and to what extent this has contributed to formalization, and whether and to what extent this has contributed to better working conditions (including higher incomes and incomes for more women and men).

The second part of the analysis (formalization and working conditions) focuses on the actors in the value chain, which are the main concern of this study. The assumption on which this part of the Theory of Change is based is that incentives for

formalization that have emerged in the changed market system will lead to some level of formalization among economic units; that the greater opportunities this opens up (e.g. more market access) will lead to higher earnings throughout the value chain, incentives for enterprises to improve their employees' working conditions, and opportunities for independent workers without employees9 (like farmers) to do the same for themselves. This could be an iterative process, with rewards for initial steps to formalization leading to further steps.

⁹ From here onwards, the term 'independent workers' refers to independent workers without employees.

3. Methodology and limitations

The study was carried out in October and November 2019. It comprised:

- Review of ALCP reports and studies and other relevant documents;
- Design and testing of questionnaires and semi-structured key informant interview schedules;
- Interviews and discussions conducted by the consultant with ALCP management and staff;
- Interviews with ALCP beneficiaries and key informants.

Field data were collected in four regions in the South of Georgia covered by the ALCP, Samstkhe Javakheti, Kvemo Kartli, Ajara, and Kakheti. Interviews were conducted with economic units in the value chain and their employees, service providers to those units and the relevant ministry, i.e. of Environmental Protection and Agriculture (MEPA). The study covered:

- 20 dairy farmers (10 women, 10 men);
- 21 dairy enterprise employees, in six enterprises that partnered with the ALCP, interviewed separately from their employers (16 women, 5 men);
- ▶ 5 ALCP partner dairy enterprise owner/managers, all of whom were included in the group of which employees were interviewed (2 women, 3 men);
- 1 non-partner dairy enterprise owner/manager (a man);
- 3 milk collectors (men);
- 3 distributors (men);
- 4 retailers (3 women, 1 man) and 1 restaurant manager (a woman);
- 2 directors of consultancy firms (1 woman, 1 man), the owner of a vet pharmacy (a man), the director of a dairy association (a man), the manager of a local branch of a bank (a

man), the producer of a TV programme (a woman), the director of a regional office of the National Food Agency (a man), the Head of the Agriculture, Food and Rural Development Department of MEPA (a man).

Sampling was purposive, to ensure representation of women and men roughly in line with the gender balance in the population (e.g. women predominate among employees), and inclusion of different ethnic groups (Georgians, Azerbaijanis, Armenians), a range of economic unit sizes (small and medium-size farms and dairy enterprises), and different levels of employees in the dairy enterprises (mostly processors, but some higher-level specialised staff).

The analysis and the report make extensive use of the ALCP's impact and other studies and data from its Monitoring and Results Measurement system, to complement and triangulate with the qualitative research done for the present study. For example, since quantitative data on outreach and income increases were available from the ALCP this study has not attempted to collect these.

The research's main limitation, due to the limited funds and time available, is that it did not include a baseline and a 'control group', i.e. farmers, dairy enterprises (with one exception), and dairy enterprise employees who have not benefitted from ALCP support. The study depends on recall, which is of course approximate. The availability of ALCP data and analysis, some of which (e.g. for income) are based on a baseline and do make use of a control group, partly makes up for this.



4. Context and regulatory framework

4.1 Context

With a total population of around 3.7 million people, Georgia counts more than 271,000 agricultural economic units with cattle, adding up to a total of nearly one million heads. ¹⁰ The collapse of the Soviet Union led to a severe disruption of the dairy sector, including the demise of collective farms supplying large factories, the system of veterinary care and the Soviet-era regulatory framework. Unregulated production of milk, cheese and other dairy products by smallholders became the rule. An estimated 80 per cent of farming households have some cows, often mostly for subsistence rather than commercial purposes. Ninety-five percent are reported to have fewer than 10 cattle, with an average of 3.8.¹¹

Traditional types of cheese are the main dairy product in Georgia and demand is high, with a reported 12.7 kg per capita consumption per year, though informal estimates put it at 20 kg ¹². Cheese making was (and to some extent still is) traditionally done at the farm, by the women who are also in charge of feeding, milking and other aspects of animal care. Demand for cheese is followed by demand for fresh milk, traditional yoghurt, sour cream and butter.

The demand of urban consumers for standards compliant and labelled dairy products is growing. In a national survey of urban dairy consumers in Georgia carried out in 2018, 84 per cent would prefer to buy dairy products made from raw milk produced in a clean environment from healthy

cows fed predominantly on grass and 89 per cent were willing to pay more for this¹³. However, though the supply of such milk by small producers has been increasing, it is still hard to source in some areas, due to strong competition for milk or low levels of production and productivity. Despite the rapid growth in formal outlets, mini- and supermarkets especially, 70 per cent of cheese and other dairy products in Georgia are still bought in informal agri-markets, competing on price with formal producers¹⁴.

Milk powder has been imported in significant amounts since 2015, from Iran, the Ukraine and Turkey, as well as other dairy products. This was estimated to account for 18 per cent of milk products used in 2016, and its value is increasing¹⁵. Milk powder is used for cheese production especially in winter, when milk production is low and prices for raw milk are high. It is very cheap, easy to manufacture and has significantly lower transaction costs than sourcing raw milk from small farmers¹⁶. Producers use informal, misleading or meaningless labels (such as "ecologically clean" or 'natural product') implying the use of natural Georgian milk in their product marketing ¹⁷, competing unfairly with those producing from raw milk collected from Georgian farmers.

Household incomes from dairy assessed by the ALCP before its interventions had started to generate significant impact (the 2008 – 2011 period)

¹⁰ Center for Agribusiness and Rural Development (CARD), 'Baseline Assessment of the Dairy Sector in Georgia', Tbilisi 2018. http://gfa.org.ge/wp-content/uploads/2018/10/%E1%83%99%E1%83%95%E1%83%9A%E1%83%94%E1%83% 95%E1%83%90-1-Baseline-Assessment-Dairy-Sector-in-Georgia_eng.pdf , page 24.

¹¹ Ibid, page 12

¹² Ibid, page 18; ALCP staff interview.

¹³ Caucasus Research Resource Center (June 2018) Dairy and Beef Consumer Preferences

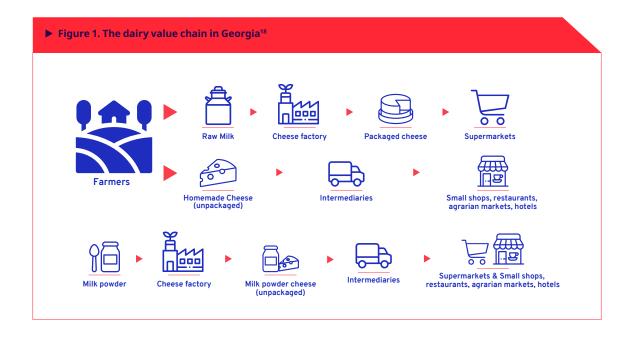
¹⁴ ALCP, 'Ensuring Sustainability in the Dairy Sector in the Dairy Market Sector', 2017, page 6. http://alcp.ge/pdfs/d755c5fad9646bcdf36d5610ca27a261.pdf

¹⁵ Caucasus Research Resource Center (June 2018), page 11

¹⁶ ALCP, 'Ensuring Sustainability in the Dairy Sector in the Dairy Market Sector', 2017, page 19

¹⁷ Ibid, page 17

¹⁸ Source: Ibid page 12



were an average of GEL 2,062, around USD 1,170 at 2010 exchange rates¹⁹, or around USD 3.20 per day ²⁰. Assuming an average rural household size of 3.44²¹ and dairy contributing 47 per cent²² to household income, this would amount to an average of USD 1.98 per capita per day, i.e. under the USD 2.50 international poverty line. It compares to an average of USD 10.53 per capita per day for Georgia overall in the same period ²³. In other words, a significant portion of dairy farming household members was living below the poverty line and dairy farmers earned among the lowest incomes in the country.

Farming communities' economies offered few services and goods and were information-poor. Transport and infrastructure were undeveloped. Exchanges were barter-based to a significant extent, e.g. with women exchanging cheese for other products. Economic exchanges depended on acquaintance and trust and were regulated

by informal social norms ²⁴. As will be seen in this report, this still holds true to a significant extent.

4.2 Regulatory framework

In Georgia, various formalization requirements are in place for economic units and workers in the dairy value chain. This section provides a short overview of such requirements. As value chain actors are inter-connected, this report is not limited to dairy farmers but rather identifies requirements and effects at all levels in the value chain, even though farmers are the primary beneficiaries of the ALCP programme.

▶ Registration of dairy farms as an economic unit is not required by law. In 2012, a law which would have required all "who produce and sell dairy products in a regular and organized

¹⁹ https://www.xe.com/currencycharts/?from=USD&to=GEL&view=10Y. The GEL has been steadily losing value against the USD over the past 10 years, from around 0.58 USD in 2010 to 0.34 at present.

²⁰ Household incomes, which include income from other sources, are not available; 2012 exchange rate.

²¹ Hakkart, R, 'Population Dynamics in Georgia; An overview based on 2014 General Population Census Data', National Statistics Office of Georgia/UNFPA 2017, page 12

²² ALCP, 'Impact Assessment Samtskhe-Javakheti' 2016. Though this is likely to have changed over time comparable pre-intervention data and current data are not available. If dairy contributed less than 47 per cent to household income at the time average per capita income per day would of course have been greater (e.g. at 37 per cent, USD 2.52, which would still imply a significant share of households probably living under the poverty line).

²³ https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=GE

²⁴ Bradbury H, Samsharadze, N, 'Beyond statistics: The Informal Economy in Rural Georgia', ALCP, Marneuli, 2012

manner" to be registered with the National Food Agency (NFA) and the public registrar was put on hold. This moratorium will end by January 2020. The Ministry of Environmental Protection and Agriculture has drafted a regulation and defined non-regular and regular production²⁵ and sales, which will be submitted to the Government for approval in early 2020. Cowsheds do have to be registered, and so do cattle, which must be tagged. This constitutes steps towards more formalization at the farm level. The NFA is undertaking this (supported by ALCP and other projects), and since 2016 a National Animal Health and Identification System is being set up with FAO support. Since January 2019, dairy enterprises can only use milk collected from tagged cows. All these measures are intended to improve disease control, maintain consumer confidence and facilitate export growth. The NFA is responsible for their overall monitoring, but in practice its capacity to do so is limited and the identification system is not yet complete and in full use.

Registration at the Revenue Service and submitting an annual income declaration is required for those physical persons whose annual household income (received via a bank account) is over GEL 40,000 (around USD 13,946). A property tax applies to those who own land. These taxes could in theory apply to dairy farmers. Since 2004, commercial businesses in Georgia (excluding farms but including milk collectors who collect milk from farmers for dairy enterprise, dairy enterprises, distributors of dairy products, retailers) have been required to register at the Revenue Service. From 2012 they have been required to indicate their economic activity, and to also register at the Business Registry of the National Public Registry Agency represented in every municipality²⁶. Registration at the Business Registry must be followed by registration at the Revenue Service and since

December 2014 it became mandatory for dairy businesses, collectors, distributors and retailers to apply to the NFA for registration, whereby they become subject to inspection (see Table 1).

Dairy enterprises in addition have to apply for 'recognition' by the National Food Agency. Since 2015, when the 2014 Association Agreement between the EU and Georgia came into force and Georgia became part of the Deep and Comprehensive Free Trade Area, compliance has been required with Hazard Analysis and Critical Control Points (HACCP) standards²⁷. Prior to this, Georgia developed its own Food Safety, Veterinary and Plant Protection Code 2012, which came into force in 2013 but whose implementation was ineffective. HACCP requires, among other things, meeting quality and hygiene standards, keeping journals of all processes, a traceability system, providing HACCP trainings to enterprise staff and appointment of a HACCP manager. It also requires written contracts for employees and since 2015 dairy enterprise staff involved in HACCP management need a HACCP training certificate.

The NFA was established in 2010, charged with ensuring regulatory compliance. Inspections by the NFA are meant to take place twice a year, plus a surprise inspection. The NFA will give recommendations for improvement, can impose a fine, or can temporarily shut an enterprise if the violations are serious. The NFA only inspects registered enterprises.

Those who use milk powder only do not require HACCP certification. Since 2017 cheese made with milk powder (and vegetable oil) can no longer be called cheese, though producers use names that indicate that it is cheese such as 'sakhajapure' ('for cheese bread'). This law was improved in 2019 to include transparent labelling of ingredients. Labelling is compulsory for HACCP-compliant cheese and only labelled cheese can be sold

²⁵ Household owning more than five milking cows and more than 15 small ruminants have to be registered at the NFA and Tax department and have official status e.g. individual entrepreneur or limited liability company. They will become the subject of the state control.

²⁶ Business Registry of the National Public Registry Agency; https://www.loc.gov/law/foreign-news/article/geor-gia-public-service-halls/

²⁷ For a simple though unofficial explanation of HACCP see http://blog.parker.com/the-haccp-framework-and-its-importance-in-the-dairy-industry and https://ec.europa.eu/trade/policy/countries-and-regions/countries/georgia/

► Table 1. Registration requirements for actors in the dairy value chain				
Business	Business registry	Revenue service	NFA	НАССР
Dairy enterprise	~	~	•	•
Milk collector	•	~	•	
Cheese distributor	•	~	✓	
Retailer (any size)	•	~	✓	
Farmer (until 2020)	-	-	✓ from 2020	

through formal channels (e.g. supermarkets). This is enforced by the NFA.

In addition to formal legislation, informal norms have been changing too, with greater consumer awareness, stronger consumer groups and a consumer programme doing its own random testing²⁸.

Dairy enterprises in mountainous areas, and their employees, are exempted from income tax, under a law adopted in 2016, as an incentive to enterprises in a difficult, infrastructure and services poor environment. The enterprises have to apply for this exemption. Vet pharmacies are required to register at the Business Registry, and are allowed to sell only those medicines registered at the NFA. The NFA carries out regular inspections of vet pharmacies. Veterinarians working in vet pharmacies must to be qualified and certified since 2014. Service providers, providing e.g. training and business consulting services, are required to register at the Business Registry. Since 2016, the businesses are obliged to be registered as a VAT payer if the annual income is more than GEL 200,000 (USD 67,360). For businesses with a lower income this is voluntary.

All enterprises, associations and organisations that employ staff are required to do so in accordance with the recently adopted Labour Code of Georgia²⁹. This includes a provision for an oral or written employment agreement for the first three months of employment, after which a written agreement is required. The Code also includes provisions on a 40-hour workweek, overtime payments, paid annual and maternity leave, and the right to a safe and healthy workplace. As farmers are independent workers, they do not have employment contracts. The Labour Code also stipulates that overtime shall be compensated by the hour based on increased pay rate (amount to be determined by agreement between the parties), and that the parties may agree on granting additional time off to an employee to compensate overtime work.30 There is no legal monthly minimum wage in Georgia³¹. The National Statistics Office of Georgia has established a GEL 192 (around USD 65 at current exchange rates) per month "subsistence level for a working age male" which is updated on a monthly basis, but this has no legal validity³². Parliamentary efforts to establish a minimum wage at GEL 400 (USD 134.59) have run into opposition³³.

²⁸ Alliances KK, 'Alliances KK synthesis report of the first phase, September 2011 to September 2013', page 11, http://alcp.ge/pdfs/9b82125e5c11d2996b53c881302f1447.pdf; interviews with ALCP staff

²⁹ https://matsne.gov.ge/en/document/download/1155567/5/en/pdf

³⁰ https://matsne.gov.ge/en/document/view/1155567?publication=12, para. 17

³¹ https://investingeorgia.org/en/georgia/labor; https://matsne.gov.ge/en/document/view/1155567?publication=12

³² https://www.geostat.ge/en/modules/categories/49/subsistence-minimum

³³ https://eurasianet.org/georgian-fight-for-minimum-wage-faces-uphill-battle

- An Occupational Health and Safety in the workplace law was adopted in September 2019.
- ➤ Since January 2019 Georgia has operated a new 'accumulated pension system', under which employers, employees and the state each contribute 2 per cent of employees' gross salaries to the state's pension fund³⁴. This is mandatory for workers under 40, voluntary for independent workers (which includes farmers) and people aged 40 and above.
- Universal Health Care in Georgia, launched in 2013, is financed through general tax contributions, not through individual or employers' contributions. It is administered by the Social Services Agency and largely delivered through private sector providers³5. Of the total expenditure on health, the share that individuals end up paying is still more than the share of the Universal Health Care system, though the share is getting less. Municipalities may support those in need.

³⁴ https://www.agenda.ge/en/news/2019/13

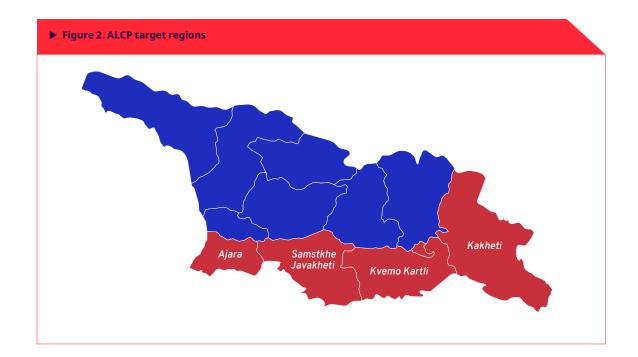
³⁵ https://en.wikipedia.org/wiki/Healthcare_in_Georgia

5. ALCP's interventions

5.1 Introduction

The Alliances programme began in 2008 in the Samstkhe Javakheti (SJ) region of Georgia. It gradually expanded to other regions in the South of the country (Kvemo Kartli, Ajara, Kakheti) and since 2017 is supporting the SDC's South Caucasus Swiss Development Cooperation Strategy 2017-2020 which covers Armenia, Azerbaijan and Georgia³⁶. It facilitates interventions in the livestock and honey market systems to safeguard ongoing sustainable growth and promote new growth that includes ensuring access for small and medium-size enterprises and

livestock and honey producers to cross-border and other export markets. It also exploits available entry points for the transfer of inputs, services and business models successfully developed in Georgia to Armenia and Azerbaijan to enhance cross-border linkages. The programme will run until March 2022. The project has twice been audited successfully against the Donor Committee for Enterprise Development (DCED) Standard for Results Measurement³⁷. It has positioned itself as an important contributor to global learning on MSD practice, in particular in the area of Women's Economic Empowerment³⁸.



³⁶ https://www.eda.admin.ch/dam/countries/countries-content/georgia/en/Strategie%20South-Caucasus%20 2017%20170511%20Web.pdf

³⁷ https://www.enterprise-development.org/measuring-results-the-dced-standard/

³⁸ See for instance https://beamexchange.org/practice/programme-index/2/

The current study is limited to ALCP's work in the dairy sector in Georgia, which was initiated in 2008.

5.2 ALCP's vision to transform the market system

ALCP's goal in the dairy sector is to increase the incomes of small dairy farmers, and throughout the value chain, by improving productivity, and quantity and quality of milk products. To this effect the ALCP has aimed to support a transition from a market system in which:

- ▶ Small dairy farmers used the milk they produced to make cheese which they marketed themselves or sold through informal intermediaries. Sales were often insecure and often resulted in high transaction costs³9. A minority sold raw milk to milk collection points from where it went to two large formal factories (which had a history of non-payment to farmers for uncompliant milk and large debts accrued in villages), or to small informal dairy enterprises.
- ► Food safety and hygiene practices on the farms were inadequate (standards were not yet in place in 2008).
- ▶ Productivity levels were low due to the use of few and low quality inputs (e.g. feed, medicines and veterinary services), disease and poor standards of animal husbandry. Farmers had on average two to four cows.
- ➤ Small dairy enterprises that bought raw milk to produce cheese used practices that compromised safety, hygiene and quality. Their products would not have passed Food Safety and Hygiene standards. Production, and therefore take-off of milk, was irregular and the failure rate of these dairy enterprises was potentially high.
- Services that could address these issues were not available.

Most consumers bought cheese in agri-markets or from small informal retailers, without quality guarantees and without information on their provenance and whether the cheese has been made in a compliant dairy enterprise or not and from 2015⁴⁰ whether milk powder or raw milk had been used.

In this system profitability was low at all levels. Cheese production at the farm placed a heavy burden in time used and costs in particular on women farmers who were responsible for milking and cheese making and incurred costs for the necessary firewood and other cheese making materials. Women usually marketed the cheese if they did not sell it to an intermediary, but sales were uncertain and transaction costs were high.

To a market system in which:

- ► The majority of small dairy farmers sell their raw milk through milk collectors or directly to close-by small dairy enterprises that process it into cheese or other dairy products.
- Productivity levels at the farm have increased and farmers invest in more cows.
- Practices on the farm meet the quality standards required by the dairy enterprises.
- ► The dairy enterprises meet the Food Safety and Hygiene standards in force in the country and have stable relationships with their suppliers.
- ► Farmers and dairy enterprises have access to services and inputs that enable them to achieve this.
- Dairy enterprises have access to formal market channels such as supermarkets and other formal retailers.
- Consumers buy high quality cheese from supermarkets or other formal retailers, that is labelled to indicate provenance and ingredients, including whether milk powder or raw milk was used.

³⁹ KK Focus Group Survey 2014. E.g. Dairy products were brought back unsold from market an average of two times out of every ten, spending an estimated three hours per trip. page19

⁴⁰ When widespread use of cheap imported milk powder became prevalent.

The expectation was that in this market system the profitability of dairy farms and therefore household incomes would increase. Women farmers would save time from cheese making and would be empowered by direct access to services and information and by receiving the income from raw milk sales, which was higher than the income from selling home-made cheese. Dairy enterprises would become more profitable and create jobs.

5.3 Facilitation provided by the ALCP

To facilitate this transformation, the ALCP has implemented a wide range of interventions with various private and public sector partners. The interventions targeted actors in the value chain itself, farmers and dairy enterprises foremost, supporting functions (improving or developing new service providers to actors in the value chain), and to some extent the regulatory environment. As noted in the previous chapter, this took place in a context of increased regulation, with the EU-Georgia Association Agreement, which includes stipulations on alignment of food safety and hygiene standards as well as product labelling, playing a major role since 2015.

A) In the value chain

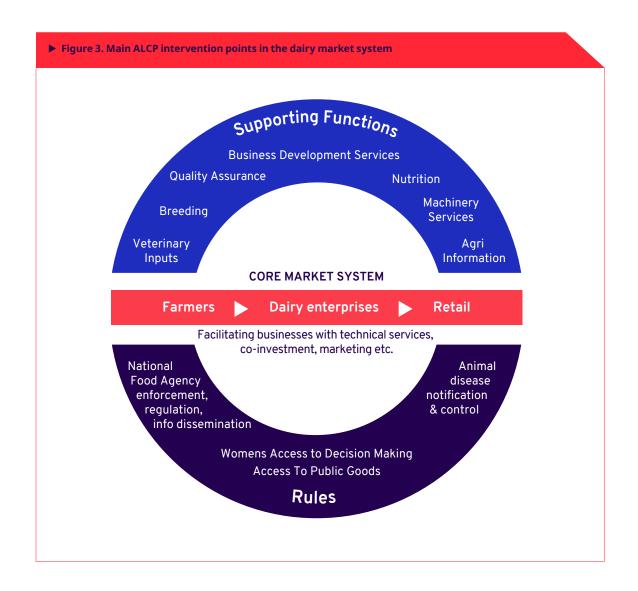
In the value chain, the project's facilitation comprised:

Dairy enterprises that showed the will and potential to be upgraded and meet food safety and hygiene standards. These enterprises were carefully selected based on the selection criteria as outlined in ALCP's Investment Manual⁴¹, along with an assessment of the entrepreneurial spirit of the business owner. Partner dairy enterprises were provided with tailor-made, needsbased co-investment of between 40 and up to 65 per cent (for movable assets only), with the enterprises' other sources of investment being their savings, loans (including those originating from MEPA), and in-kind investment. The total

investment per enterprise was between USD 120,000 and USD 150,000 (project and enterprise investment combined). In total 39 enterprises received this support from the ALCP. The project required its partner dairy enterprises to be formally registered, have a bank account and maintain formal records. Staff members of the dairy enterprises were trained (through a consultancy firm developed and contracted for the purpose) and provided with information to improve safety and hygiene standards, whereas business plans were written by a business development services provider. This started before Food Safety and Hygiene (FSH) standards had been adopted officially in 2012 and was based on Good Management Practice⁴². Once HACCP standards were adopted (in 2015), support aimed at enabling the enterprises to become HACCP certified. HACCP systems were put in place, HACCP managers were trained and enterprises were supported in the certification process.

⁴¹ ALCP Investments Manual 2015-2019 Version 2 page 15.

⁴² Basic operational and environmental conditions required to produce safe food (environmental control, premises), equipment maintenance, personal practice, pest control, sanitation, water safety and traceability.



Farmers received training and information from the enterprises to improve hygiene in milk production, initially supported by a consultant. A programme was implemented by which farmers' bulls of low-yield varieties were replaced by improved varieties, for use not only by their owners but by the community⁴³.

B) Services (supporting functions)

The ALCP's facilitation comprised developing the following supporting functions:

Training and advice on Food Safety & Hygiene and HACCP-related management and procedures: Support was provided to the establishment of *Star Consulting Company* by an independent

⁴³ This followed attempts by ALCP to introduce a workable model for Artificial Insemination (AI) through a service provider 2009-11. See Case Study (The Springfield Centre, 2010). AI was associated with high failure rates and relatively high costs, which farmers were reluctant to cover. AI was persistently promoted by donors and several programmes consisting of free Artificial Insemination to farmers were brought in at that time severely undercutting the attempts to develop a commercial market. Project communication 28.11.19

consultant whom the project had contracted for these services initially. FSH/HACCP training and advice had not been available beyond Tbilisi.

Business development services: The ALCP strengthened *First Consulting*, a firm that offers services such as business plan development and assistance with loan and grant applications. These services had not been available beyond Tbilisi.

Environmental impact assessments: The project supported *Gergili Environmental Team* to produce a condensed environmental impact assessment tool and expand into the dairy sector and rural areas.

Information: The ALCP worked with regional newspapers, a national TV and radio station to develop attractive formats and content for farmers (including in dairy) that would enable them to improve their practices and inform them about services and standards. This work expanded into social media and digital platforms and the development of the discipline of agri-journalism at 12 universities.⁴⁴

Veterinary medicines: To date 418 veterinary pharmacies have been upgraded or newly established, mostly in remote areas, in partnership with *Roki*, a large distributor and manufacturer which had no rural distribution model. This included training of pharmacists. Medicines had been available in Tbilisi only and farmers bought and sold them informally, from their homes, or in small under-equipped shops⁴⁵.

Veterinary services: Twenty vets and satellite vets in rural areas were re-trained to update their knowledge and practices as part of the rural outreach of the pharmacies.

Better (combined) cattle feed: The project supported an individual entrepreneur and a firm (*Agrotrading Ltd*) to expand distribution in rural areas and develop combined feed.

Agricultural machinery: ALCP worked with a machinery supplier (*Marmot Ltd*) and *Roki* to improve access in rural areas to equipment like hay making and milking machines.

Finance: Working with these machinery suppliers, vet pharmacies and a bank, ALCP facilitated the establishment of in-shop, low or zero interest credit⁴⁶ and instalment plans.

Quality Assurance Mark and Sector Advocacy: The project facilitated the introduction of the Georgian Milk Mark (GMM)⁴⁷ in early 2019 as a means to address unfair competition, add value and thus improve the sustainability of producers of compliant cheese from raw milk. This quality assurance mark, and the audited system which accompanies it, guarantees that cheese is HACCP compliant, made from raw Georgian milk from cattle who are predominantly grass fed without the use of milk powder and vegetable oils⁴⁸. The project facilitated the Business Institute of Georgia (BIG) to administer the mark. Recently, The Business Institute of Georgia who administers the Georgian Milk Mark has formed the Georgian Milk Federation from GMM-affiliated dairies to perform the function previously performed by the Advisory Committee (see below).

C) Rules

Animal disease regulation and control and women's access to decision making are two key regulatory issues which underpin and cross-cut the livestock sector as well as regulatory frameworks directly involving the dairy sector. The following interventions involve working with all levels of government as a partner to address regulatory constraints in the operating environment.

Co-facilitation with government to address sectoral constraints: The Advisory Committee is the format used to convene diverse actors to address intractable constraints in the operating

⁴⁴ Springfield Centre, 'Developing Media Markets to Address Agricultural Constraints A Case Study from the ALCP Georgia', 2019; ALCP 'Visualising Results the ALCP in Infographics Book II September 2019, page 26-30

⁴⁵ Beam Exchange, 'Transforming Access to Veterinary Services in Georgia, The Alliances Lesser Caucasus Programme'. 2016

⁴⁶ A bank or MFI representative is present in the shop to provide loans, for which the machinery is collateral.

⁴⁷ http://georgianmilk.ge/

⁴⁸ Therefore supporting small scale producers mostly women, who supply community based factories whose cattle graze for over six months of the year rather than intensive milking herds kept inside, often fed concentrates and silage, of which in any case there are few in Georgia.

environment. The ALCP is the convenor of Dairy Sector, Meat sector, Honey Sector⁴⁹ and Bio-Security Advisory Committees, with all relevant Government, NGO and private sector stakeholders. The committees have a problem-solving role addressing issues that usually emerge from ALCP market research and ongoing facilitation. In the dairy value chain the project's role has been, on the whole, to enable value chain actors to comply with the emerging regulatory framework rather than to shape it. However, through the Advisory Committee it has advocated for and contributed to regulatory change, including the injunction against calling milk-powder originated products cheese.

Animal disease regulation and control: One key issue the Advisory Committees have dealt with has been the need for better Government support to the twice-yearly transhumance of hundreds of thousands of sheep and cattle from winter to summer grazing grounds and vice versa. Animal disease notification and control as well as support infrastructure en route are vital to underpin the livestock sector as a whole. The ALCP co-invested with the Government to set up six bio security points and other improvements⁵⁰.

Women's Rooms: The project has initiated and supported the establishment of 29 Women's Rooms as a municipal service located in the Local Self-Government premises. They function as a focal point, resource centre and communal space to support mainly rural women to participate in local decision-making, access local government and public services as well as other public goods⁵¹. They also provide training, advice, and support in developing business proposals and completing funding applications ⁵².

The ALCP was the first to support cattle registration by co-financing the NFA to carry out the first national registration and data entry drive and inform and educate farmers. This is now funded by FAO/SDC/ADC.

Much of the project-supported work with farmers, dairy enterprises and other players can also be seen as aiming to contribute to change in their informal norms relating to milk and cheese production.

⁴⁹ ALCP, 'Visualising Results the ALCP in Infographics Book II September 2019 P 35 for Honey Sector Advisory Committee outcomes.

⁵⁰ For more information see https://oiebulletin.com/?panorama=veterinary-surveillance-points-for-animal-migration-routes-in-georgia-2

⁵¹ ALCP, 'Visualising Results the ALCP in Infographics Book II September 2019 P 39 Womens Room Map.

⁵² ALCP, 'How to set up a Women's Room and improve local decision making', 2017

6. Change in the market system

This chapter considers the effects of the ALCP's interventions on the way the dairy market system operates, in the value chain (section 6.1), services to value chain actors (section 6.2) and the formal and informal norms and rules that affect the value chain (section 6.3). Chapter 7 considers the effects in terms of formalization.

6.1 Changes in the value chain

ALCP has contributed to a fundamental shift in the dairy market system in its project areas, which took about eight years to accomplish and is still ongoing elsewhere in the country.

Farming households: Within the value chain, an estimated 23,528 farming households in the ALCP regions have made the shift from cheese production to the sale of safe, hygienic and high-quality raw milk. This is an estimated 70 per cent of dairy farmers in total in these regions. This scale is partly the result of farmers copying the behaviour of ALCP-reached farmers (more than 3,000 farmers, included in the figure above)⁵³. The average number of cows per household

increased from 2.5 in the 2008 – 2011 period to 10 in 2019⁵⁴. The households used on average two different project-facilitated services (such as veterinary pharmacies, hay-making machine services, improved feed). Impact on farmers' practices goes well beyond the farmers linked to ALCP-supported dairy enterprises. A study of the impact of the project's media work for instance found that farmers who accessed information through ALCP-facilitated media shared information with on average eight others, of whom an average of 3.4 copied their behaviour (e.g. in accessing veterinary pharmacies)⁵⁵.

ALCP's studies show that farmers changed their milk production and storage practices to ensure better hygiene and quality⁵⁶; invested in more cows⁵⁷ and cowsheds; invested in better cattle breeds (bulls are being replaced by farmers at their own cost now) and feed which improved yields (on average four litres per day and three litres per day respectively)⁵⁸, and better cattle health care⁵⁹. Interviews conducted with farmers for the present study confirmed these findings (see Chapter 7).

⁵³ Project communication 13.11.2019, Monitoring and Results Measurement data

⁵⁴ Ibid

⁵⁵ ALCP, 'A National Review of Information Impact in Alliances 2008 to 2018', October 2018, page 9

⁵⁶ ALCP, 'Impact Assessment 2017 Ajara', 2017, table 20; ALCP, 'Impact Assessment 2016 Kvemo Kartli', 2016, page 16; ALCP, 'Impact Assessment 2016 Samtskhe-Javakheti', 2016, page 17

⁵⁷ Project communication 13.11.2019; Monitoring and Results Measurement data

⁵⁸ ALCP, 'Impact Assessment 2016 Kvemo Kartli', 2016, page 13; ALCP, 'Broad Impact of the ALCP 2017', 2017, page 6

⁵⁹ E.g. ALCP, 'Impact in the Livestock Sector in Khulo 2014-2018', page 7

▶ Figure 4. Tsezari dairy enterprise before and after partnership with ALCP



Old building of Dairy Products Company Tsezari, 2012 year, Sakdrioni village, **Tsalka municipality**



Dairy Products Company Tsezari, new facility, 2014 year, Sakdrioni village, **Tsalka municipality**



Dairy Products Company Tsezari, Before, 2011 year, Sakdrioni village, Tsalka municipality



Dairy Products Company Tsezari, After, 2013 year, Sakdrioni village, Tsalka municipality

All farmers interviewed planned to continue to supply their raw milk to the dairy enterprises with which they had established a relationship. Higher profitability, time and effort saved by women farmers compared to cheese making, stability of the income, savings made on inputs for cheese making, the conditions offered by the dairy enterprises and the good relationships with the enterprises were the reasons mentioned. The incentives to continue supplying to dairy enterprises appear to be strong.

Dairy enterprises: A total of 39 dairy enterprises that received ALCP support are operational, buying raw milk through milk collectors or directly from the farmers to process into cheese. From these, 17 are HACCP compliant and six are in

process of certification. Dairy enterprise owners interviewed for the current study reported high increases in the number of farmers they buy from since they formalized and received ALCP support (e.g. from 15 to 800, 25 to 500, 25 to 150), with even greater increases in the quantities of milk bought due to farmers having more cows and higher yields. More than 90 per cent of the suppliers to these enterprises were women, though overall this may be lower (70 per cent)60. In a study on systemic change in the dairy sector, ALCP assessed the enterprises to have "high" sustainability, with a score of 88 per cent (out of 100) on an ALCP-developed sustainability indicator⁶¹. All five enterprises that partnered with ALCP covered by the present study reported diversification of

⁶⁰ ALCP staff interview

⁶¹ ALCP, 'Visualizing the ALCP in Infographics Book II' September 2019 based on all dairy enterprises i.e. directly facilitated and crowded in. In ALCP, 'Analysing Systemic Change Trends in the Dairy Sector', 2018, page 2 this indicator was 73 per cent but based solely on crowded in entities interviewed in early 2018.

products (to butter, cottage cheese, sour cream, ghee, cheese with herbs, bottled milk), increased sales (five-fold in one case) and profitability and planned to continue operations ⁶². They were expanding or had expanded significantly already after ALCP support.

The ALCP systemic change study found that since 2015, 23 not-supported dairy enterprises in five regions in Georgia had 'crowded in' (i.e. followed the example of the supported enterprises), a key indicator of systemic change⁶³. They applied the model of the ALCP-supported enterprises by accessing cheap loans or grants from different donor projects (EU, USAID, Cultivating New Frontiers in Agriculture) and the MEPA, after registering their business, which was a requirement for such assistance. They used the consultancy service providers ALCP which had helped to develop. In the present study all compliant enterprise owners interviewed knew of others who had started on the path to compliance following their business model and most compliant enterprise owners had provided them with advice. All considered their own enterprise a "great example" for such newcomers. ALCP found that the not-supported enterprises showed similar sustainability as the enterprises it had supported⁶⁴. The project estimates that at present some 30 per cent of farmers still process and market non-compliant cheese informally, and some 50 per cent of dairy enterprises in Georgia are compliant, which demonstrates the scale of the change in the market system it contributed to.

The current study also found that the compliant dairy enterprises experienced a strong increase in sales through formal retailers, including supermarkets, supermarket chains, hotels and restaurants. They now sell almost exclusively to such buyers. Supermarkets and other formal retailers require compliant and labelled cheese and are not allowed to sell non-compliant products. Though in reality some still do⁶⁵, compliant cheese has come to dominate the formal market. Enterprises interviewed stated they can now supply compliant

cheese in the quantities required. One enterprise has been exporting to the U.S since 2016. Some large international supermarket chains whose conditions are not adapted to local small suppliers are still out of reach. None of the enterprises covered by the study experienced problems in selling their cheese. The only non-compliant enterprise covered by the study was selling to the informal retailers in agri-markets only.

Retail outlets: The three supermarkets covered by the study sold compliant and labelled cheese only, noting increasing consumer awareness and preference, with consumers reading the labels. They expected this trend to continue. They only sourced from distributors that deal in compliant cheese and they were inspected by the NFA. A (registered) small shop also carried home-made cheese, which its customers prefer due to the lower price. The one restaurant manager interviewed used compliant and non-compliant cheese. The three distributors interviewed dealt in compliant cheese only and noted increasing demand from consumers. Earlier ALCP research indicates that non-compliant and unpacked cheese is still widely available in agri-markets, with restaurants and hotels (60 per cent), followed by individual consumers, being the main buyers. The need to be able to taste the cheese was found to be a key reason66.

In conclusion, in the core of the market system, i.e. the value chain, change is therefore likely to be sustainable and has already reached considerable scale, including through copying and crowding in without ALCP support. Though non-compliant cheese is still on the market, demand for compliant and labelled cheese – mostly at premium prices - is strong and increasing. The expected curtailment of home-based production of non-compliant cheese through a regulation planned for adoption in 2020 is likely to strengthen this. In other words, the change can be considered systemic.

⁶² ALCP, 'Analysing Systemic Change Trends in the Dairy Sector', 2018

⁶³ Ibid, page 2.

⁶⁴ See note 51

⁶⁵ ALCP staff interview.

⁶⁶ ALCP, 'Research of 'Dezertirebi' and 'Navtlugi' Agri markets', June 2019

6.2 Changes with respect to services (supporting functions)

This section describes changes in the market system with respect to supporting functions for actors in the value chain.

Training and consultancy services: The three training and consultancy services providers that the project has worked with and helped develop (i.e. in training and advice on FSH and HACCPrelated management and procedures, business development services and environmental impact assessments) are delivering their services outside Tbilisi and in rural areas, where they were not active before. They are being hired by projects other than the ALCP, by enterprises that have received public grants or loans and are being contracted privately. Star Consulting Company (the only firm interviewed for the current study, started six years ago with ALCP support) has developed from an independent consultant into a firm with an additional four employees. Demand for its services is high and profitability is increasing.

Information through media: An ALCP study estimated that by 2018 nearly 624,000 people had regularly obtained information from the media it had supported.⁶⁷ It found that:

"The majority of agri media outlets have become financially sustainable and less dependent on donors. Seventeen entities have crowded in and replicated the agri programmes and newspaper supplements of programme facilitated clients after seeing increased farmer demand for getting agri information". 68

The national TV programme *Perma*, of which the producers were interviewed for the current study, is among the most popular programmes on the (public) station. It no longer receives financial

support from the ALCP. The project has also invested in a partnership with two media associations to establish training for agri journalists to further facilitate sustainability and scale. Twelve universities will be accepting students for these courses in spring 2020. The intervention contributed to the launch of an Agricultural Journalists Association⁶⁹.

Veterinary medicines and services are now available throughout the country, with 418 improved and new vet pharmacies and 20 satellite veterinarians. By 2017, when the number of new pharmacies was 120, 87 per cent of farmers were accessing medicine through them and the range of medicines available had been increased⁷⁰. The model has continued to develop with an interactive online platform for farmers to access support, advice and services as well as ongoing embedded advice and trainings and the development of new medicines and products, 80 per cent of which are now manufactured in Georgia compared to 20 per cent in 2011. Embedded credit in many vet pharmacies provided through microfinance institutions and banks provides access to equipment such as milking machines. Two other veterinary input suppliers have copied the model. Export of veterinary inputs to Azerbaijan, Armenia and Tajikistan based on a similar distribution model is ongoing⁷¹.

Access to cattle feed: Improved cattle feed is available through 25 distribution points throughout Georgia⁷². Usage in one of the project regions had already increased to 33 per cent in 2016.⁷³ Since April 2017 the amount has increased vastly with a total of 2,697 tonnes of combined feed and 15,000 tonnes of milled grain sold and distributed to an estimated 10,000 farmers. Most farmers interviewed for this study reported they have changed feeding practices after starting to supply raw milk, to increase yields, but only 3 out of 21 were using combined feed. Bran was used by most.

⁶⁷ ALCP, 'A National Review of Information Impact in Alliances 2008 to 2018', October 2018, page 3; this includes users in other sectors.

⁶⁸ Ibid, page 3

⁶⁹ Ibid, page 13 to 15

⁷⁰ ALCP, 'Broad Impact of ALCP', page 5

⁷¹ BEAM Exchange 'An MSD Advocates Arsenal. ALCP Healthy Herds'. November 2019

⁷² Project communication, 13.11.2019

⁷³ ALCP, 'Impact Assessment 2016, Kvemo Kartli', 2016, page 14

Access to machinery: Agricultural machinery is now available outside Tbilisi, throughout Georgia and in Armenia and more recently Azerbaijan, sold through 19 outlets and bought by 473 machinery service providers (mostly in hay-making) in Georgia and 729 in Armenia and Azerbaijan, including on instalment plans⁷⁴. An estimated 56,800 farmers in Georgia, Armenia and Azerbaijan have used the hay making service.

Introduction of a Quality Assurance Mark: The Business Institute of Georgia is administering the *Georgian Milk Mark*. Thirteen firms have been approved for its use and some 30 more approvals are expected over the next six months. Cheese with the mark is present in supermarkets. The Institute is still supported by ALCP but is developing a business plan for financial independence. Sustainability cannot be assessed yet, though the Institute's management seems committed to it. The Georgian Milk Federation formed from GMM-affiliated dairies have recently spearheaded advocacy to government concerning the threat posed by evaporated milk imported from Iran and used, unlabelled, in cheese making.

It can be concluded that in terms of service provision the changes ALCP has contributed to are likely to be sustainable and have reached significant scale, including through 'crowding in'. The change can therefore be considered systemic. This means that value chain actors can access services that will continue to benefit them and will support their sustainability and increase the scale of change in the value chain.

6.3 Changes with respect to formal and informal rules and norms

This section provides an overview of changes in the dairy market system with respect to formal and informal rules and norms.

Government support and services: The Dairy Sector and the Bio-Security Advisory Committees

continue to meet. In terms of services one of their main successes has been improved Government support to transhumance. The NFA now provides free vaccination against common diseases, six biosecurity points are operational along the route where animals are disinfected and treated if necessary, better routes have been established to avoid conflicts with local communities and working groups at municipal level are operational, also to reduce conflict⁷⁵.

While the Women's Rooms do not specifically target dairy farmers, they do provide services relevant to them. Twenty-nine are operational, including 10 initially funded by USAID. They had 13,500 unique visitors (69 per cent women). Dairy farmers benefitted from training, consultancies and assistance to complete applications for funds. Public, private and grants funds leveraged for women's initiatives and business through the rooms is currently standing at 2.4 million USD. Participation in village meetings is at 35% in four regions from 3%76. Municipalities have continued to budget for the Women's Rooms.77

Cattle registration by the NFA has been nearly completed in ALCP project areas and is ongoing elsewhere. The NFA is expected to continue this regulatory function.

HACCP standards: Overall, the most important questions in relation to dairy sector sustainability and scale is whether HACCP standards and other formality requirements can be expected to remain in place and whether the NFA can ensure compliance. The trade agreement with the EU, the codification of HACCP standards in legislation, and the planned 2020 legislation to further reduce informality in cheese making indicate that the answer to the first question is yes. Regarding the second question, the NFA seems well-resourced to perform its current tasks relating to formal dairy enterprises⁷⁸, and dairy enterprises interviewed reported regular inspections. However, the project reports that "The regulatory focus of the NFA still has gaps, which increase constraints for clients such as insufficient policing of milk powder

⁷⁴ Project communication, 13.11.2019

⁷⁵ ALCP, 'Broad Impact of ALCP', page 13; staff interviews

⁷⁶ ALCP, Visualising Results the ALCP in Infographics Book II September 2019 P 40-42 for public goods including funds accessed by women through the intervention.

⁷⁷ ALCP, 'Illustrated Results of Gender and WEE of the ALCP', page 8

⁷⁸ Interviews with NFA Regional Office and MEPA

usage and sale as raw milk and unregistered factories" ⁷⁹. When the 2020 legislation that requires households owning more than five milking cows and more than 15 small ruminants to be registered at the NFA comes into force the NFA's capacity will be severely stretched. What this will mean for enforcement of existing and new regulations remains to be seen.

Up to this point, the Theory of Change on which this study is based can be considered to have been validated. The next chapter will look at the next step in the hypothesis, i.e. did change in the dairy market system contribute to greater formalization.

7. Formalization

How the changes in the market system the ALCP contributed to have furthered formalization in the value chain will be considered in this chapter, based on the different indicators listed in Annex 1. Section 7.1 assesses to what extent value chain actors have formalized, whereas section 7.2 assesses their incentives to formalize. Changes in the market system related to workers and independent workers will be dealt with in the next chapter⁸⁰. Why value chain actors formalized is considered in a separate section at the end of the current chapter.

7.1 Progress towards formalization of farmers, dairy enterprises, distributors and retail outlets

This section assesses formalization of the economic unit in terms of its nature and internal activities (items 1 – 5), relations and interactions within the core value chain (items 6 - 10), supporting functions (items 11 - 13) and rules of the game/formal and informal norms (items 14 - 17).

1. Does the economic unit meet the national registration requirements?

All **farmers** interviewed had their cattle registered and tagged by the NFA since this became legally required in 2016. In ALCP project areas registration of current stock is reported to be nearly completed but it is still ongoing in the rest of the country. Few reported they had their sheds registered and most were not aware of the requirement. Since some noted this had been done at the same time as cattle being tagged it may have happened without their realising it⁸¹. There are no other legal requirements as yet. All ALCPsupported dairy enterprises have formalized as required by law. They are registered as limited liability (Ltd) company or private entrepreneurs and at the Revenue Service and have been 'recognised' by the NFA. This was confirmed by the enterprise interviews. Twenty-three enterprises supported by other programmes have formalized as well. The distributors interviewed are registered as Ltd company or private entrepreneurs and at the Revenue Service. They did so when they started operations as it was a legal requirement. All retail outlets covered by the study are registered. This was already required before ALCP started.

2. Does the economic unit meet the registration and licensing requirements with sub-national authorities?

This does not apply to farmers and dairy enterprises.

3. Do the economic units maintain a set of accounts required by law or of some accounts of a formal nature?

There is no legal requirement for **farmers** to keep records of any kind. However, all but four of those interviewed had started keeping their own daily records of milk supplied and money received since they started selling raw milk. They do so for their own use, e.g.to avoid misunderstandings with the milk collector and track yields, income and prices. Milk collectors interviewed keep records of transactions as well. Farmers who did not keep records said they trusted those of the collectors or the enterprise. The ALCP partner dairy enterprises covered by the study keep formal accounts as required by law since they registered. Those that are HACCP certified, keep extensive records to ensure quality and traceability. Distributors and retail outlets reported they keep formal accounts as required by law and have been doing so since they were registered.

⁸⁰ Although the current study concerns formaliszation in the value chain only, it can be reported that all service providers interviewed were found to be legally registered.

⁸¹ ALCP, 'Impact Assessment 2017 Ajara', 2017, page 16; ALCP, 'Impact Assessment 2016 Kvemo Kartli', 2016, page 17; ALCP, 'Impact Assessment 2016 Samtskhe-Javakheti', page 18

4. Do economic units comply with tax laws?

There is no requirement for farmers to register with the Revenue Service and pay taxes unless their household income is more than GEL 40,000 per year and received in a bank account. Payments for milk are made in cash and household incomes are unlikely to be above GEL 40,000 (see Chapter 8). Payments to collectors are also made in cash. All ALCP partner dairy enterprises covered by the study are registered at the Revenue Service. They pay income and profit taxes (20 per cent and 15 per cent respectively), apart from those that benefit from the exemption for enterprises in mountainous areas, which only pay profit tax. Three out of the five that partnered with the ALCP and were covered by the current study had obtained this exemption. Distributors interviewed also stated they comply with tax laws. This was not assessed for retail outlets.

5. Do economic units apply standard procedures for producing goods and services?

Farmers interviewed had significantly changed their milk production practices to ensure hygiene and quality, based on training, advice and leaflets from collectors, enterprises and in some cases FSH consultants. Since they give similar accounts of the changes made, some level of standardisation has taken place. The dairy enterprises that are HACCP-certified, of which five were covered by the present study, follow standard processing procedures. The required HACCP managers are in place. The enterprises are inspected regularly by the NFA to ensure compliance. Other ALCPsupported enterprises are working to meet HACCP requirements. Even before HACCP became compulsory, enterprises had been supported to adopt FSH and Good Management Practices. Standardisation must therefore have taken place also among enterprises that have not yet obtained HACCP certification. This was not the case in the only enterprise covered by this study that had not been supported by ALCP, where the only change in practice was purchase and use of a milking machine. Distributors are required to transport dairy products in a refrigerated van, keep cheese in hygienic conditions and to have the necessary documentation related to the cargo. They reported this is being complied with as they would not be able to conduct business otherwise. However, in

practice they are not controlled by the NFA and it is up to the dairy enterprises and retailers to check if storing, transport conditions and documentation meet requirements. The appliance of standard procedures was not assessed for retailers.

6. Are goods or services at least partially sold or bartered?

Farmers sell their milk. While some use the income to buy goods from dairy enterprise-run stores, this is also a commercial transaction. Milk collectors are paid on the basis of a fee per litre of milk. The **dairy enterprises** are formal commercial economic units that sell their produce. Distributors are paid for a service. Retailers are formal commercial businesses.

7. Are transactions based on written contracts (which may or may not be legally valid), between buyers and sellers at different nodes in the value chain? What is the nature and duration of as well as adherence to those contracts?

The use of written contracts is limited especially at the bottom-end of the value chain. Out of the 20 **farmers** interviewed, 16 had a verbal agreement with the milk collector or enterprise. The four who had a written agreement supplied to the same enterprise. Some respondents reported they had signed "something" with the enterprise every year but were not sure what it was. Agreements concern quality and price, frequency of payment and the daily supply of milk (in any quantity available). The duration of the agreements seems to be unlimited. Milk that does not pass the enterprises quality tests is returned. Quality is also periodically controlled by the NFA and by compulsory tests at MEPA.

Agreements between the **dairy enterprise** and the milk collector may be in writing or verbal, depending on the status of the collector (if registered as an enterprise in writing). Durations vary from three to twelve months and quantities are not specified. It is understood that milk of inadequate quality is returned. Farmers, collectors and enterprises stressed the high degree of trust between them as they are members of the same community. The regular take-off of milk and the

success of the dairy enterprises have strengthened this. Even if a contract was in writing it was considered "a formality" (required if the collector is a registered small entrepreneur). None of the respondents at this level of the value chain reported disagreements about the agreements' terms and all said the agreements, verbal or written, were well adhered to. Agreements between dairy enterprises and formal buyers such as supermarkets and restaurants may also be in writing or verbal. They may specify duration, quantity and regularity of supply, price and notification of price changes, and how the products will be promoted. Smaller buyers (also formal) are more likely to have verbal agreements with the enterprise. The enterprises do keep records of the transactions. Trust is also important in these relationships, with one respondent stating it is "more important than a legal contract". This is not to say there are no disagreements between enterprises and buyers (e.g. about placement of the products, late payments), which in some cases have led to relations being discontinued. Distributors have written contracts with the dairy enterprises or with retailers, depending on whether they buy and sell the cheese or just distribute. This has been the case since the enterprises formalized. Contract durations vary (three to 12 months). Transactions are being documented. Timely payment by the retailers was mentioned as the main issue in adherence to their terms.

8. Do economic units comply with quality standards and forms of product certification?

Some farmers' milk is tested "visually" by the milk collectors but for most it is tested by collectors and again by the enterprises with a lactoscan, for fat and water content and acidity. Cleanliness is tested visually. No certification is involved. Seventeen of the ALCP-facilitated enterprises are NFA-certified as HACCP compliant, while six more are going through the certification process. They do not use milk powder. As required by HACCP, regular laboratory tests are done at the MEPA for the NFA, e.g. to test for antibiotics and diseases.

An additional 16 are working towards meeting the criteria and a further estimated 23 operating dairies in Georgia are HACCP compliant. The ALCP estimates this accounts for about 50 per cent of dairy enterprises in the country⁸². Distributors do not require certification. All but one of the retailers interviewed deal only in compliant cheese, as required by law. The exception was a small (formal) shop.

9. To what extent does vertical integration of transactions, relationships, services and functions occur within the value chain that entail increased structure, routines and documentation for interaction between market actors?

The above indicates a high degree of vertical integration, with increased structure and documentation, as required by HACCP standards and the formal nature of the enterprises and their buyers, distributors and in some cases the collectors. Farmer-collector, or farmer-enterprise relations are also documented in the enterprises' HACCP journals. None of this was in place before ALCP assistance. In terms of services embedded in the value chain, vertical integration is indicated by milk collectors and enterprise managers providing training, advice and leaflets to the farmers to keep or improve milk quality. Three out of the five enterprises interviewed that partnered with the ALCP report this, while the others had training provided by a third party (paid for by the dairy enterprises and ALCP).

10. To what extent are market actors self-organised into registered or unregistered associations/cooperatives or branch organisations/Business Membership Organisations?

There are four registered dairy associations⁸³ and one newly registered Federation⁸⁴ One was started independently by an ALCP dairy enterprise and the other three were started with and supported by various donors. The Federation was formed by affiliated user dairies of the Georgian

⁸² Project communication, 13.11.2019

⁸³ ALCP, 'Ensuring Sustainability in the Dairy Market Sector', 2017, page 21

⁸⁴ July 2019, project communication

Milk Mark. The one covered by the study started in 2006 with donor support and was now working on a business plan. It provides, among other things, training and opportunities for experience sharing which may be considered a response to the introduction of FSH standards. It has advocated, among other things, for reducing unfair competition between informal and formalized producers. Most small dairy enterprises consider the associations to serve the interests of large producers only⁸⁵. The Georgian Milk Federation is already serving the interests of its twenty four member dairies addressing specific issues related to their production.

11. Do economic units have access to and make use of formal forms of finance?

Six (five women, one man) of the 20 farmers had taken bank or MFI loans (including through instore credit) after starting to sell raw milk, some saying their stable relationship with a dairy enterprise had helped the approval. Others noted they had had no need for loans or if they did, they could get an advance from the enterprise. The one bank representative interviewed said 80 per cent of borrowers were dairy farmers and would not comment on whether this had been increasing. The ALCP reported in 2016 that a significant share of households had loans (between 35 and 40 per cent), with fewer repayment problems than non-beneficiary households, but it is not clear to what extent this was linked to farmers starting to sell their milk86. In one study farmers did say access to loans had improved87 and the project's latest bi-annual qualitative assessment found that the number and amounts of agricultural loans88 provided to milk suppliers (and potato growers) had also increased89. Four out of the five compliant dairy enterprises have accessed loans (mostly low-interest Government loans administered through banks), and some grants. Two stated this would not have been possible without being formalized and HACCP compliant. They also had to provide collateral, a business registration certificate, a document from the Revenue Service that all taxes were covered, and information on turnover. Distributors did not access loans, one mentioning the high interest rates.

12. Do economic units have access to and make use of formal non-financial business services?

Farmers interviewed did not use formal non-financial business development services, i.e. consultancy or training services. They were satisfied with the training and advice provided by milk collectors and the enterprises, while for a few TV was an important source of information. However, 12 out of 20 increased their use of vet pharmacies and veterinarians. All made use of the free vaccinations provided by the NFA, for which registration and tagging of cattle is a prerequisite. As noted in Chapter 6 households used on average two different project-facilitated services (such as veterinary pharmacies, hay-making machine services, improved feed). Most of the dairy enterprises mentioned the ALCP as the source of their business development services (training, consultancies). The NFA was mentioned too. Distributors did not make use of business services, apart from, in one case, the ALCP.

13. Do economic units have access to quality certification services?

Quality certification is not available to and not required of **farmers**. The NFA certifies that **enterprises** are HACCP compliant. The Business Institute of Georgia, which owns the Georgia Milk Mark, has additional standards, including the non-use of milk powder. Awarding an enterprise this mark certifies that these standards are met. Thirteen have received approval to use the mark,

⁸⁵ Ibid, page 21

⁸⁶ ALCP, 'Impact Assessment 2017 Ajara', 2017, page 9; ALCP, 'Impact Assessment 2016 Kvemo Kartli', 2016, page 7.

⁸⁷ ALCP, 'Impact Assessment 2016 Samtskhe-Javakheti', page 10

⁸⁸ Loans specifically taken to further invest in agriculture.

⁸⁹ ALCP Bi-annual Report April 2019-September 2019. Interviews with two major banks. Branch managers reported repayment schedules based around the high milking period and potato harvest and agri-loans making up 60 per cent of the loan portfolio in one bank with agri-loans being offered for the first time in the other. The default rate in one had lowered from 4 per cent to 1 per cent over the last two years amongst farmers

30 are working towards meeting the requirements. Distributors do not need these services.

14. Is an effective regulatory framework for formalization in place?

The past five years have seen a rapid development of the regulatory framework specific to the dairy sector, with the introduction of HACCP standards and the NFA becoming more effective in ensuring compliance with the advent of the politically and economically important EU-Georgia Association Agreement (see Chapter 4).

15. Is some level of formality required for sale of produce and/or access to services?

Farmers can only sell the milk of tagged cows to compliant dairy enterprises and NFA vaccination services are only available for tagged cows. **Dairy enterprises**' access to all but small informal and formal retailers depends on their being registered and HACCP compliant. Support from the ALCP, other programmes and the Government is conditional on registration. Distributors also need to be registered and deal with HACCP compliant enterprises in order to distribute to formal retailers.

16. Do formal and informal norms protect economic units from harassment and rent-seeking?

None of the enterprises covered by this study indicated any element of harassment or rent seeking in their relationship with the NFA, though some complained of a too high frequency of inspection and wished the NFA would inspect non-compliant enterprises. Georgia's Transparency International ranking has improved from 68 out of 178 in 2010 to 41 out of 180 in 2018, indicating an environment in which rent-seeking has become less common.⁹⁰

17. Is there a high level of trust between value chain players?

As reported earlier, respondents at all levels in the value chain indicated a high level of trust between them. Some indicated this was not always the case and had taken a year or more to establish. Others, especially at the lower end of the value chain (farmers, collectors, enterprises) indicated it was grounded in their being members of the same community.

It can be concluded that a significant level of formalization has been achieved at the institutional (business) level, especially regarding registration, the adoption and effective enforcement of standard procedures for producing goods and services the economic units deliver, quality certification and vertical integration of the value chain. The adoption of HACCP standards and the fact that some aspects of formalization enable market access, has provided the enabling regulatory framework for these changes. While farmers show fewer characteristics of formalization than other actors in the value chain, the strong trust between them and small, local dairy enterprises appears to be an effective replacement of formal, written arrangements.

7.2 Incentives for formalization and the role of the ALCP

This section looks at why actors in the value chain formalized, and what role the ALCP played.

Farmers interviewed reported that they registered their cattle and had them tagged because it is a legal requirement and some stated they did so because only milk from tagged cows can be sold to the dairy enterprises. They changed and standardised their milk production and storage practices to meet the requirements of the dairy enterprises. Without such change their market access would have been limited to the remaining non-compliant enterprises which pay less, or informal sale of home-made dairy products. Better medical care of the cows is provided for the same reason. As the ALCP has no direct relationship with the farmers they did not mention the project, but reported that the changes were made possible by training and advice provided by the milk collectors and enterprises (whose capacity was built by the ALCP).

Owner/managers of the dairy enterprises were very clear about the reasons for formalizing. Without registration and compliance with HACCP, or Georgia's earlier Food Safety and Hygiene standards, and other regulations (e.g. on labelling) they could only have operated as micro, largely home-based producers of non-compliant cheese and would not have reached any scale nor accessed formal market channels. Consumers are also increasingly demanding compliant cheese. The respondents had neither the skills nor the financial resources to make the transition to compliance, and the ALCP was the only source of assistance. To quote two of the respondents:

"The Government requires HACCP and registration and so do the supermarkets. It is needed to develop the enterprise. Also more consumers want natural cheese, without milk powder. Without ALCP I would have had to stop production"91.

"I did it (register as an Ltd company) because there were new regulations and laws and I could not work without that status at this scale, it was important. I wanted to start producing compliant cheese and follow standards and the ALCP was the only organization which could help me. Before, I did not know what standards existed, I did everything by myself and I knew that it was wrong. I even did not know to whom could I ask and where could I find out the information I needed. After the ALCP I changed the whole business model. I established HACCP which means better management, accounting and ensuring traceability. (ALCP) provided me with knowledge, explanations what and how to do and financial support for nearly everything. Everything that I own and have today, it is created after collaboration with the ALCP. If not (for) this collaboration, I would stop producing cheese at all"92.

Other benefits of formalization mentioned by respondents were that it allowed them to qualify for government loans, tax exemption status for mountainous areas, and lines of credit otherwise completely inaccessible to them. As reported in Chapter 5, formalization has paid off for the enterprises in terms of expansion and profitability. Two of the enterprise owners mentioned a disadvantage of formalization, i.e. taxation (the others being tax-exempt). Yet they considered this to be outweighed by the benefits.

Distributors also stated that they had registered their business to be able to deal with formal market channels. They felt greater regulation benefitted their business:

"All the regulations are beneficial for my business, because I distribute high standard cheese following all the transportation requirements. I think these regulations will increase demand for my services and also improve the dairy market in the country"⁹³.

The ALCP played no direct role except in the case of a distributor who upgraded his retail outlet. It did facilitate the wide availability of compliant cheese which enables distributors to meet retailers' demand.

Registration of retailers is not related to the changes in the dairy market, since they deal in many products and registration is a legal requirement not related to the dairy sector. Their retailing compliant cheese is due to legal requirements, but also to consumer demand. The wide availability of compliant cheese which the ALCP facilitated enables the retailers to meet both.



"Consumers' awareness is increasing step by step, so compliant cheese is in more demand. We have an obligation to sell only compliant cheese since 2018"94.

In conclusion, farmers, enterprises and distributors formalized to meet the requirements

- 91 Collated from answers to several questions, same respondent. Kvemo Kartli
- 92 Idem. Kvemo Kartli
- 93 Distributor in Samtskhe-Javakheti
- 94 Supermarket in Tbilisi

of the evolving regulatory framework and gain and expand access to the formal market for their products. The ALCP's facilitation enabled them to do so. The support to the dairy enterprises was critical, as it leveraged change elsewhere in the value chain, among farmers in particular.

At this stage in the analysis it can also be concluded that formalization was not so much aresult of the changes in the market system the ALCP helped facilitate as being an integral part of it. More enterprises registering, adoption of standard procedures and quality standards,

vertical integration of the value chain and access to services were at the core of what ALCP was facilitating rather than being an indirect consequence of it. In addition to the improving regulatory framework, being able to meet the demands of the robust national market for 'natural' and increasingly, 'compliant' cheese and the growth of formal retail outlets, supermarkets in particular have been critical to ALCP's success: therefore the demand for raw milk.

8. Working conditions

This chapter considers whether the changes in the market system, including formalization, have contributed to better working conditions in the value chain, for each of the indicators listed in Annex 1 (section 8.1). The incentives for improving working conditions are also described (section 8.2).

8.1 Improved working conditions in the value chain

1. Higher incomes, amounting to at least the minimum wage, or above the poverty line, and incomes for more people?

ALCP estimates, based on impact assessments that compare with control groups and a baseline, that 23,528 **dairy farming households** have increased their total net income from dairy from GEL 2,062 (around USD 1,170 at 2010 exchange rates)⁹⁵ in the 2008 – 2011 period to GEL 11,250 (around USD 3,790 at current exchange rates), in the 2017 – 2019 period ⁹⁶. This is a more than five-fold increase. ALCP attributes about 40 per cent of this increase to its interventions (as distinct from price increases and other factors).

One of ALCP's impact studies found that income from dairy accounts for on average 47 per cent of total household income in 2016⁹⁷, making the average annual total household income in the 2008 – 2011 period USD 2,490 and in the 2017 – 2019 period USD 8,060. With an average rural household size of 3.44, this amounts to an increase of USD 724 to USD 2,334 per capita⁹⁸. This is still well below the USD 4,345.5 per capita income (2018) for the country, but at an average USD 6.42 per day well above USD 2.50 poverty line. It compares

to USD 1.98, i.e. below the poverty line, before interventions. It is also above the official monthly minimum subsistence level of GEL 192 (USD 64.67) per month, which converts to USD 2.15 per day. Though this analysis is based on averages it can be safely concluded that ALCP has contributed to lifting thousands of dairy farming households out of poverty.

In the present study all except two of the 20 farmers interviewed stated that selling raw milk to dairy enterprises had increased their household and/or personal income and that this increase was important to them for covering household expenditure, medical costs, education, buying appliances, home improvement, and investing in dairy or other income generation. The exceptions were when dairy income was not a significant part of household income or inflation was said to have cancelled income gains.

Independent milk collectors collect from double to triple the number of farmers compared to before the ALCP's interventions, and greater quantities per farmer, due to the increased demand for raw milk and farmers shifting to selling raw milk. As they are paid per litre delivered, their incomes have increased. Depending on the season, gross incomes could range between USD 16 to USD 33 per day, which in some cases may have to be shared with small-scale collectors who collect for larger ones.

An ALCP study conducted in 2017 found an average net salary of **dairy enterprise employees** in Kvemo Kartli of GEL 476 and 507 in Adjara⁹⁹. When milk supply is high this may be increased by 25 per cent due to the increased workload. Employees expressed satisfaction with their salaries, noting they are the same as bank and public office employees' and GEL 100 more than

⁹⁵ https://www.xe.com/currencycharts/?from=USD&to=GEL&view=10Y.

⁹⁶ Project communication 13.11.2019. Calculations were done to as much as possible separate out the effects of other interventions in the same households.

⁹⁷ ALCP, 'Impact Assessment Samtskhe-Javakheti' 2016. Though this is likely to have changed over time comparable pre-intervention data and current data are not available.

⁹⁸ Hakkart, R, 'Population Dynamics in Georgia; An overview based on 2014 General Population Census Data', National Statistics Office of Georgia/UNFPA 2017, page 12

⁹⁹ ALCP, 'The Creation of Jobs by ALCP facilitated entities in the Dairy Sector in Kvemo Kartli and Adjara', 2017, page 1

those of shop workers in their communities. The ALCP study covered all levels of employees, from cheese processors to managers. Wages of cheese processors ranged from GEL 300 to 500 per month, in part depending on the number of days per month and hours per day they are expected to work. Processors in dairy enterprises interviewed for the current study made between GEL 360 and 800 per month, with most around GEL 500. All those interviewed reported that their income had improved compared to their previous income (if any). Some who had worked for a (failed) informal dairy enterprise before reported much lower wages there (around 50 per cent).

ALCP monitoring also indicates that wages are on average double of what is earned in informal dairy enterprises. About a third of employees interviewed for the current study had not had a (paying) job before, while in the ALCP study on job creation most had not had a paying job before 100. All employees expressed satisfaction with their pay and said it was important to them and their households, as they can pay their bills, plan their expenditures, and invest in the education of their children, house improvement, and income generation such as cows, cultivation, and non-agricultural businesses. Management level and specialised staff earned significantly more (GEL 900 – 1,000). For processors, wages are more than the 'official minimum subsistence level' (GEL 192) and, at USD 4.04 per day for the lowest earners, well above the poverty line.

The project reports that 261 full-time equivalent **jobs** have been created since the project started (of which 115 are due to crowding in), so more women and men are benefitting from dairy-related incomes. The jobs created are in large majority in the dairy enterprises. Fortyfive percent are for women. The five compliant enterprises interviewed alone reported more than a quadrupling of the number of employees since collaboration with ALCP started, most of them being women. More are hired temporarily on a seasonal basis. Distributors also reported increased employment in their businesses. Dairy farmers do not hire employees, and data collected for the current study do not indicate more household members having become involved in milk production or more benefitting

from dairy income. Rather, they have benefitted from more income.

2. Written legally valid employment contracts between employers and employees, and adherence to their terms, or in the absence of these, verbal agreements that are adhered to?

Dairy farmers are independent workers and therefore do not have employment contracts. As noted already in Chapter 7 most have verbal agreements with milk collectors or enterprises, which are adhered to. The same is true for independent milk collectors.

ALCP's 2017 study found **dairy enterprise employees** had written contracts and knew their rights and responsibilities. These were negotiated in advance¹⁰¹. The current study found that 18 out of the 21 employees interviewed had a written contract. The three who did not have a written contract, worked for the same enterprise. Those who did, were not always fully aware of it ("yes, I now remember signing something"). They were often not clear about what their contract stipulated, but they did know what they had verbally agreed with their employer.

All five compliant dairy enterprise owner/managers stated they provide written contracts to their permanent employees, usually on a oneyear renewable basis. They introduced this because it is a HACCP requirement. Not all inform the Employment Agency, to avoid their employee's household losing welfare payments and most pay in cash. The relationship is again strongly trust-based, with one interviewee (with a contract she had forgotten about) stating she "would be ashamed to have a written contract" as this would indicate she did not trust her employer, and others saying "we are all friends and family here". The fact that there is a contract in writing seems to be considered largely irrelevant, except as a formal requirement. It should however be noted that in principle, under conditions where written contracts can be enforced, such employment contracts play an important role in formalizing informal work and provide better protection of both parties. The absence of such contracts (as is the

case for 3 employees of non-HACCP compliant enterprises) may pose challenges to formalization of jobs. Despite this, employees as well as employers indicated there had been no significant disagreements between them about their duties or conditions and that the agreements' terms are being adhered to. This suggests that the enterprises' rootedness in the community and its informal norms, and the possibility of social pressure in the case of injustices, may at present be an effective protection mechanism.

One of the three distributors interviewed provided employees with written contracts, the others saying employees are part-time and a verbal agreement was therefore legally sufficient. This is not clear from the Labour Code ¹⁰². Supermarkets provide written employment contracts or service contracts (due to high turnover). The small shop covered by the study used verbal agreements.

3. A greater sense of security and stability of income?

Apart from three respondents whose sense of security had been based on other sources of income, all **farmers** interviewed stated that supplying milk to a dairy enterprise had increased their sense of income security and stability, and that this was important to them. Their income has increased, they can sell as much as they want, payments are always on time, and they can plan for the future, including expansion of their farm. They are "more confident" and "do not have a fear for the future" because the dairy enterprises they sell to are doing well and they trust the enterprise owners to continue to buy from them. These sentiments were expressed by women in particular. The results are similar for milk collectors. The increased sense of security is not rooted in any regulatory or institutional provisions as these do not exist.

All **dairy enterprise employees** interviewed indicated they feel more secure than before their employment by the dairy enterprises and that this is important to them. The ALCP 2017 study of job creation found the same sentiment¹⁰³. Those

interviewed for the present study expect the dairy enterprises to continue and grow, to keep their jobs there, and they can plan their expenditures, including for income generation. This indicator was not assessed for distributors and retailers.

4. Access to training, information?

Eighteen out of the 20 **farmers** interviewed received advice, information and some informal training on safe and hygienic milk production from milk collectors or the dairy enterprises, with four receiving formal FSH training. They consider their skill level satisfactory and applied what they learned. As stated by one of the farmers:



"I have more information now on requirements for clean milk. I try to follow the norms of temperature, washing utensils storage, hygiene norms. Before I did not have much information and was not motivated to change my milking practices" 104.

The two exceptions claimed they made no changes and had always paid attention to hygiene. TV was mentioned by two respondents as an important source of information on feed and cattle breeding. Collectors are a key source of advice and training for the farmers, and have been trained and coached by the enterprises, usually in conjunction with a FSH consultant.

The 2017 ALCP study on job creation found **dairy enterprise staff** at all levels had received training on food safety and health standards, including HACCP, and felt confident in the performance of their tasks¹⁰⁵. The current study confirmed this for employees in cheese processing as well as HACCP and general managers. Ten out of the 21 employees interviewed received structured training on FSH, and all received and continue to receive on-the-job training and guidance from the enterprise directors, managers and other employees. All consider their skill level to be satisfactory and received certificates, though these have no official status. The skills learned are transferable to other

¹⁰² Labour Code of Georgia, Article 8

¹⁰³ ALCP, 'The Creation of Jobs by ALCP facilitated entities in the Dairy Sector in Kvemo Kartli and Adjara', 2017, page 2

¹⁰⁴ Female farmer, Samtskhe-Javakheti

¹⁰⁵ ALCP 2017, page 2

dairy enterprises, in theory giving employees freedom to change employer. In practice there are few opportunities to change employer due to the limited number of dairy enterprises in the region.

Dairy enterprise owners/managers are a main source of farmers' and employees' improved skills and information. Owner/managers interviewed had all received FSH and HACCP training, supported by the ALCP. This indicator was not investigated for distributors and retailers.

5. Better working conditions (e.g. working hours, annual leave, sick leave)?

ALCP reports that women dairy farmers save on average three hours a day when they sell raw milk instead of making cheese, in spite of farmers having increased their number of cows¹⁰⁶. The current study confirmed this. Time savings are greater when farmers have invested in milking machines, as an increasing number do. Further time is saved by not having to take cheese to markets and by making use of hay making machine services (also increasingly done)107 . In addition to higher profitability, savings in time and effort are the main reason respondents mentioned for farmers having switched from cheese making to selling raw milk. Time saved is used on other income generation, social activities and family life. While based on the data collected it is difficult to estimate the total number of hours per week worked, and farmers work every day of the week, the increased time spent on family and social activities indicates that as a result of the shift from making cheese to selling raw milk, overall working time on dairy farming has decreased. As reported by the independent Outcome Harvesting report:



"Time for leisure and general sense of wellbeing indicates a perception among female dairy producers that the transition to milk sales from cheese making has brought a larger change in quality of life, as indicated by the availability of daily free time for socializing with neighbors. (.....) It seems unnecessary to question too deeply a woman's testimony that the shift from the "torture" of cheese making, permitting little if any free time and low earnings, has dramatically improved her quality of life – especially when faced with multiple statements about the joy one derives from "having a coffee" with friends in the afternoon, between the morning and evening milking periods. ALCP's role in contributing to this outcome seems relatively straightforward – were it not for its investment in cheese factories and the work to improve FS&H practices, female dairy producers would have had little opportunity to access the more lucrative fresh milk market"108.

Independent **milk collectors** also work seven days per week. Neither farmers nor milk collectors have the option to take paid annual, sick or maternity leave. The ALCP 2017 study found working hours of between six and ten hours a day for **employees in cheese processing**. Because the enterprises are close to employees' homes, employees can take brief breaks several times a day to take care of other duties including child care and income generating activities109. Based on employer and employee interviews the current study found working days and hours vary enormously, e.g. with some working in shifts of two 12-hour days (followed by two days off), others working four-hour days throughout the month, or six-day weeks of nine hours per day. Four out of 21 employees expressed some concern about the "high workload", while others said this was agreed with the employer and they were used to it. Overall, about half of the employees probably work more than the 40 hours per week as

¹⁰⁶ ALCP, 'Impact in the Livestock Sector in Khulo 2014-2018', page 6

¹⁰⁷ ALCP, 'Impact Assessment 2016 Kvemo Kartli' page 16

¹⁰⁸ Leveraging Economic Opportunities, 'Testing Tools for Assessing systemic Change; Outcome Harvesting, ALCP in the Georgian Dairy Industry', USAID, 2016. Page 18

¹⁰⁹ ALCP 2017, page 3

recently (2019) stipulated in the Labour Code¹¹⁰. Overtime beyond the working hours agreed on between the employer and employees was paid by three out of the six employers. There is no information available on why the employees did not negotiate overtime with the three employers. The ALCP study also found that dairy enterprise employees have paid annual leave and sick leave¹¹¹. The current study found a variety of arrangements for annual leave, from a few days per month or one or two weeks being paid to no paid leave. The Labour Code stipulates, (since 2019) at least 24 days paid leave per year¹¹². It was not clear whether employees have the right to maternity/paternity leave. Employers and employees interviewed stated "the situation had not yet arisen", except in one case where maternity leave was taken but not paid for. The Labour Code now stipulates 183 calendar days of paid maternity leave¹¹³. The distributor and retailers who provide written employment or service contracts reported five to six-day workweeks, eight to tenhour workdays being agreed on, and paid annual and sick leave.

6. More safety and health at the workplace?

Four out of the 20 farmers interviewed felt the changes they had made at their farm after starting to sell to a dairy enterprise had improved their safety, comfort and health at work. This related to better cow sheds having been built. The Occupational Safety and Health in the workplace law was adopted very recently, in September 2019. There are therefore few signs yet of implementation at the **dairy enterprises**, except for one having hired a Safety and Health Officer and another planning to do so. In practice, due to the compliance with HACCP standards and ALCP support, workplaces have been professionally designed, appear well-laid out and hygienic, and employees stated they feel safe in them. First Aid boxes are available and nearly all employees interviewed knew where they were located. This indicator was not assessed for collectors, distributors and retailers.

7. More access to health insurance or, in its absence, better access to health services through other means?

As noted in Chapter 4 Georgia has a functioning Universal Health Care System, though out of pocket payments still account for about half of medical expenditure. Employers are neither obliged nor expected to provide employees with additional health insurance. Both the ALCP 2017 and the current study found that they do not do so, though they may give an advance on wages or provide support on a one-off basis. Some of those interviewed for the current study reported better access to health care because of their higher earnings, among farmers (seven out of 20) as well as dairy enterprise employees (six out of 25). Distributors and retailers do not provide additional health insurance.

8. Arrangements for income security in old age, through contributions to a pension fund or other investment?

Georgia's new 'accumulated pension system' became operational only in January 2019. Farmers could join as independent workers, but none of those interviewed had done so. Only four out of the 25 dairy employees said they had joined the fund, others were not aware of it or opted out of joining. Though most are younger than 40 years old and therefore have to join, being paid in cash probably enabled them to opt out. Employees seem to prefer to receive the money in their hands rather than contributing to the fund. Four of the employers interviewed, on the other hand, stated they are paying the contributions for those for whom it is compulsory, with the fifth saying she plans to do so. Employees may be in the pension fund without realising it because their employer has not informed them. Some employees are making their own arrangements, which they reported had been affected by their selling milk instead of cheese. The current study found that five out of 20 farmers (women as well as men) interviewed were saving or had built a house to provide for their retirement

¹¹⁰ It should be noted that it may take some time for new legislation to be applied both in law and in practice.

¹¹¹ ALCP 2017, page 3

¹¹² Article 21

¹¹³ Article 27

while another expected her children, in whose education she had invested, to "look after (her)". The ALCP 2017 study found that 80 per cent of employees, women especially, had savings and invested money in their children's education, renovating or buying houses. Some invested in businesses or cows, made possible in a few cases by bank loans premised on their employment contracts¹¹⁴. Such measures were, however, not taken specifically to provide for retirement. The present study found only a few employees who were saving specifically for their old age. The others found the time for this "had not come yet".

9. Greater gender equality, women's control over resources in particular?

As already noted, ALCP impact assessments and the current study found that in the **farms** the shift from cheese making to supplying raw milk saves women on average three hours per day of hard work¹¹⁵. As women have become the main point of contact between collectors and dairy enterprises, they make up 78 per cent of those who receive the dairy income. All the project's studies and an independent assessment indicate they have a greater say over how the income is spent, including with regard to use of dairy-related services and investment in the farm ¹¹⁶.

"The switch to selling milk directly to local collectors, enabled by ALCP investments in cheese factories and the spread of improved FS&H information, does seem to have influenced a sharp change in agency over revenues. And it seems that the mechanism for women's control of revenue is their direct sale of milk to processors from the home which in turn leads from their direct receipt of information on how to produce the quality of milk which the collector requires".117

In the **dairy enterprises** the current study found that women and men in the same jobs receive the same wages. Seven of the 16 female employees stated that getting their job in the dairy enterprise had provided them with their own income over which they decided themselves. Others took joint decisions with their husband.

In conclusion, the findings of this and ALCP's 2017 study on job creation show noteworthy improvements in incomes and working conditions related to dairy farming since dairy enterprises formalized and started buying raw milk from farmers. Women farmers save 3 hours per day on dairy farming as they no longer need to make cheese (which is hard work) and take cheese to the markets. This change has gone hand in hand with an increase in household and/or personal income. Roughly one-third of the farmers and one-fourth of the dairy enterprise employees interviewed for the current study (seven out of 20 and six out of 25, respectively) reported better access to health care because of their higher earnings. Some farmers mentioned improved safety, comfort and health at work, whereas dairy enterprise employees indicated that they feel safe in the work places, which have been professionally designed based on HACCP standards. The vast majority of the employees had a written contract.

Whereas farmers reported spending less time on dairy farming, reports on working time from dairy enterprise employees are mixed. One in five employees expressed concerns about the high workload. Overtime was paid by half of the employers. Dairy enterprise employees have paid annual leave and sick leave, yet the actual arrangements for annual leave vary and are not always in compliance with the Labour Code.

The extent to which pension payments are made is unclear, perhaps partly due to the legislation being recent. This may improve once legislation is better enforced. Farmers are, however, unlikely to make use of the opportunity to join the pension fund. The collapse of pensions following the demise of the Soviet Union, and the resulting loss

¹¹⁴ ALCP 2017, page 2

¹¹⁵ Project communication, 13.11.2019; ALCP, 'Impact Assessment 2017 Ajara', 2017, page 16; ALCP, 'Impact Assessment 2016 Kvemo Kartli', 2016, page 17; ALCP, 'Impact Assessment 2016 Samtskhe-Javakheti', 2016;

¹¹⁶ Ibid; Leveraging Economic Opportunities, 'Testing Tools for Assessing systemic Change; Outcome Harvesting, ALCP in the Georgian Dairy Industry', USAID, 2016. http://alcp.ge/pdfs/966b13cce393860897a87869017ec6e7.pdf

¹¹⁷ Leveraging Economic Opportunities, 'Testing Tools for Assessing Systemic Change; Outcome Harvesting, ALCP in the Georgian Dairy Industry', USAID, 2016, page 11

of trust in state-run pension funds, may be one reason that they and many employees prefer to make their own arrangements¹¹⁸.

8.2 Incentives for better working conditions and the ALCP's role

The study shows that incomes have increased and have become more secure due to the systemic changes in the dairy market, including formalization. Farmers sell high quality and more milk to formalized dairy enterprises that have access to formal market channels and have become more profitable as a result. Increased profitability has enabled the enterprises to pay employees what the latter consider a satisfactory wage. ALCP's interventions have contributed to this.

Written or verbal agreements are adhered to, probably because it is in the interest of farmers,

collectors, enterprises and their employees to do so in the changed market system. Demand for raw milk and compliant cheese is high and not adhering to agreements, including quality standards, would result in a loss of market. The HACCP requirement, other aspects of which ALCP has enabled enterprises to meet, is the key reason most employees have a written contract, even though in practice they seem largely irrelevant. The embeddedness of the enterprises in local communities from which they draw their suppliers and employees and the high level of trust between the parties concerned may be another reason for offering good payment and working conditions and adhering to agreements.

In conclusion, the changes in the dairy market system to which ALCP has contributed, which include a significant level of formalization, have contributed to improvements in working conditions in the value chain.

9. Conclusion

Sustainable and large-scale change has taken place in the Georgian dairy market system over the past seven or eight years and is still ongoing. Formalization has not so much resulted from that change as having been an integral part of it. The ALCP has played a key role in this process.

The driving force behind formalization has been regulatory change, in particular the adoption of HACCP standards in 2015 following the conclusion of the 2014 Association Agreement between the EU and Georgia. This had been expected and many dairy enterprises had started to prepare for it well in advance. The ALCP's facilitation enabled dairy enterprises and farmers to comply with the new regulations. It was the only source of such support for several years, and many enterprises would probably have closed without it and small scale farmers would have been barred from the changing market. Instead, ALCP support enabled enterprises to access formal markets and grow, and farmers to shift from the arduous task of cheese making and marketing to the more lucrative sale of high(er) quality and more raw milk.

The risk of business closure for non-compliant enterprises and loss of jobs (due to the introduction of HACCP standards) was not the only factor driving change. Opportunities to seize new markets have been an important contributing factor. Formal retailers, supermarkets in particular, have been growing rapidly, opening up urban markets. Urban consumers overwhelmingly prefer compliant and labelled cheese, for which demand has therefore grown strongly. This and the stability provided by the lasting relationships between farmers and dairy enterprises led to farmers investing in the expansion of their farms and adopting measures to increase productivity.

More than 23,500 farming households increased their incomes. This has lifted thousands of rural households well above the poverty line and, as several studies have shown, made an important contribution to rural development well beyond the dairy sector¹¹⁹.

In addition to better incomes, working conditions for farmers improved by savings in time and heavy work on cheese making (for women in particular), income stability, access to training and business services and greater gender equality. While farmers do not have employment contracts, their agreements with milk collectors or dairy enterprises are adhered to. Large scale employment creation among farmers has, however, not taken place. Farmers' work has improved in quality rather than quantity, though it is likely dairy as a source of their income would have been lost without the ALCP's interventions. The project's interventions ensured access to information on new regulations and support on meeting them, which ensured that market access was maintained and enhanced

Jobs were created in dairy enterprises that are well-paid compared to those of their informal counterparts and other jobs in their communities, provide income security, with employer-employee written or verbal agreements adhered to, access to training and information, a safe working environment, and equal pay for women and men. While room for improvement remains, especially with regard to leave and working hours for employees of dairy enterprises, this is significant progress.

The study therefore demonstrates that the Theory of Change which was the basis of this study, which posits that Market Systems Development can contribute to formalization which can contribute to better working conditions, is valid overall. However, it also found that in the ALCP's case formalization was not, as posited, a further result of a changed dairy market system, but an integral and critical part of the change. It was at the core of what the ALCP's facilitation needed to achieve in the context of a formalizing economy.

This case study also indicates that Market Systems Development is an effective approach to reducing rural poverty, facilitating rural economic development and improving working conditions through

¹¹⁹ Leveraging Economic Opportunities, 'Testing Tools for Assessing Systemic Change; Outcome Harvesting, ALCP in the Georgian Dairy Industry', USAID, 2016; ALCP, 'Impact in the Livestock Sector in Khulo 2014-2018'.

support to enterprise formalization in situations where:

- ▶ A Government is engaged in establishing and implementing the legal and regulatory framework for formalization at different levels and in a broad range of sectors in the economy (e.g. not just the introduction of HACCP standards for processors, but formalization of commercial outlets as well);
- Access to formal markets is conditional on the formalization of processors and producers;
- ➤ The potential formal market for rural produce is expanding and demand for standards-compliant produce is increasing, so processors and producers have a strong incentive to formalize.

The study also indicates that:

- Depending on the specific conditions in a sector's market system, projects may have to support improvement or development of a wide range of services to value chain actors, and to facilitate change in formal and informal rules or norms, to achieve an effectively functioning and sustainable system;
- Depending on the availability of affordable finance, projects may have to provide costsharing or co-investment to a relatively large number of individual enterprises and service providers before scale is achieved through broader market uptake.

Annex 1: Characteristics of formality and indicators for improved working conditions

The defining characteristics of formal and informal employment depend on the status in employment (ILO, 2018, p. 11). One can differentiate between (i) employees, (ii) employers/business owners, and (iii) contributing family workers.

- ► Employees are in formal employment as long as the employer contributes to social security on their behalf or, in the absence of information about social security contributions, if they receive paid annual leave and paid sick leave¹²⁰. In all other cases, employment is considered informal.
- ▶ In the case of employers, independent workers and members of cooperatives, the formality of employment depends on the status of the economic unit. If it is part of the formal sector, they are in formal employment. If it is part of the informal sector, their employment is considered informal.

Contributing family workers are by definition in informal employment unless they have an employment contract and receive remuneration and other benefits like other employees.

The current study uses the following main indicators for **formalization in the value chain**:

1. Nature of the economic unit

- a. Registered at relevant national institutions (which includes social security authorities, sales or income tax authorities).
- b. Registration and licensing with sub-national authorities (including municipalities).

2. Internal economic unit activities

a. Maintenance of a set of accounts required by law (e.g. balance sheets) or of some accounts of a formal nature.

- Written legally valid employment contracts between employers and employees, and adherence to their terms.
- c. Compliance with tax, social security and labour laws.
- d. Standard procedures for producing goods and services the economic unit delivers.
- Relations/interactions within the core value chain (e.g. transactions with suppliers and buyers)
 - a. Goods or services are at least partially sold or bartered.
 - Written contracts, which may or may not be legally valid, between buyers and sellers at different nodes in the value chain (e.g. input providers, producers, processors, traders, buyers), nature and duration of as well as adherence to those contracts.
 - c. Compliance to quality standards and forms of product certification.
 - d. Increase in mutual trust among market
 - e. Provision of services by value chain actors to other value chain actors (embedded services)
 - f. Other aspects of vertical integration of transactions, relationships and functions within the value chain that entail increased structure, routines and documentation for interaction between market actors.
 - g. Self-organisation of the market actors into registered or unregistered

¹²⁰ This is the combination of criteria used by the ILO to define informal employment. They are the recommended criteria, but other countries may use different criteria or combine the ILO criteria in a different way.

associations/cooperatives or branch organisations/BMOs.

4. Market system in terms of supporting functions

- a. Access to social security for the economic unit owner and employees.
- b. Access to and use of formal forms of finance (working and investment capital).
- c. Access to and use of other financial services (e.g. having a bank account).
- d. Access to and use of non-financial business services.
- e. Access to quality certification services.
- f. Access to legal services.

5. **Market system in terms of the rules of the game** (formal and informal norms)

- a. An effective regulatory framework for formalization is in place.
- b. Some level of formality is required for sale of produce and/or access to services.
- c. Formal and/or informal norms protect economic units from harassment and rent-seeking.

The indicators for **improved working conditions** used in this study are:

- a. Higher incomes, of at least the minimum wage, and incomes for more people.
- Written legally valid employment contracts between employers and employees, and adherence to their terms, or in the absence of these verbal agreements that are adhered to.
- A greater sense of security and stability of income.
- d. More work satisfaction.
- e. More safety and health at the workplace.
- f. More access to health insurance or, in its absence, better access to health services through other means.
- g. Arrangements for income security in old age, through contributions to a pension fund or other investment.
- h. Reductions in use of child labour.
- i. Greater gender equality, women's control over resources in particular.



