



Safety and Quality Investment in Livestock:

Georgian Beef Market System Analysis and Mapping

May 2019



Georgian Beef Market System Analysis and Mapping

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Prepared by

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METHODOLOGY AND SOURCES OF INFORMATION

This section describes the methodology applied for the study and provides citation for the sources of information used.

Research Methodology

This research used the following methodology:

- At the initial stage the project team identified the required data, sources of information, and elaborated a data collection strategy.
- Second stage was devoted to data collection. This included selection and review of existing documents relevant to the study, interviews with key informants, and collection of statistical data
- The collected data was documented, sorted and processed for further analysis.
- The next stage was devoted to data analysis with the engagement of project consultants and industry
 experts. The results derived were carefully analyzed and based on the results a map of current beef
 market systems was drafted.
- The next step was in-depth analysis of each component of the beef value chain. This was done to identify existing challenges and suggest solutions for strengthening the beef value chain in Georgia.
- At the final stage the findings of the study were summarized and a draft report and presentation were developed for submission to stakeholders.

Sources of information

The data for the study was obtained from various sources, including but not limited to:

- GEOSTAT (National Bureau of Statistic of Georgia)-statistical information on local consumption and production trends, price dynamics, livestock production and processing was obtained from the statistical databases of GEOSTAT.
- UN Comtrade (United Nations Statistical Database on Commercial Trade)-the UN Comtrade database
 was used to collect information on export and import of beef and livestock, identify key importer
 countries and export markets.
- Desk research- Desk review of existing reports on beef market studies and value chain analysis were reviewed to gather information about the past performance and current state of Georgia's beef market.
 Annual reports from the National Food Agency (NFA) were analyzed to obtain information about existing measures applied for animal health and food safety control.
- Interviews and consultations with key informants and in-depth interviews with key actors were
 conducted. Interviewees included: primary producers of livestock and beef products, slaughterhouse
 owners, animal feed producers, retail shop owners, and bank representatives. In addition meetings with
 different departments of NFA were conducted to identify existing challenges in animal health and food
 safety control in Georgia.

Table 1: List of Interviews

	Name of Interviewee	Organization/Activity
1	George Berishvili	Angus Farm in Saguramo
2	Konstantine Kvernadze	LLC Agromax Beef, Limousine Farm in Sartichala
3	Niko Beridze	Slaughterhouse
4	Giorgi Dadianidze	Animal Husbandry Farm
5	Vano Razmadze	Butchery Shop in Gori
6	Mari Loladze	Bank of Georgia
7	Lasha Gelashvili	Bank of Georgia
8	Ramaz Mukhtar Oghli	Slaughterhouse Tsikhisdziri 2014
9	Rafik Mamedovi	Livestock Farm for Beef Production
10	Vitali Mamedovi	Livestock Farm for Beef Production
11	Roman Jajilovi	Livestock Farm for Beef Production
12	Rolandi Meladze	Concentrated animal feed seller
13	Demna Khelaia	National Food Agency
14	Ana Gemazashvili	National Food Agency
15	Giorgi Miqadze	National Food Agency
16	Beka Bekaia	Nutrimax LLC, Animal Feed Production

List of Acronyms

SQIL- Safety and Quality Investments in Livestock

USDA- United States Department of Agriculture

HACCP-Hazard Analysis and Critical Control Point

NFA- National Food Agency

MEPA- Ministry of Agriculture and Environmental Protection of Georgia

APMA- Agricultural Projects Management Agency

GEOSTAT -National Bureau of Statistic of Georgia

UN Comtrade-United Nations Statistical Database on Commercial Trade

ALCP-Alliance Caucasus Program

DCFTA-Deep and Comprehensive Free Trade Agreement

EU-European Union

ACDA-Agricultural Cooperatives Development Agency

AMMAR-Agricultural Modernization, Market Access and Resilient project

ENPARD-European Neighborhood Program for Agricultural and Rural Development

EXECUTIVE SUMMARY

This section provides summary of findings of the study including description of main market trends, import dynamics and export opportunities and key challenges that exist at each level of beef value chain in Georgia.

Market trends

- Consumption of beef dropped by 11% between 2014-2017, which is a 3.5 thousand tonnes decline in absolute terms.
- In 2017 Beef consumption was 28 thousand tonnes, 76% of local demand is satisfied by domestic production, the rest is imported, mainly from Ukraine and Brazil.
- Beef prices are characterized by strong growth trends. Between 2010-2017 beef prices grew by an average of 8% (CAGR).
- The average retail price of beef is 14.7 GEL. However, prices vary depending on store and beef cut. The price of lean beef in retail shops ranges from 18-22 GEL.
- Due to price increases in beef consumers have been switched to the pork and poultry meats, which are relatively cheap compared to beef. As a result the share of beef in total meat consumption was reduced from 23% to 19% between 2014-2017
- Between 2010-2017 local production of beef reduced by 20%. Local production reduced by 3% on average (CAGR) over the last 8 years.
- The fall in domestic production was caused by a reduction of livestock in Georgia. The number of bovines dropped by 21% in 2014 from 1229 thousand heads to 970. Overall decline of livestock during 2014-2017 amounted to 26%. The main reason for this drop is the growing export of live animals to neighboring countries, mainly Azerbaijan.
- Drop in domestic production resulted in an increase in beef prices. Between 2013-2018 retail prices of beef cuts increased by 27.6% and over last three years there has been an 18% price growth.
- The largest price increase was in 2017, when the average price of beef increased by 14%, from 12.5 GEL to 14.2 GEL
- The deficit in domestic production is filled by imported frozen beef. Around, 91% of beef is imported from Ukraine and Brazil. Imported frozen beef is almost twice as cheap as domestically produced beef. Domestic consumers prefer to buy locally produced fresh beef cuts, imported products are predominately used by meat processors, local hotels, and restaurants.
- Since 2016 beef export has increased by 230%. In 2018 the volume of exported beef increased by 265% compared to previous year and amounted 181 tonnes. Of which 97% was frozen beef with the remaining 3% being made up of fresh or chilled beef.
- In 2018 the volume of exported frozen beef amounted 176 tonnes. Of which 69% was not produced in Georgia and was re-exported from other countries. Frozen beef was mainly exported to Azerbaijan, Armenia and Kazakhstan.

- Export of fresh and chilled beef increased 2.5 times in 2018 amounting to 5.2 tonnes. Fresh and chilled beef is produced in Georgia is primarily exported to Kuwait, Qatar, and Saudi Arabia.
- In 2019 the government of Georgia prohibited the export of live cattle weighing less than 140 KG. The restriction was imposed to encourage households to keep calves until they achieve optimal weight for slaughtering. As a result of this restriction, exporters started to purchase live animals from Russia and Ukraine instead of Georgia and the price of calves has reduced in the domestic market and Primary Production
- Georgia' largest beef producing regions are Imereti, Samegrelo, Samtskhe-Javakheti, Shida Kartli, Kvemo Kartli and Kakheti. Imereti makes up 23% share of total beef production in Georgia, followed by Samegrelo with 18% and Shida Kartli with 11%.
- Almost all rural households are engaged in animal husbandry. However, these households are primarily involved with farming and dairy production for personal consumption. Around 94.8% of rural households hold up to 10 heads of cattle, 5.1% of rural households hold from 10 to 100 heads of cattle, and only 0.4% of farms hold more than 100 heads of cattle¹.
- Most of these large farms are located in Kakheti, Samtskhe-Javakheti and Kvemo Kartli. Ethnic Azeri's hold most of these farms, keeping livestock to sell to Azerbaijan. It is for this reason that large farms are predominately found in areas of Georgia with large ethnic Azeri populations
- The main problem with primary production is the lack of high productive cattle breeds. Local farmers hold mixed cattle breeds that are characterized by low productivity. The average productivity of local cattle ranges from 50-57% depending on treatment and feeding rations.
- Local farmers do not use artificial insemination and reproduction of livestock takes place in a natural and chaotic way. This hinders development and maintenance of high productive breeds.
- Only four farms exist that hold high production breeds (Angus and Limousine) and among which is "Blauenstein" farm in Racha that holds combined Swiss cattle breeds. However, only two of those farms are focused on breed development, the other two farms operate under a "buy-fatten-sell" business model which does not consider maintaining and developing breeds.
- Blauenstein Georgia holds its own slaughterhouse, processing plants and brand shops where the beef and beef products are delivered to the final customers. Blauenstein also supports development and improvement of cattle breeds in Racha-Lechkhumi Kvemo Svaneti region by providing local farmers with high production breeds and giving them financial support to run their own organized farms.
- Blauenstein Georgia also has its own training center that allows students to gain and improve their skills in the production of high quality and healthy beef products. The

¹ These numbers were obtained from agricultural census which took place in 2014 by National Bureau of Statistics. There is no recent data at this level.

- training center prepares students in different professions, such as farmers, butchers, cheese & dairy product makers, artificial inseminators, agriculture vehicle engineers, and para veterinary professionals.
- Local farmers are not aware of efficient farm management practices that help operate farms in cost efficient ways, provide proper treatment to livestock, and select adequate food rations to increase productivity and deliver high quality beef products to the market.
- The access to veterinary services is limited. There are very few professional veterinarians in Georgia, even large organized farms find difficult to acquire professional veterinarian service.

Feeding and Fattening

- Most rural households feed cattle in the pasture, they do not provide balanced feeding to speed up fattening, and do not sell when the livestock has achieved the optimal weight for slaughtering.
- Organized beef producing farms use pastures and feedlot fattening. Fattening period lasts from 8 to 14 months depending the breed, sex and age of the livestock.
- Organized beef producing farms that hold mixed breeds do not consult with professionals to select balanced feeding for the cattle to speed up fattening. They provide forage and concentrated feed and outdated food from supermarket such as pasta, grain. They develop feeding rations based on their experience and income.
- Farms that hold high productive beef-producing breeds try to construct optimal feeding rations to speed up fattening. However, they find it difficult to obtain professional services to help select proper feed rations for the livestock.
- The price of forage feed varies depending on the season. In summer it is usually cheaper than in winter. However, farmers find it difficult to purchase enough forage feed when it is cheap due to limited funds. Georgian banks provide low interest credit line for businesses but since the farmers are not registered as market operators they do not have access to the credit line.
- There are several animal feed producing factories in Georgia which produce concentrate feed and forage feed and sell it through the retail shops and direct contracts with the farmers. However, farmers still find concentrated feed to be expensive.
- Farmers are not fully aware about benefits of balanced feeding which consequently limits the demand for concentrated and forage food.
- There is no pasture management practice in Georgia, which has led to overgrazing. Furthermore, existing publicly owned pastures do not provide high quality feeding grass. Overgrazing and pasture management is very acute problem in Georgia.
- Farms that have high production breeds have their own private pastures, they also have direct contracts with concentrated feed producers that supply animal feed.

Supportive Services

- Local entities exist that provide supportive services for livestock and beef production. These include: artificial insemination, animal feed production, veterinary service providers and manufacturing of veterinary drugs.
- It should be noted that there are no farmers unions and association that specialize particularly on beef production.
- Caucasus Genetics provides artificial insemination for between 50-100 GELS. However, the demand for artificial insemination is very low, only a few beef producing farms use artificial insemination services. Small farms, that are some of the largest suppliers of livestock, do not use artificial insemination services to develop high productive cattle breeds.
- There exist 20 active registered entities that produce animal feed. Most of them were created with the support of the state preferential Agro Credit program. Nutrimax LTD and Invet LTD are among those who established factories with state support programs. They sell animal feed through retail shops and also supply animal feed to large beef producing farms through direct contracts.
- Roki and Geo VET produce veterinary medicines and provide food additives to local and export markets. Roki LTD mainly targets small scale farms and provides various supportive services around 67% of farmers use Roki products in Georgia.² With the support of the Alliance Caucasus Program (ALCP) Roki has expanded its distribution chain and currently supplies its products through more than 100 pharmacy stores in different regions in Georgia.
- Access to veterinary services is very limited in Georgia. Veterinary pharmacy stores exist in regional centers and farmers purchase veterinary medicines and obtain consultation from sellers. However, there are very few professional veterinarians, especially in rural regions. Furthermore, the qualification of existing veterinarians is very low.
- The National Food Agency has 600 contracted veterinarians and paravets that provide state funded preventive vaccinations and conduct identification and registration of animals. However, the qualification of these veterinarians is of a low standard.
- Only Agrarian University has a veterinary faculty that prepares new veterinarians for the market. However, the demand for this profession is low as it is not a popular profession in Georgia. Most of the graduates of the veterinary faculty stay in Tbilisi to provide veterinary services for domestic pets.

Food safety issues

- NFA is responsible for monitoring food safety, controlling animal health, and preventing the expansion of animal diseases.
- NFA conducts regular inspections of slaughterhouses and market operators, conducts identification and registration of animals to better monitor and control animal health

-

² Source: Broad impact of ALCP, 2017

- issues, and provides preventive vaccinations to avoid the spread of epidemic animal diseases.
- The placement of unsafe products on the market is still an issue, backyard slaughtering persists, and keeping meat on open shelves is still a problem - particularly in open markets.

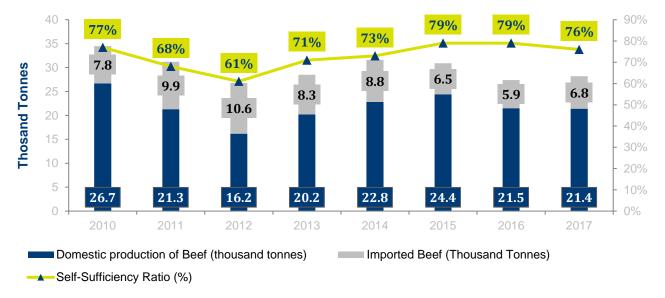
State and Donor supported programs

- Various state and donor supported programs exist targeted at strengthening agricultural production value chains. These support the development of agricultural enterprises and enhance the capacity of government institutions to design and implement efficient policy aimed at agricultural development.
- The state runs the preferential agro credit project, providing low interest rate loans for development of agricultural enterprises and storage facilities.
- Also, international donors provide direct and indirect support for farmers, agro processors, and government institutions to improve productivity and performance of the agricultural sector in Georgia.

Beef Market Trends in Georgia

Animal husbandry is one of the primary focuses of agriculture in Georgia. Small households are important suppliers of livestock for beef production. The value of primary production of animal products amounted to to 735 mln USD and make-up around 50% share of primary agricultural output³. Meat production, including as primary and processed products, constitutes a 28% share of total agricultural output in Georgia⁴.

A beef market system is still at development stage in Georgia. Domestic production of beef is not enough to satisfy local demand, which puts a pressure on prices and increases dependency on imports. Annual per capita beef consumption averaged 7.5 KG in 2017, which is far behind the nutritional norm of 25 KG.



Graph 1: Domestic Consumption of Beef by source, 2010-2017

Source: GEOSTAT

Currently annual domestic consumption of beef amounts to 27.8 tonnes, 76% of this is satisfied by domestic production, the remaining 24%, which is 6.8 thousand tonnes, comes from imported beef.⁵ Import is a way to fill the deficit in domestic demand and cannot be considered as a competitor for domestic production.

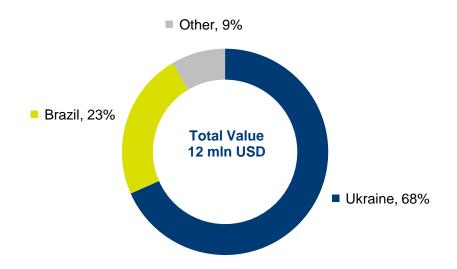
In 2018 the value of imported beef amounted of 12mln USD. Beef is mainly imported from Ukraine and Brazil. Ukraine holds a 68.4% share of Georgia's imported beef market and Brazil makes-up the 23% of the import market, followed by Netherlands with 4% and Germany with 1%.

³ Source: GEOSTAT. Primary production of animal products amounts to 2 billion GELS, which is 735 mln USD considering 2.75 GEL/USD exchange rate

⁴ Source: GEOSTAT, The data covers as meat, as well fish and other animal products

⁵ The recent data on consumption is available for 2017 years

Graph 2: Key Countries which export beef to Georgia, 2018



Source: UN Comtrade

The price of imported beef is much lower than domestic product. In 2018 the average price of imported beef was \$2.8 USD (7.5 GEL), that is two times lower than the price for domestic products. Consumers of imported beef are mainly meat processors, hotels and restaurants. Even though imported beef is cheaper consumers prefer to buy domestically produced beef in local butcheries as it is believed to be tastier and fresher than frozen beef.

Beef is relatively expensive compared to other meats such as pork and poultry. The average price of beef ranges from 10-12 GEL at farm gate and 14.7 GEL in retail stores⁶. The farm gate prices depend on season, amount of supply, and the bargaining power of farmers.

The beef price in retail market depends on the location of stores, shop type, and beef cuts. The price of beef in open markets is relatively low compared to supermarket chains. Also, beef price depends on the beef cut, the price of lean beef ranges from 18-22 GEL in retail market.

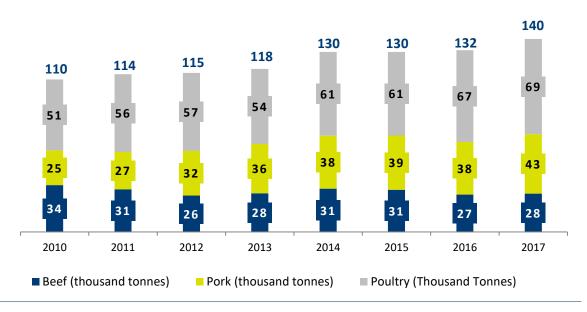
Between 2010-2017 beef price grew by 8% on average. As a result, consumers substituted expensive beef with relatively cheap pork and poultry meat.

Price growth has negative impact on domestic consumption of beef, which has decreased steadily over the last few years. However, while beef consumption was declining by an average of 4% (CAGR) a year, between 2010-2017 total meat consumption grew by an average of 3% (CAGR) a year.

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⁶ Source: Geostat

Graph 3: Domestic Consumption of Meat by Type, 2010-2017

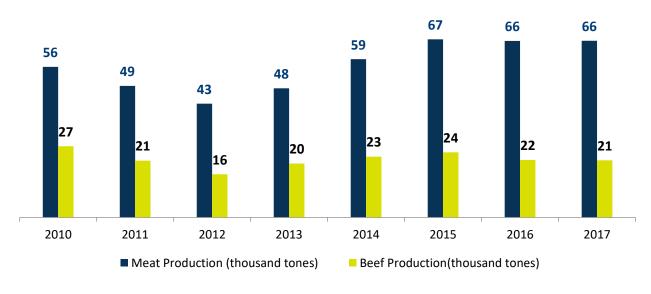


Source: GEOSTAT

As it is seen in the graph consumption of beef was declining while the consumption of pork and poultry was increasing. Since 2014 the share of beef dropped from 23% to 19% in total meat consumption within Georgia, while the share of pork and poultry has been slightly increased. Domestic consumption decreased by 3.5 thousand tonnes in 2014-2017, which is an 11% decline. Consumers substituted expensive beef with cheaper poultry and pork. In 2018 average retail price of pork was 10 GEL and poultry 6.5 GEL, that is much cheaper than beef.

The growing price of beef was caused by a reduction in domestic supply. Local production was characterized by an average of 3% negative growth (CAGR) over the last 8 years. Throughout the period of 2010-2017 domestic production of beef declined by 20%.

Graph 4: Domestic Production of Meat and Beef, 2010-2017



Source: GEOSTAT

In 2017 the local production of meat amounted to 66.2 thousand tonnes, out of which 21.4 thousand tonnes was beef - taking a 32% share in total meat production in Georgia.

According to data of National Statistics Office the largest production of beef takes place in the region of Imereti. In 2017 the out of 5 thousand tonnes of beef was produced in Imereti region which is a 23% share of total beef production in Georgia, followed by Samegrelo-Zemo Svaneti with 18%, Shida Kartli is third producing 11% of the total and Kvemo Kartli is fourth producing 10% share of total. In addition, Imereti takes prior position by number of livestock slaughtered in slaughterhouses, which was over 45 thousand in 2017. However, Imereti is at second place by number of livestock. According to the latest statistics⁷, the number of livestock amounted to 909, 7 heads in Georgia, out of which 19% (175 thousand heads) is held by Samegrelo-Zemo Svaneti Region, followed by Imereti with 18% share in total livestock number in Georgia, which is 166, 6 thousand heads.

Total 21,000 tonnes

Samegrelo-Zemo Svaneti, 18%

Graph 5: Beef production by regions8

Kvemo Kartli, 10%

Source: GEOSTAT

The dramatic reduction in domestic meat production was caused by the growing export of live animals. According to statistical data from 2018, around 98% of beef was exported in the form of live animals.

Rural households and milk producing farms are the main suppliers of live animals for export. They sell mainly newborn male calves to collectors in order to save the milk required for their feeding. Collectors purchase calves directly from farms, or in agrarian markets, and export them to neighboring countries for beef production.

Shida Kartli, 11%

⁷ The latest statistics is available for 2017 years

⁸ Beef production statistics covers beef produced as in slaughterhouses as well beef produced within the households

⁹ The data on export are obtained from UN Comtrade statistical database

Graph 6: Number of Bovines held Domestically and Exported, 2010-2018

Source: GEOSTAT, UN Comtrade

■ Number of Bovines in Georgia (thousand heads)

As it is seen from the above graph, export of bovine animals almost doubled in 2016. As a result the number of livestock residing in Georgia has decreased which led to the decline in domestic meat production. Between 2013-2017 the number of bovine animals declined from 1.2 million to 909.7 thousand heads in Georgia, which is 26% decline.

Export of bovine animals (thousand heads)

Live animals are mainly exported to Azerbaijan and Iraq. In 2015/16 Georgia had wide range of export partners in trading of livestock, including Iran, Saudi Arabia, and Egypt. Reductions of livestock in domestic markets have an impact on the export as well. Export of livestock decreased in 2018 and live animals were only exported to Azerbaijan and Iran. As a result export of livestock dropped by 4.5%. In monetary terms the income from export dropped by 18% in 2018 amounting to 29. 5 million USD.

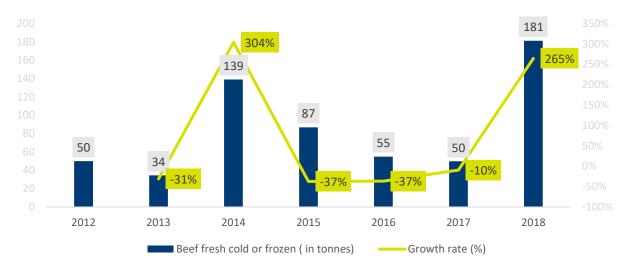
In order to prevent flow of calves from the country and keep added value in domestic meat production in 2019 state prohibited export of live animals below the weight of 140 KG. However, this restriction had negative consequences on local households and milk producing farms. Collectors switched to other countries such as Russia and Ukraine to purchase calves to send to Azerbaijan. The demand for calves reduced in domestic markets and the price of calves dropped from 700 GEL to 400 GEL.¹⁰

The main reason households prefer to sell live animals rather than slaughtered ones is the associated cost. Animal feed, that is important to increase the weight of meat after slaughtering, is costly and most household do not find it profitable to keep cattle unless they naturally reach optimal weight for slaughtering, preferring to sell them alive. Moreover, selling live animals is a source of income for rural households and many households selling livestock at times when they need quick income. Milk producing farms also supply livestock for beef production. They sell newborn male calves to save on feeding costs. On average, one calve needs 6 liters of milk per day, milk producing farms prefer to sell male calves after two weeks to save milk and generate additional income. As a result of this restriction both rural families and milk producing farms experienced

¹⁰ Reported by local farmers and industry expert

losses in income. They are now forced to sell calves at cheaper prices than they were prior to the implementation of the weight restriction.

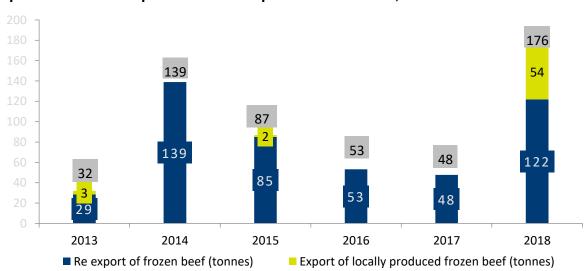
The export of cold and frozen beef is very moderate in Georgia and is characterized by very unstable growth trends. The large growth of export in 2014 was followed by decline between 2015-2017 years and in 2018 there was significant jump in the export of cold and frozen beef. The large ups and down in growth rate indicates the instability of the industry.



Graph 7: Volume of Exported Beef, 2012-2017

Source: UN Comtrade

The export of cold and frozen beef amounted to 181 tonnes in 2018, out of which 97% (176 tonnes) was frozen beef, while export of fresh beef was 5 tonnes. The value of export was 470 thousand USD which is very low. The average export price of fresh or cold beef was \$8.55 USD and for frozen beef the price was 2.43 USD.



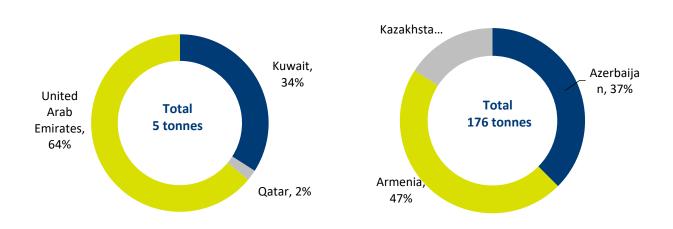
Graph 8: Volume of Exported and Re-exported Frozen Beef, 2013-2018

Source: UN Comtrade

Exported fresh beef is totally produced in Georgia, while frozen beef is mainly re-exported. In 2018 the share of domestically produced frozen beef increased and took 31% of total volume of exported frozen beef.

Fresh beef is exported to United Arab Emirates, Kuwait and Qatar, while frozen beef is sold to Azerbaijan, Armenia, and Kazakhstan.

Graph 9: Export Countries for Fresh Beef, 2018 Graph 10: Export Countries for Frozen Beef 2018



Source: UN Comtrade

The growing demand for beef in neighboring countries creates opportunity for export. Turkey and Azerbaijan are big importers of beef products. In Turkey the per capita consumption of beef amounts to 10.4 KG a year, and in Azerbaijan average consumption a year is 15.4 KG.¹¹

Turkey is one of the biggest consumer of beef and veal, in 2018 the consumption amounted 1229 thousand tonnes.¹² Turkey and Georgia have a preferential trade regime and Turkey is one of the biggest trade partners of Georgia. However, Georgia does not export beef and beef products to Turkey. Currently Georgia has ongoing negotiations with Turkey to simplify export procedures for Georgian honey and beef products.¹³

The same can be said about the Azerbaijan market, which is one of the biggest importers of livestock from Georgia and characterized by growing demand for beef and beef products. In 2017 the total consumption of beef amounted to 150 thousand tonnes, out of which 14% (21 thousand tonnes) was imported. However, as it was already mentioned, beef and veal are exported in the form of live animals. Livestock fattening and slaughtering takes place in export countries and value added is transferred to export countries.

Georgia has free trade agreement with its neighboring countries and benefits from preferential trade regimes. Both, Azerbaijan and Turkey are some of Georgia's largest trade partners. Moreover, the DCFTA agreement with the EU opens up large export markets for Georgian products. The EU is one of the largest meat consuming markets in the world. Beef consumption in the EU amounted 7896 thousand tonnes in 2018. However, in the short term it is unrealistic to consider the EU as a potential export market for Georgia, as domestic

¹¹ The recent data is available for 2017 years source: https://data.oecd.org/agroutput/meat-consumption.htm; <a href="https://data.oecd.org/agroutput/meat-consump

¹² https://data.oecd.org/agroutput/meat-consumption.htm

¹³ http://www.economy.ge/?page=news&nw=1055&lang=en

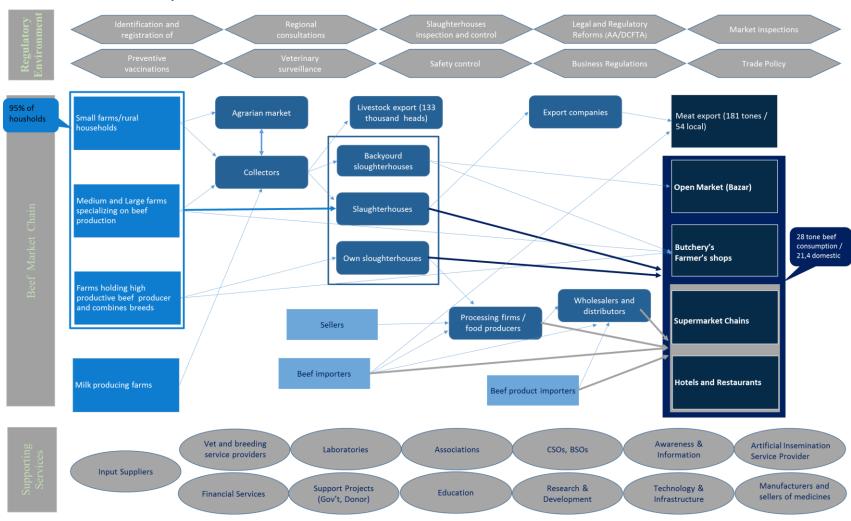
¹⁴ https://www.oecd-ilibrary.org/agriculture-and-food/data/oecd-agriculture-statistics/oecd-fao-agricultural-outlook-edition-2018 d4bae583-en

production and trade logistics are not developed enough to ensure stable supply of high quality beef to a large market such as the EU.

Growing demand for beef in neighboring countries and existing free trade agreements create potential to develop export oriented beef production. However, the lack of productivity in domestic beef production limits Georgia, not only to maximize export, but also to satisfy domestic demand for beef.

Beef Market System in Georgia

Scheme 1: Beef Value Market Systems

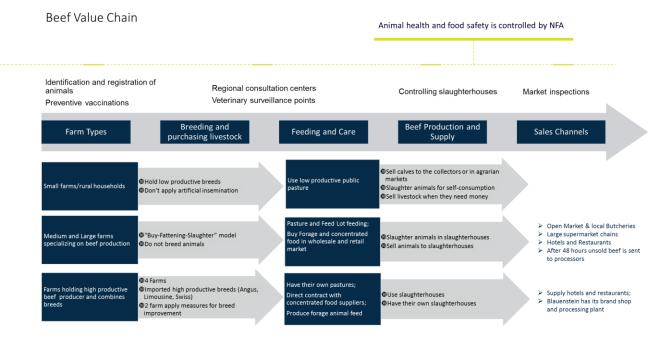


The domestic beef market value chain is the interactions between input providers, farmers, processors, intermediary companies, retail markets and suppliers of supportive services.

The core of beef market system is beef value chain, which consists of 4 related stages:

- Livestock purchasing and breeding
- Farming (Care & treatment)
- Beef production
- Beef trade

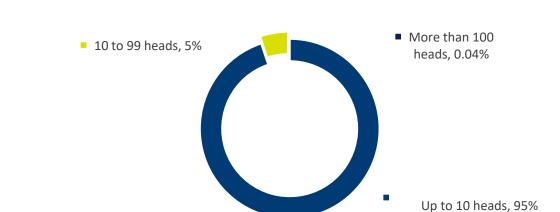
Scheme 2: Beef production value chain and methods applied for food safety control



- Farmers and rural households are main suppliers of livestock for beef production. The existing farms engaged in animal husbandry and supplying cattle for beef production can be grouped into three categories:
- Small rural households that hold up to 10 heads of cattle- such households hold cattle mainly for dairy production. Beef consumption takes place at the expense of male calves. Rural families sell livestock when they need funds to cover everyday family expenses and as such do not provide special treatment to increase calves' weight as sale is situational, not planned.
- Medium and large beef producing farms- These beef producing farms do not hold special beef producing cattle breeds and do not apply special measures to improve the breed and increase beef yield.
- These types of farms operate under a "Buy-Fatten-Slaughter" model. They buy livestock at cheaper prices and keep cattle only until they achieve optimal weight for slaughtering and produce beef.

- Farms that hold high productive beef producer and combined breeds Four farms exist that hold high productive cattle breeds (Limousine, Angus and Swiss). Of these farms only two (Angus in Saguramo and "Blauenstein" in Racha) work on breed development and reproduction. The farms produce high quality beef and mainly supply hotels and restaurants. Blauenstein has its own branded shop in Tbilisi with plans to add three more.
- Milk producing farms are also among suppliers of livestock for beef production. They sell newborn male calves to collectors in order to save milk for their feeding.

The largest share of livestock is held by small rural households that supply calves and cattle for domestic production of beef. Small farms holding up to 10 heads of cattle own 95.5% of livestock in Georgia, the remaining 4.5% is held by medium and large farms with more than 10 heads of cattle. Current redistribution of livestock highlights the lack of professional enterprises and farms that are specializing in beef production.



Graph 11: Share of Households by Number of Livestock

Source: GEOSTAT, Agricultural Census, 2014

Almost all households in rural area are engaged in animal husbandry, they do not specialize in meat production but remain one of the main suppliers of livestock for beef production. Out of the rural families that produce animal husbandry products most of them, around 87 % produce mainly for self-consumption, only 13% of rural families produce animal products for commercial sale. Rural families hold cattle primarily to produce dairy products for self-consumption. Livestock supply for beef production takes place at the expense of male calves, rural families sell male calves in agrarian market or directly to collectors.

Medium and large farms that specialize in beef production operate under "Buy-Fatten-Slaughter" model. These farms buy cheap calves or young cows from collectors or in agrarian markets and keep livestock only until they achieve optimal weight for slaughtering. Fattening period lasts from 8 to 14 months depending on age, sex, breed, and feed type. The farmers slaughter livestock in slaughterhouses and supply beef to local butcheries and supermarket chains.

Beef producing farms usually hold from 20 to 100 heads of livestock. There are very few large farms with more than 100 heads of livestock. Those that do exist are primarily located in Kakheti (47 Households), Samtskhe Javakheti (23) and Kvemo Kartli (19 households). Animal husbandry is main activity of the ethnic Azeri population in Georgia and beef producing farms are subsequently developed in regions with high density Azeri populations.

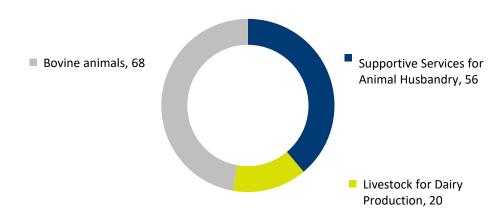
Graph 12: Number of Households with more than 100 heads of cattle by regions



Source: GEOSTAT, Agricultural Census, 2014

144 registered entities engaged in animal husbandry exist in Georgia. These hold livestock for dairy and/or beef production, or provide farm support services such as production of animal feed, veterinary medicines, and running of slaughterhouses. Of the 144 registered farms 68 hold animals for beef production. However, this is a misleading figure as most of beef producing farms are not officially registered as business entities. This limits their access to low interest credit lines and financial support for farm development funds. Despite primary production of agriculture is exempt from taxes farmers still often avoid registering as legal entities.

Graph 13: Registered entities by type of activities related to animal husbandry, 2018



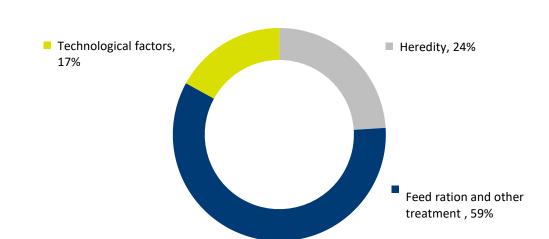
Source: GEOSTAT, Business Registry

The unregistered farms limit the state's ability to design proper targeted need based support programs for animal husbandry development. In order to address this issue the state launched farmer registration program in 2018, this was then implemented by Agricultural Project Management Agency (APMA). The project aims to create a database of entities engaged in primary and secondary agricultural production and use the data to more effectively design and target state support programs for agriculture.

Livestock purchasing and breeding

In Georgia mixed breed cattle are accepted as beef producing livestock breeds. Beside this, there are four large cattle farms with imported breeds of cattle (Angus, Limousine, Swiss breeds). Recently Bogdanovka and Dutch breed cattle have also become more popular.

The average beef yield for mixed cattle breeds ranges around 50-57% and depends on the feeding and treatment type, while beef producing and combined breeds normally produce 60-65% beef yields. The beef yield after slaughtering depends on several factors, such as: proper feed ration, breed, age, sex, treatment against the diseases, and other technological factors. The extent to which each factor affects the productivity is shown in the graph below.¹⁵



Graph 14: Factors Affecting Beef Yield

Source: Association of Young Economists of Georgia, "Agricultural Value Chain Analysis in Imereti and Racha Region", 2015

Main Suppliers: Mixed/Georgian breeds suppliers to the market are mostly households. In the various regions across Georgia households with 3-5 cattle have the opportunity to sell calves and oxen for beef production. Rural households do not apply measures to improve cattle breeds and to increase the productivity of livestock. They do not use artificial insemination service and reproduction of animals takes place in a natural chaotic way, which leads mixing of breeds and lowers beef and milk yields.

Milk producing farms also provide livestock supply for beef production. They mainly sell newborn male calves in order to save the milk required for feeding.

The connection between the sellers and the end-users is created by so called mediators. These are the people who collect cattle from families and then sell them to small farms or as meat by themselves. Mediators' involvement is especially high in small farms. In small farms, to balance costs and risks, farmers prefer to cooperate with market mediators. Organized beef producing farms also use mediators' services to buy cattle. However, it should also be noted that direct purchase of livestock from rural families is also an applied practice for organized farms.

¹⁵ Source: "Agricultural Value Chains in Imereti and Racha Regions", Association of Young Economists of Georgia, 2015

Trading with cattle, takes place on non-formal markets (such as Kabala market in Kakheti region, Marneuli and Zestafoni markets). It is also common practice to directly purchase cattle from rural households.

Most of the beef producing farms do not usually breed cattle for reproduction. They mainly buy male calves or buffalo as they gain weight quickly and because their meat is tenderer than cow meat.

Part of the livestock collected by mediators is sent to export in neighboring countries - mainly Azerbaijan and Iraq. The practice of exporting calves had some positive impact on breed improvement, as rural families were selling low productive calves and purchasing higher-production breeds. However, state restrictions on exporting animals below 140 Kg forced collectors to switch to Russian and Ukrainian market to purchase cattle. As a result, the restriction not only brought economic losses to households, it also stopped the natural process of breed improvement in the sector.

Local farmers do not import high productive breeds as they find it difficult and expensive. There are four farms holding high productive cattle breeds: Angus farm in Saguramo and Martkopi, Limousine farm in Martkopi and Blauenstein in Racha. Saguramo and Martkopi farms brought high productive cattle breeds with the support of state programs. Imported breeds of cattle are often purchased in Belarus and Ukraine. Limousines were imported from France.

Blauenstein farm in Racha holds combined Swiss breeds for milk and beef production. The company was established in 2008 with the help of Swiss-Georgian investment. Blauenstein has its own meat processing plants and slaughterhouse which produce high quality beef to supply to its brand shop in Tbilisi. The company plans to open three more shops in Tbilisi, Kutaisi and Batumi.

Out of these only two farms, Angus farm in Saguramo and Blauenstein, are oriented towards reproduction of livestock and improvement of cattle breeds.

Since its inception Blauenstein has provided support to local farmers in Racha to improve cattle breeds. The company tried to incorporate cooperation practices to improve productivity and strengthen beef production systems in Racha. The company selected 20 local farmers and provided high productive Swiss breed calves to them, it also supported them in efforts to obtain loans to arrange for the creation of animal barns, and provided annual payments to ensure proper treatment for livestock. Adult cattle which produced milk were purchased back by the company for beef and dairy production. However, the cooperation model failed and only four farmers are left that actively cooperate with company. The main reason of failure was Blauenstein provided farmers with cattle breeds and other equipment for free, there was no co-financing requirement and no risks taken by the farmers themselves, resulting in inadequate selection of partner farms. Currently Blauenstein changed its approach and distributed some risks to farmers.

Artificial insemination is the cheapest means of breed improvement. Artificial insemination services are provided by Caucasus Genetics, the fee for service varies from 50 to 100 GEL. However, very few beef producing farms use this service. Small farms, that are important suppliers of livestock, do not use artificial insemination service for breed improvement and maintenance mainly because they do not recognize the need and benefit from breed improvement. Also, the price might be another factor which limits farmers to apply artificial insemination, as most of the small farms belong to middle and low income groups and even 50 GEL is not an affordable price for them.

State programs: Farmers can benefit from preferential agro credit to finance the cost of livestock purchase. However, only certain types of breeds (Limousines, Angus) are financed by the agro loan program and other breeding varieties (Charolet) do not fall into the program. There is a possibility to add new breeds to the list upon the request of a reputable organization, despite this possibility the limitations of the program are still cumbersome for farmers. This problem is exacerbated by the fact that after the purchase of expensive breeds,

reproduction and maintenance of breeds is not controlled. Currently, the expensive breed farms are in Saguramo, Martkopi and Sartichala. In Saguramo there is the Angus farm, which is oriented on both beef production and development of high-productive cattle breeds. While the Limousine farm in Martkopi mainly works for beef selling and breed development is not a priority.

Farming (Care & treatment)

Care and treatment of livestock has a significant influence on productivity and beef yield. However, rural households and even organized farms are not aware of modern farm management practices to achieve cost efficiency in the production process. Currently, farmers run their land in traditional ways, they do not apply measures to select proper feeding rations, improve cattle breeds, or arrange logistics to achieve high productivity. The lack of knowledge and restricted access to funds limits farmers' opportunities to get acquainted with modern farm management practices and incorporate them into their everyday operations.

General conditions and practices for livestock feeding: There is two types of feeding applied in fattening period: Feedlot type and pasture feeding. Sometimes farmer combine both feeding types. In case of feedlot feeding farmers provide animals with forage food and other protein-rich supplements.

Rural households mainly use pastures for feeding livestock, they do not use concentrated protein rich food to fatten animals so that they can be sold at a higher price. Organized farms mainly use feedlot-pasture type of feeding. In the summer season cattle are sent to Kazbegi, Didgori, Manglisi, and other pastures under the supervision of a shepherd. The cattle is transported to pastures by car, which costs around 300-400 GEL depending on distance. Transportation by car is not used when the pasture is located at near distance. In that case cattle move itself to pastures by foot under supervision of shepherd. Car transportation is not used if the pasture is located nearby, if this is the case livestock moves itself under the supervision of a shepherd.

Most pastures are publicly owned, this leads to overgrazing resulting in a deficit of productive grass. There are no pasture management practices in Georgia. Farms that have high productive breeds have their own private pastures and manage them to avoid overgrazing and maintain highly productive grass.

Organized farms use combine feedlot and pasture feeding. For feedlot feeding farmers use forage food, grain and concentrated animal feed. Feedlot is costly, as local production of grain does not satisfy domestic demand. Cereals are mainly imported from Ukraine or Russia. Also, imported products have higher nutritional and, therefore, it's much simpler for cattle to gain weight and the taste of meat is improving.

Silo and silage production is quite small and the price is too high for many farmers. For food diversity sunflowers, fruits, and sometimes even food products are used. Recently it has become quite popular to add protein-rich foods to rough food. Using protein-rich food decreases bovine fattening periods and also increases meat output for both mixed and meat producing breeds.

With the help of state supported programs and donors engagement animal feed production has developed significantly in recent years.. Currently there are twenty registered entities that produce concentrated food for animals. LLC Nutrimax, LLC Invet Feed, LLC Unigrain Georgia and AgroTrading LTD are among the animal feed producing enterprises that obtained funding from the state preferential agro credit program.

The Alliance Caucasus Program (ALCP) also provides support to strengthen animal feed suppliers at the local level. Roki LTD and Agro Trading LTD are one of the beneficiaries of the programs. Roki LTD produced veterinary medicaments and animal feed additives that supplied over 120 veterinary pharmacy stores across all regions of Georgia. In addition, Roki LTD exports medicines to Azerbaijan, Armenia and Turkmenistan.

Animal feed producers sell their products through veterinary shops or have their own retail stores in different regions of Georgia.

Farmers select feeding rations based on their experience and financial capacity. The price of forage food varies depending on season. However, due to limitations of funds farmers are not able to purchase enough animal feed when the price is low and when they run out of feed they are forced to purchase the forage food at a higher price. Usually banks, with help of state programs, offer low interest credit lines for businesses but since most of the farmers are not registered as commercial entities they do not have access to low interest bank loans.

The large farms mainly have direct contracts with suppliers that provide forage and concentrated animal feed. Medium and small farms buy animal feed and veterinary drugs in local veterinary shops. Most of the farmers do not consult with livestock specialists to select feeding rations and medicaments for livestock. They mainly rely on their experience and advice from veterinary shop workers.

There is an 8 month to 14 month fattening cycle for farm animals. Choosing a suitable cycle depends on cattle breed and farmers ability of keeping and feeding their animals. Imported meat producing breeds are feed on feedlots for an average of 12-14 months.

Farmers who keep meat producing imported breeds are oriented not only towards meat production but also towards breed reproduction. Schematically bovines are kept by the following principle: the calf is kept with her mother for up to 6 months, the following month the calf is feed on a feedlot, and after that the bulls are separated and feed on feedlot for fattening, and the heifer then return to its mother.

Mixed breed cattle reaches its optimal weight for slaughter after 8 months. However, experience shows that using food additives shortens the fattening period to 4 months.

Beside achieved weight, the period of a bovine's slaughter also depends on its farmer's financial stability. The demand for meat in the Georgian market changes during the holidays and price change accordingly. Farmers that are financially stable do not sell the cattle during the summer period, because the demand is low and the price of beef drops. Also, it is cheaper to keep livestock in the summer period due to the presence of green cover. However, farms that have liquidity issues are forced to sell livestock at cheaper price in order to obtain funds.

Veterinary service: The state provides preventive vaccinations every 6 month. The vaccination is conducted by state veterinarians that are employees of the National Food Agency. Vaccinated animals are registered in NFA database and are marked with a yellow earmark. The lack of professional veterinarians and livestock specialists is a problem in the public and private sector. This problem is particularly important for farmers that hold high productive cattle breeds because imported bovines have immune system and climate adaptation problems. They need early identification and treatment of health problems but local veterinarians have neither experience nor the qualifications to provide necessary treatments. In cases of breeding imported livestock it is necessary to involve veterinarians at the time of delivery as most need caesarean births.

No veterinary faculties in state universities exist. A veterinary faculty only exists in the Agrarian University. However, the demand for this profession is very low and those who graduate from veterinary faculty prefer to stay work in Tbilisi and specialize in domestic pet treatment. Organized farms do not use veterinarians and select the necessary treatment for livestock based on their previous experience. Farms with high productive cattle breeds try to prepare young veterinarians themselves. Blauenstein has its own training center that prepares students in different professions.

Cattle-shed maintenance: For the maintenance of the stalls 1-3 people are needed depending on farm size. At the cattle-shed there is need for light penetration and the possibility of cleaning. Livestock do not require heating in winter.

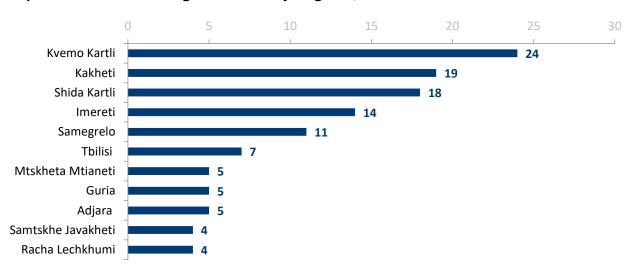
Satisfaction of requirements related to the stalls is crucial especially for imported breeds as they are less resistant to Georgian conditions. In case of a wooden floor any breed may have parasites on its feet as bacteria are easily grown on woo. Floors must not damage hooves and must be easy to clean.

State Agro Credit program provided preferential loans for the building of and arrangement of cattle sheds. Organized farms took advantage of the state agro-credit program and obtained low interest loans for building cattle sheds.

Regulations exist defining standards for arranging cattle sheds. However, these standards are outdated and do not comply with modern practices. Most of the farmers are not aware about modern approaches in cattle shed arrangement. In beef producing farms livestock are kept in enclosed areas and are chained to animal barns. For the most part they do not move during the fattening period. However, this is not the best practice, according to modern approach keeping livestock in an open area and allowing free movement has a more positive influence on beef yield.

Beef production

In 2012/13 the government of Georgia adopted new regulation which made it mandatory to slaughter animals in slaughterhouses; otherwise it was prohibited to place meat in the market place. The new regulation stimulated the establishment of slaughterhouses. The number of registered slaughterhouses increased by 26 in 2017 and 2018. Currently there are 116 registered slaughterhouses in Georgia; they are distributed across almost all regions of the country.



Graph 15: Number of Slaughterhouses by Regions, 2018

Source: Annual report of NFA, 2018

Overall 11.4 million heads of Animals were slaughtered in slaughterhouses in 2018. The largest portion of this was poultry. The cattle slaughtered in slaughterhouses amounted to 182.3 thousand heads in 2018 and produced beef amounted 17.9 thousand tonnes.

Table 1: Meat Produced in slaughterhouses, 2014-2018

Meat slaughtered in slaughterhouses	2014	2015	2016	2017	2018
thousand tonnes					
Produced meat total	16.0	32.9	36.5	42.1	43.3
Of which beef	N/A	N/A	16.4	17.7	17.9
of which meat purchased by slaughterhouses		2.3	2.5	6.0	5.1
Of which beef purchased by slaughterhouses	N/A	N/A	1.9	1.4	1.2

Source: GEOSTAT

Slaughterhouses not only provide slaughtering service but also purchase beef from farmers and supply restaurants, local butcheries, and large supermarket chains. Slaughterhouses also participate in state tenders and supply beef to public institutions - kindergartens, prisons, army barracks, orphanages and psychiatric hospitals.¹⁶

It should be noted that of slaughtering animals outside the slaughterhouses is still an issue for Georgia. It is difficult to define precise portion of beef that is produced outside the slaughterhouses, however, existing statistics allows to make some estimates. According to statistics in 2017 21.4 thousand tonnes of beef was produced in Georgia, out of which 17.7 thousand tonnes was produced in slaughterhouses. It is likely, that remaining part of beef was produced outside the slaughterhouses.

Backyard slaughtering is still an applied practice, mainly among collectors, which increases risk of selling unsafe beef products. National Food Agency conducts regular inspections on market to timely prevail unsafe products and prevent its consumption. However, the shops with high turnover sale beef so fast that it is difficult to prevent sales of unsafe beef products to final consumers.

Principles of the slaughterhouse work: Production of meat begins at the slaughterhouse. The standard of slaughtering is strictly regulated by the Food Agency and by the National Agency. Nowadays it is prohibited to sell the raw meat of slaughtered animals without a slaughterhouse mark of food safety. The period of fresh meat realization is 48 hours after slaughter.

There are two types of practices of meat realization: farmers themselves sell meat to final customers, or sell meat to the slaughterhouse and they sell it to intermediaries or to final customers. If the farmer sells meat themself, he/she should be able to transport meat in a refrigerated vehicle. Slaughterhouses have their own refrigerated vehicles and are able to provide delivery service.

Before entering the slaughterhouse, the veterinarian checks the animal visually. The condition of the fur, control of external injuries, indications the possible diseases, and control of body temperature are all checked to identify any inflammatory process.

The slaughterhouses should operate under the HACCP system and maintain food safety standards during the production process. However, due to the lack of qualifications of personnel and the overload in high-demand

¹⁶ Meat Sector Development in Georgia, ALCP, Mercy Corps, 2017

season slaughterhouses are not always able to fully comply with HACCP standards during the production process.

Animals' skin, head, hides, and skeletons remain in the slaughterhouse. The slaughterhouse has an obligation to provide safe waste utilization. Hides and leather can be sold separately by slaughterhouses. However, very few slaughterhouses apply proper waste utilization; most of them bury animal remains nearby.

There is the potential to run waste free production process as animal remains - such as skin, bones and hides - can be processed and used for production of leather or animal feed. However, there is no waste free production practice and animal remains that can be processed are thrown away. Currently, slaughterhouses do not find economically profitable to adopt waste free production. The main drawback is that slaughterhouses do not have a high capacity to process them and the remains left are not enough to be supplied as inputs to processing factories. An additional process chain should be added which is responsible for collection of animal remains from slaughterhouses, remains separation, and supplys relevant processors.

Farmers' relationships with the slaughterhouses are often complicated in the price arrangement process. When a slaughterhouse buys meat it tries to pay as little as possible. For this reason farmers are often offered a below market price for slaughtering their animals. If it is important for the farmer to get the money quickly he/she will often agree to the lower price.

Beef realization

The farmer may sell meat to intermediaries or final buyers. In rare cases the farmer may also run a butcher shop and sells meat directly to final users. The common practice is to sell beef to wholesale buyers or slaughterhouses.

Often meat is sold in mixed markets, butcher shops, and in the markets on meat shelves.

Average selling price of beef at farm gate is 12.5 GEL. However, farm gate price vary seasonally depending on demand and are also highly dependent on the bargaining power of slaughterhouses. The retail price of beef is higher and ranges from 14 to 22 GEL depending on the beef cut. The prices are set by the selling location and type of beef cut. Daily sales of mid-sized butchery shop are at least 50-100 kg.¹⁷

Slaughterhouses are suppliers to hypermarkets such as Goodwill and Carrefour. The main difficulties are associated with related costs of contracts. For example, to enter large supermarkets a slaughterhouse owner or a farmer needs to make monthly payments to the store, the provision of bank guarantees is required as well.

In retail realization there are also problems with consignation payments. Unregistered farmers do not have official contracts with buyers which limits their ability to obtain payments on time. Sometimes, there are cases in which butchery owners do not pay farmers for supplied beef and the farmers do not have the legal tools to appeal and obtain their payment.

Beef should be sold within 48 hoursof slaughter. This prohibition is not a problem with meat selling. After 48 hours unsold beef is frozen and sent to meat processors for the production of sausage varieties. The raw meat is not allowed to be used after 48 hours of slaughter.

¹⁷ The information was obtained from the interviews with farmers and slaughterhouse owners

Consumers

Consumers purchase beef in local butcheries and supermarket chains. Some of the consumers also go to open markets to buy beef - usually beef in open markets is cheaper than in supermarket. Georgian consumers purchase beef at least once in a week.

Most consumers pay attention to beef safety and quality and check the beef. However, they are not aware about food safety certificate form #2 and that they have right to require food safety certificate when making a purchase. Consumers mainly check beef safety and quality by visual inspection. Also, trust in the butcher is an influential factor when making a purchase. Most of the consumers go to local butcheries because they trust the seller and believe that the beef provided by their trusted butcher complies with food safety standards.

Consumer awareness is an important factor for the improvement of food safety and quality control. Informed consumers will themselves become inspectors of the market and will be able to identify products that do not comply with food safety standards and will inform the agency for further reaction. Increased awareness of consumers will be of good assistance for the NFA to strengthen market supervision and lower food safety risks in the market.

Food Safety and Security

The government policy of food safety and animal health protection is elaborated by the Ministry of Environmental Protection and Agriculture (MEPA) and is implemented by the National Food Agency (NFA).

The meat and meat products placed in markets are subject to requirements of food safety and security standards. NFA is responsible for ensuring the compliance of market operators to food safety standards and also controlling and preventing the spread of animal disease.

Since 2012 NFA, started a program for identification and registration of animals in Georgia, with the aim to better control and monitor animal health and safety to prevent the spread of animal disease. In 2016 with the support of Food and Agricultural Organizations of United Nations (UN FAO) the NAITS program was launched which contributed establish more sophisticated system and improve process identification and registration of animals. The program was funded by the Swiss Agency for Development and Cooperation (SDC) and Austrian Development Agency (ADA). The identification and registration of animals are conducted by the veterinary department of NFA which is also responsible for controlling and preventing the spread of animal disease. Currently, around 70-80% of Livestock is covered by the system.

Food safety issues are under the responsibility of the food safety department within the agency. The food safety department conducts periodic inspections of slaughterhouses and market operators to prevent the placement of unsafe meat products in the market.

Scheme 3: controlling animal health and food safety at each level of value chain











Farm Level

Identification and registration of animals Periodic Vaccination Diagnostics Against Brucellosis Agro consultancy centers in the regions

Pasture Level

Veterinary Checkpoints to control animal health during the transhumance Protecting animals against parasites Ensuring livestock has all necessary vaccination

Collectors

There is no control at this level unless collectors take the cows to the slaughterhouse In cases where the animals are registered it is possible to track the meat production process from the farm to shop In cases where the animals are not registered the risk of illegal slaughtering exists

Slaughterhouse

NFA periodically inspects slaughterhouses Slaughterhouses Slaughterhouses should work in accordance with HACCP standards NFA veterinarian controls production process and provides certificate Form#2 indicating the safety of meat It is prohibited to place beef in the market place that does not have Form #2

from slaughterhouse

Market Level

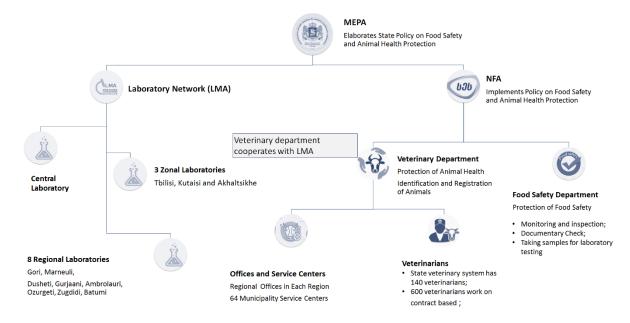
NFA conducts periodic inspections of market Shops are not allowed to sell beef that is not produced in slaughterhouses The beef placed in shops should have certificate Form #2 and should be marked The beef at the shop should be sold within the 48 hours The beef should be kept in a special fridge

Veterinary department provides preventive vaccination of animals against the following diseases

- Foot and Mouth Disease
- Anthrax
- Rabies
- Brucellosis
- Lumpy Skin Disease

The vaccination is conducted by veterinarians that work for NFA on contract, they also conduct a registration and identification program during the vaccination. Currently NFA has 600 veterinarians that work on contract in the regions of Georgia and they are responsible for vaccination, identification, registration of animals, and taking samples for laboratory testing. Of the 140 state veterinarians 40 work centrally in Tbilisi.

Scheme 4: Institutional arrangement in controlling of animal health and food safety



Source: Annual report of NFA, 2018

The lack of professional veterinarians is identified as a main problem by all actors in the beef market. Agrarian University prepares new veterinarians but the number of new graduates is not enough to meet the demand for veterinary services that exist in the market. Moreover, the new graduates from veterinary faculty mainly stay in Tbilisi to provide services for domestic pets - rarely are they interested to work in the rural areas as it is neither prestigious nor profitable. Even the existing veterinarians need to upgrade their skills and knowledge to get acquainted with modern approaches and provide qualified services to the market.

Except the vaccination, NFA provides diagnostics to reveal and prevent the spread of animal diseases implemented by the Laboratory of Ministry of Agriculture (LMA). In 2015-2017the NFA conducted diagnostics of cows against brucellosis. However, due to limited resources it is impossible to cover whole population. Assistance to conduct diagnostics of cows against brucellosis in organized farms will be beneficial to prevent the distribution of disease. The agency plans to start diagnostics against Bovine Spongiform Encephalopathy from 2020 and leucosis from 2023¹⁸.

As a preventive measure the NFA established Veterinary Surveillance Points to control animals during the transhumance. Veterinary checkpoints control livestock when they leave for the pastures during the summer period. They check whether livestock is vaccinated and also provide treatment against parasites.

NFA periodically conducts information campaigns to increase the awareness of local farmers about animal disease and help them to identify incidences of disease before it is too late. There are agro consultancy centers in each region where farmer can apply for consultation or obtain identification and registration for new animals. However, farmers do not use these services. Identification and registration of animals mainly takes place during the periodic vaccinations. Currently, around 70-80% of livestock are registered in the program. However, when households or farmers purchase new cattle or new calves are born they do not

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¹⁸ Source: interviews with NFA representatives

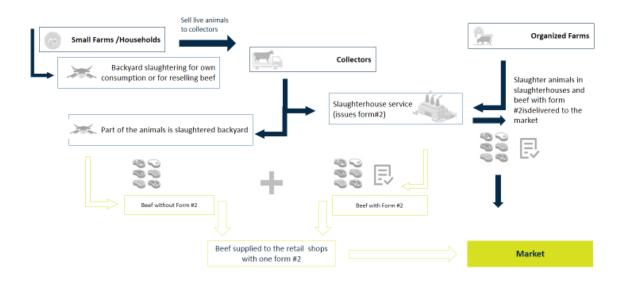
apply consultations center to register animals. Usually they only apply for identification and registration of animals if they want to sell or slaughter animals.

Often farmers do not report incidence of disease as they are not willing to bare the associated losses. In cases of incidences of disease they slaughter the animal or sell it alive at a cheaper price to local butchers. This practice limits the NFA's ability to discover on time the incidence of animal disease and apply preventive measures.

The agency finds that giving compensation to farmers for reporting incidence of disease will increase their motivation to inform the NFA about sick animals and help the agency to efficiently control and prevent distribution of animal diseases.

Despite the fact that the NFA applies various control measures on animal health and food safety issues, problems still exist. The most acute problem is the placement of unsafe meat products in the market. According regulations only beef that was produced in a slaughterhouse and has the required certificate and marking is allowed to be placed on the market. One veterinarian works in the slaughterhouses and inspects livestock health before slaughtering, checks the meat conditions and afterwards provides the necessary certificate that proves the product is safe. However, slaughtering animals outside the slaughterhouses is still an applied practice in Georgia.

Scheme 5: Scheme of Backyard Slaughtering



The problem of illegal slaughtering is rare in case on organized farms. The highest risk comes from collectors that purchase animals from households. Collectors circumnavigate the law requiring all meat that is sold to have Form#2 by sending only a small portion of their cattle to slaughterhouses. Here the cattle are slaughtered and Form#2 is legally provided. Once collectors have this document they slaughter the rest of their livestock and sell this meat alongside the certified product. Thus, if the butcheries have high turnover it is impossible to identify the products that are illegally placed in the market.

The strengthened process of identification and registration of animals will help the NFA to combat illegal beef emerging in markets for public consumption. Preventive measures should be applied in order to avoid illegal slaughtering. Some slaughterhouses transport the beef with their own vehicle to stores in order to prevent the placement of illegally slaughtered beef in the market.

An increase in the awareness of consumers about food safety requirements is an important step to further combating this. Informing them about their rights and the ways in which they can check beef sold in shops is compliant with safety standards will provide additional preventive measures to the placement of illegally slaughtered meat on the market.

Illegal slaughtering is not the only problem. Although slaughterhouses are required to work under HACCP standards, in practice not all slaughterhouses can fully comply with these standards during the production process. The reason for this is the lack of competence in staff. There is a need to increase skills of staff in order to establish well functional production processes in accordance with HACCP standards. Another reason is workload, when there is high demand of meat (holidays etc.) slaughterhouses work overtime and it is difficult for them to fully follow the required standards.

When checking the conditions of meat slaughterhouses should take a sample in accordance with standard ISO17604. The sample should be taken using special equipment which most of the slaughterhouses do not have. NFA provided equipment for taking samples last year, but it was one-time occurrence. The strengthening of the capacity of slaughterhouses to run production processes in accordance with HACCP standards will reduce food safety risks.

Usually meat is not allowed to leave slaughterhouses unless it gets cold. In the regions that are populated with Azeri people this requirement is not ensured. This is due to their slaughter traditions, Azeri's do not let beef get cold in a fridge and they take newly slaughtered meat out of the slaughterhouse - this is risky in terms of safety. The increase in awareness of consumers regarding food safety issues will be helpful to better deal with such cases.

Government and Donor Funded Programs Supporting Beef Sector Development in Georgia

Various donor and state funded projects focusing agricultural development exist in Georgia. Technical and financial support are provided by international donors and state. The scope of the programs cover: strengthening institutional arrangement at national and regional level, supporting SME development, empowering women engaged in agricultural activities, strengthening primary production, and the development of agricultural enterprises, food processing factories, and storage facilities. International donors actively cooperate with the Ministry of Agriculture and Environmental Protection (MEPA) to implement need based projects in different fields of agriculture in Georgia, including animal husbandry and meat production. Currently there are several ongoing projects focusing on the strengthening of market systems and the development of agricultural production value chains.

State Programs

State programs in agriculture development are initiated by the Ministry of Agriculture and Environmental Protection (MEPA) and are implemented by its agencies. The Agriculture Projects Management Agency (APMA) implements programs that provide direct financial and technical support for primary producers of agricultural products and agricultural enterprises. The Agricultural Cooperative Development Agency (ACDA) implements projects supporting development of agricultural cooperatives. The National Food Agency implements projects to strengthen food safety and security, protection of animal health and sanitary norms in production process.

APMA

The Agricultural Projects Management Agency (APMA) was established in 2012 with the aim to support rural development in Georgia. The agency works under the Ministry of Agriculture and Environmental Protection of Georgia (MEPA) and implements the projects initiated by Ministry under the framework of "Unified Agro project".

Projects implemented by APMA provide supporting schemes for the development of primary production and agro processing enterprises in different fields of agriculture, such as tea production, horticulture, gardening, animal husbandry, and other supporting services, such as development of dry and cold storage facilities.

Among the APMA projects that target animal husbandry and its supporting industry are the following:

- Preferential agro credit program This program launched in 2013 and is aimed at increasing access to finances for people engaged in agriculture. Program beneficiaries are able to receive preferential loans to establish new, or expand existing, enterprises. The scope of the program includes primary production, as well agro processing factories, packaging and storage facilities. The decision for issuance of the loan is made by banks, after the loan is issued the part of interest rate on loan (around 10%) is covered by state, in addition agency also provides secondary collateral for issued loan. The amount of loans obtained through the program varies from 20,000 GEL to 5 million Gel depending the type of the project. In addition, preferential agro loans provide up to 24 months payment grace period to beneficiaries. The length of grace period depends on the amount of loan and type of the project.
- Young Entrepreneur Project Initiated in 2018 this project aims to support young entrepreneurs in rural areas. The program was initiated by Ministry of Environment and Agriculture (MEPA) and supported by the Denmark International Development Agency

(DANIDA). The total budget of program amounts 4.1 million USD. Target beneficiaries are young men (of 18-35 age) and women (of 18-40 age) that are going to establish new enterprises producing primary or secondary production of agricultural products. The supporting scheme includes co-financing 40% of initial investment (but no more 60 000 GEL). Together with financial support beneficiaries will obtain technical assistance in the form of consultancy services and trainings to establish efficient management systems and well-functional processes. The expenses related to drafting business plans are also covered by the program.

Farms/Farmers registration project - started in 2018 and aims to create a unified database of entities that are engaged in agricultural activities. The unified database will assist the state to elaborate need based support mechanisms and select proper target groups.

It should be noted that organized farms and slaughterhouses are active users of preferential agro loans to arrange the infrastructure and buy equipment necessary for production processes. Both preferential agro credit and the young entrepreneur program provide finance for purchasing high-productive cattle breeds. The list of breeds are defined by Government Decree N139 of 2014, the list includes combined beef producing and milk producing cattle breeds.

The table below provides the list of cattle breeds the purchase of which can be co-financed by APMA program.

Combined breeds **Beef Producer Breeds** Milk Producer Breeds Brown Caucasian (Tsabla) Black-white (Shavtchreli) Holstein Swiss Hereford Jersey Simmental Aberdino-Angus Ayrshire Fleckvieh •Latvian Brown (Tsabla) Velis Tsiteli (Field red) Tarentaize Kalmyk Cattle Yaroslav Limousine Holand breed •German Angler •Estonian red •Red Hosltein

The only problem with this is that some beef producing cattle breeds are not given in the lists, this can be considered as a limitation of the projects. There was a case when farmers wanted to bring Charolaise cattle breeds into Georgia but they did not get financing as they were not in the list.

Currently only four farms have high-productive beef producing breeds (Angus, Limousine and Swiss breeds), and only two farms have a long-term plan to develop those breeds locally. Other farms mainly operate under the "buy-fatten-sell" business model. This does not support breed improvement and local development of high-productive cattle breeds.

ACDA

Agricultural Cooperatives Development Agency (ACDA) was established to support the development of agricultural cooperatives and increase their efficiency. Development of agricultural cooperatives is of the utmost importance for the development of the Georgian agricultural sector. As most of the share of livestock is supplied by small rural farms capacity is limited to increase the productivity and economic benefits in the sector.

ACDA supports agricultural cooperatives that specialize in milk production, beekeeping, and chestnut production. In addition, ACDA provides support to cooperatives that operate in high mountain regions. Although, cooperatives specializing in beef production are not covered by ACDA program.

In July 2018 ACDA launched a new program to support implementation of HACCP standards and assist agricultural cooperatives to develop proper packaging and branding for their products.

The program financed 90% of expenses required to buy necessary equipment for implementation of HACCP. In terms of branding, 70% of expenses were co-financed by the agency for the purchase of equipment for packaging and branding. Registration to the program ended in March 2019.

Currently there are no ongoing programs supporting cooperatives specializing in animal husbandry and beef production.

Despite the various support schemes, cooperation between farmers is very low. Many farmers are not aware about cooperative management practices and most of the cooperatives created to obtain financial support have been closed down. The farmers established cooperatives that consisted of their family members with only purpose to obtain financial support from ACDA. To avoid the same mistake it is important to carefully select target groups, increase farmers' knowledge about cooperative management practices, and provide technical assistance to establish efficient production processes and management systems in cooperatives.

International Donor Funded Programs

International donors design and implement various projects to support the development of agriculture in Georgia. They actively cooperate with MEPA to design need based support schemes for the private sector as well for public institutions engaged in the design and implementation of agriculture development policy in Georgia.

Currently there are the following ongoing donor funded projects that support agricultural development in Georgia

AMMAR- Agricultural Modernization, Market Access and Resilient project

This project is financed by International Fund for Agricultural Development (IFAD) and co-financed by the Global Environmental Facility (GEF) and Denmark. The project started in 2014 and will last until the end of 2019. The total budget of the project is \$30.82 million USD. The project is targeted at small scale farmers and is aimed at strengthening their capacity to increase their income and resilience trough supporting the development of climate smart production value chains. Supporting schemes provided by the program include financing to upgrade irrigation infrastructure, provision of trainings to farmers, arranging demonstration plots, and also issuing grants to develop climate smart production value chains. The grant component of the program is administered by APMA.

AMMAR is implemented in cooperation with MEPA and is comprised of two components:

- Investment in irrigation infrastructure and agricultural production value chain development This component covers upgrading and developing irrigation infrastructure and supporting private investments in agricultural production value chains.
- Development of climate smart production systems in agricultural value chain This component is targeted at stimulating the adoption of new technologies that strengthen agricultural production value chains. The supportive schemes provided include arranging demonstration plots and provision of training to farmers.

European Neighborhood Program for Agricultural and Rural Development (ENPARD) Phase 3

ENPARD program was incepted in Georgia in 2013. It aims to reduce poverty in rural areas of the country. The projectt is funded by EU and has a total budget amounts 179.5 millions of Euros.

The program has three phases. The third phase started in 2018 and will last until the end of 2022. The support provided by the program covers three key areas:

- Strengthening government institutions and provide assistance in reforming agricultural sector covers provision of assistance in elaborating policy documents, arranging effective systems for coordination among institutions, elaborates programs for strengthening the capacity of government employees.
- Support improvement of living conditions and job creation in rural area by strengthening agricultural cooperatives and increasing their access to finance- covers providing financial and technical assistance to agricultural cooperatives, and the development of regional consultation centers where farmers can obtain information and necessary consultation.
- Supporting economic diversification in rural regions with active engagement of women and youth the supportive schemes provided under this component includes: assisting municipalities to draft development strategies, establishment of Local Action Groups (LAGs) in municipalities, and provision of co-financing grants for funding of local development initiatives.

The partners of ENPARD Phase 3 are:

- UNDP "Supporting sustainable rural development" project the project supports systemic and structural changes supporting economic development in rural areas. The final goal of the project is to assist the government of Georgia to elaborate strategy documents and programs supporting agricultural development, support diversification of economic activity in rural areas, and increase job creation. This project is aimed at improving environmental protection mechanisms, supporting sustainable natural resource management, and applying measures to address challenges related to climate change.
- UN FAO "FAO Support to Georgian Agriculture sector under ENPARD 3"- The project works
 under two main directions. First, it provides assistance to MEPA to increase its technical capacity in
 implementation of sustainable rural development policy. Second, it provides support to farmers,
 agricultural cooperatives, and SMEs to increase their access to finance and information. Support
 schemes include technical consultations to MEPA, provision of small grants to farmers, agricultural
 cooperatives, and SMEs, and provision of training and dissemination of information to farmers.
- CARE International "Implementing LEADER in Mestia municipality for better livelihoods in high mountainous regions of Georgia"- This project is aimed at supporting the improvement of the economic well-being of the high-mountains regions of Georgia. Supportive schemes provided under the project include development of Local Action Groups (LAGs), provision of assistance to draft local development plans, and provision of financial support for implementation of local development initiatives.
- People in Need (PIN) implements projects in Tskaltubo municipality aimed at supporting rural development and poverty reduction using the LEADER program approach. The project aims to develop partnership links among local government, civil society organizations, private actors, and local population by creating Local Action Groups (LAGs). LAG members will participate in drafting and implementing local development strategies.
- Caucasus Environmental NGO Network (CENN) "Embrace Tsalka Local LEADERs Embrace Sustainable Development in Multi-Ethnic Tsalka Municipality"- The project aims to increase access of local population with particular emphasis of women and youths to agricultural knowledge and innovation, as well as strengthen agricultural value chains in Tsalka municipality. Under the project LAGs will be established that will draft local development plans and participate in their implementation. The project also covers provision for the funding of local development initiatives.
- Action against Hunger (AAH) Promoting inclusive and participatory local development in
 Akhmeta Municipality Project is designed to support rural development and increase economic and
 social well-being in Akhmeta municipality. Under the project framework LAGs will be established to
 design and implement local development strategies. The project also considers providing funding and
 technical assistance for minimum of 35 rural development project initiatives.

Alliances Caucasus Program (ALCP)

This project was launched in 2008 and initially targeted the Samtskhe-Javakheti region, recently it was expanded to include the Kvemo Kartli and Adjara regions. The project is funded by Swiss Development Cooperation (SDC) and implemented by Mercy Corps. The program has developed partnership links with public and private sectors and also actively cooperates with civil sector.

The program is aimed at strengthening livestock and honey market systems, aims to expand export opportunities, and develop cross-border cooperation between Azerbaijan, Armenia and Georgia. ALCP program targets strengthening meat, milk, honey, and sheep wool production value chains by improving producers' access to finances and knowledge. It also supports them in adopting new technologies that improve productivity and quality within the sector.

Dairy Modernization and Market Access Project (DIMMA)

The project is funded by IFAD and is going to be implemented throughout 2018-2024 years. Overall project budget amounts to 53.4 mln USD. The project targets to dairy sector aiming to strengthen Georgian dairy market system and support income growth of small dairy farms, with the emphasis of those located in mountainous regions¹⁹.

The target area of project is Imereti, Samegrelo Zemo Svaneti and Samtskhe-Javakheti regions. Within the framework of program, the 18 years loan, about 16 million Euros, will be issued for Georgia to support institutional development and increase resilience of dairy production value chain. The project will be implemented by MEPA²⁰.

Considering the fact that dairy farms are among the livestock suppliers for beef production and strengthening local dairy market system will also have positive influence on beef production as well.

¹⁹ Source: https://www.ifad.org/en/web/operations/project/id/2000001393/country/georgia

²⁰ Source: http://georgiandairy.org/ka/post/ifad-i-sakartveloshi-merdzeveobis-ganvitarebistvis-16-milion-evros-gamohqops

Conclusion and Recommendations

Growing demand for beef in domestic and export markets creates opportunities for development of the beef sector in Georgia. Consumption of beef in neighboring countries, Turkey and Azerbaijan, is increasing which makes them attractive markets for beef export. Moreover, the existing DCFA agreement with EU, which is one of the largest consumers of beef and meat products, opens up a large export market for Georgian products. In addition the DCFTA provides opportunity to connect European and Asian market through Georgia. This is additional way of attracting investors that will sell livestock and beef products to Asian markets - also one of the largest meat consuming markets in the world.

However, before developing export potential, local production systems should be strengthened to satisfy domestic demand and increase the capacity of local production systems to prepare high quality beef and beef products for export. In addition, arrangement of well-functional logistics is important to ensure stability of supply to export markets.

Low productivity in local production is main challenge that hinders market development. Livestock production in Georgia takes place in small extensive farms that use small amounts of inputs, capital, and labor, and do not apply measures for improvement of cattle breeds to improve productivity. There are very few farms that have intensive production system and specialize in improvement and maintenance of high productive cattle breeds.

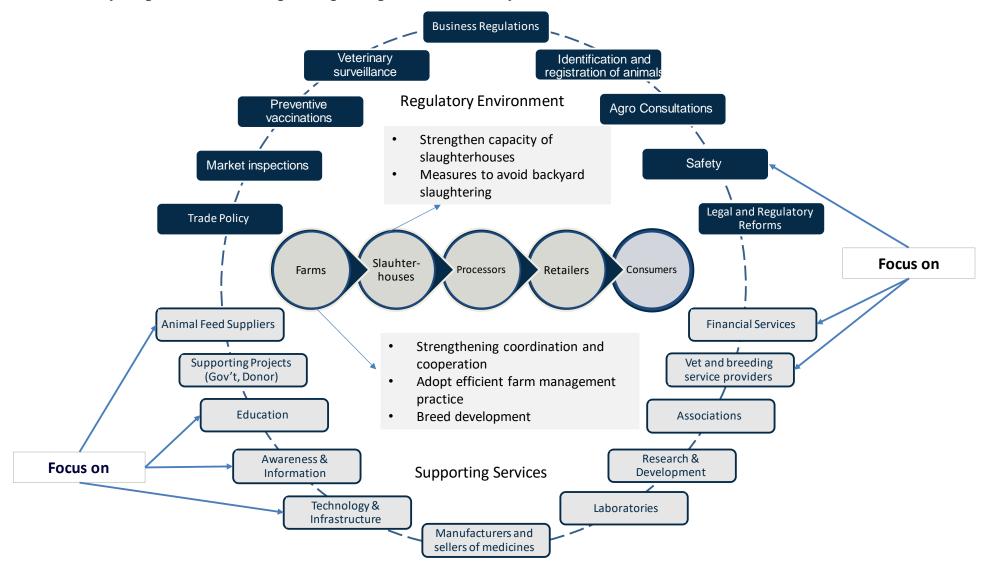
Breed improvement, adoption of good farm management practices, and selection of proper feed rations is important in increasing efficiency of primary production. In addition, a lack of qualified professionals, such as veterinarians and livestock specialists, limits the ability of farmers to elaborate proper treatment schemes to increase productivity of livestock.

Strengthening beef market systems to increase production capacity and absorb export potential is a very long term goal. Core problems of existing market systems are: low productive breeds, skills shortage, and lack of efficient farm management practice.

Animal health and food safety control have improved in recent years. Development of slaughterhouses operating under HACCP principles is one of the biggest steps forward to protect food safety standards and avoid placement of unsafe meat products in the market. However, backyard slaughtering is still an applied practice in Georgia and additional efforts should be made to reduce the risk that unsafe products will appear on the market. The placement of unsafe beef products in the market is still an issue which needs to be addressed.

Despite progress, local beef market systems still faces challenges in terms of low productivity, expensive inputs, and lack of knowledge and technology in production process. The sector still needs additional support to improve productivity, and adopt new knowledge and technology in beef production that produce high quality beef and beef products for domestic and export markets.

Scheme 6: Key Target Areas for Strengthening Georgian Beef Market System



The development of beef market systems should be focused on achievement of following objectives:

- Improve productivity and support market players to produce and deliver products in a cost effective way.
- Support knowledge transfer and adoption of new technology to produce high quality beef and beef products.
- Strengthen protection of food safety and animal health control in order to have locally produced products recognized as safe and trustworthy in export market.
- Support arrangement of logistics and delivery systems to ensure stable supply to domestic and export markets.

Recommendations

- Breed improvement and maintenance is of the utmost importance for strengthening the capacity of local production. Measures should be applied to increase utilization of artificial insemination services among small and medium farms that are some of the largest producers of livestock for beef production.
- Local farmers should have given the possibility to purchase high productive breeds in local markets at affordable prices. Currently there are four farms holding high productive beef producer and combined breeds. Of which only two farms are actively engaged in breed reproduction and improvement. Those farms can become suppliers of new breeds to rural households and also provide technical assistance and consultation in livestock treatment.
- Rural households have limited funds to purchase high productive breeds, which is why they will need to be provided with some financial support to purchase high productive cattle breeds from local farms. However, in order to avoid the risk of irresponsible behavior some co-financing should be required from farmers and obligations should be imposed on beneficiaries in order to maintain breeds in the long term.
- The skills shortage is a biggest problem in the market. Measures should be applied to popularize the veterinary and livestock specialist professions amongst young people. Economic stimulus should also be adopted to engage more young professionals in the sector.
- The knowledge transfer and adoption of technology should be stimulated to support development of beef market systems in Georgia. Currently, there is shortage in local expertise and the technical assistance of donors to transfer knowledge by inviting foreign professionals did not succeed as it was intended. Long-term schemes which allows to bring foreign professionals to Georgia to transfer knowledge and provide beef production consultations should be developed.

- The lack of farm management skills limits Georgia's ability to achieve cost efficiency in production. Measures should be applied to improve farm management practices among beef producing farmers in Georgia.
- MEPA regional consultation centers should be used as a platform where services and information will be provided to all market players engaged in beef production.
- Incentivize farmers to become officially registered entities which will improve their access to low interest bank credit lines and allow for purchasing of food and other inventories at a cheaper price.
- No livestock insurance exists in Georgia. This increases business risks and limits farmers ability to get necessary funding. The local insurance companies have no experience in designing commercial insurance packages for livestock. Measures should be applied which will support the development of livestock insurance packages that will be economically profitable and acceptable to farmers.
- Low productivity pastures and overgrazing is a problem in Georgia. This increases the cost to farmers by forcing them to buy food additives, extend fattening periods, and lowering beef yields. Adoption of pasture management practice to maintain high productive grass and avoid overgrazing is important.
- Current capacity of slaughterhouses is not enough to fully meet HACCP principles, particularly when there is a high demand for service and overload. Providing support to slaughterhouses to increase their capacity and skills to maintain production process in accordance with HACCP standards is required.
- There is the possibility to achieve waste free production through utilization of animal remains. Support development of waste free production by developing collection and separation of animal remains services that supply goods to processing factories. This will help to achieve waste free production processes in slaughterhouses.
- Support adoption of new production technologies to produce high quality beef products that will be sold as in domestic as well in export markets.
- Encourage use of vacuum packaging which extends validity period of beef and makes the production process more profitable.
- Stimulate cooperation among beef producing farmers in order to reduce bargaining power of slaughterhouses.
- Encourage farmers to sell beef under official contracts which will improve collection of payments.
- Increase awareness of consumers so that they will able to check safety of food when making a purchase.
- Assist NFA to develop market mechanism that will reduce risk of backyard slaughtering.

- Provide support to increase technical and human capacity of NFA to better control animal health and food safety standards in the sector.
- Adoption of a quality mark that will be assigned to safe beef products will reduce risk of placement unsafe beef in the market. This allows consumers to easily recognize safe products and gives incentive to producers to maintain food safety standards. Moreover, assigning a quality mark on safe products will also bring benefits in terms of export development. Products with a quality mark will increase trust of foreign consumers in beef and beef products produced in Georgia.

Annex 1: Company Profiles

Farms		
Name	Profile	Contact Information
Angus Farm in Saguramo	The farm was established in 2016 with the support of "Young Entrepreneur" project funded by DANIDA and implemented by APMA. The initial investment amounted to 1.5 mln GEL. The high productive cattle breeds were imported from abroad. Farm holds Angus, Holstein and Limousine breeds. Farm is oriented to develop and maintain high productive cattle breeds and supply market with high quality beef and raw milk. Currently, there exist 150 cows, 4 buffaloes and 6 limousines within the farm. Currently around 7 people are employed within the farm.	Contact Person: Giorgi Berishvili Founder Mob:
LLC Agromax Beef Limousines Farm in Sartichala	The company was established in 2011 and in 2015 with the support of preferential agro credit arranged animal husbandry farm in Sartichala. Company imported high-productive beef producing "Limousine" breeds and started to supply market with high quality beef products. Currently, company has 230 heads of livestock and is aimed to increase number of livestock up to 350 heads within upcoming 2 years. Currently, company provides high quality beef to restaurants operating under "Hacker-Pshorr" group. In addition, company owns pastures, fruit orchards and also produces animal feeds which is mainly supplied to poultry farm "Biu-Biu"	Contact Person: Konstantine Kvernadze Founder/Director Mob: e-mail: <u>Agromaxbeef@gmail.com</u>
LLC "Angus Group"	In 2018 under the framework of "Enterprise Georgia" program, Angus Group was granted with 10 000sq. m land to arrange modern farm of high productive cattle breeds. Company imported black Angus breeds from abroad and aims to supply market with high quality milk and beef. The planned annual production volume is 30 thousand liters of raw milk and 70 thousand KG beef. The products will be supplied to domestic market.	Contact Person: Otar Kobakhidze, Founder/Director Mob: E-mail: angusgroup17@gmail.com
LLC Blauenstein Georgia	Blauenstein Georgia was established in 2008 with the Swiss investment. Company is based on Oni municipality and holds high-productive Swiss Cattle breeds. Company produces raw milk, beef and beef products. Blauenstein Georgia holds its own slaughterhouse, processing plants and brand shops where the beef and beef products are delivered to the final customers. Blauenstein also supports development and improvement of cattle breeds in Racha region by providing local farmers with high production breeds and giving them financial support to run their own organized farms.	Contact Person: Tatia Arabidze Director Mob: E-mail: info@btq.ge
LTD "kvareli-baga"	Kvareli baga is located in Kakheti region and holds high productive milk producing Holstein cattle breeds. Company was established with the support of preferential Agro Credit project. Company holds 530 heads of cattle and daily raw milk production amounts 3000 tones. Company supplies milk to	Contact Person: Natia Gargulia Director Mob: E-mail: natia.gargulia@kvarelibaga.ge

	"Sante GMT" which is one of the biggest producers of dairy products. Currently there are 20 people employed in the farm.	
LLC Agrotek	Agrotek is modern dairy farm, located in Kvareli village Eniseli. Farm holds 80 heads of combined Swiss breeds and produces raw milk, which is supplied to LLC "Wimbildan" operating under brand "Soplis Nobati". There are 5 permanent staff within the farm, but additional people are hired for seasonal works. Company plans to expand the farm in near future and increase number of cattle up to 150 heads.	Contact Person: Malkhaz Khurcidze, Davit Legashvili- Founders Giorgi Gigitashvili -Director Mob: E-Mail:
LTD Lodinaro	The farm was established in May 2016. Initial investment amounted to 95,000 GEL. Farm is located on 4,000 sq.m area in Racha and is included in the "Animal husbandry development in Racha region" initiated by "Blauenstein Georgia". Blauenstein provides farm with high productive Swiss Cattle breeds. Farm is organized according to the international standards. Farm has capacity of 60 heads of livestock.	Contact Person: Paata Maisuradze-Founder Mob:
LTD "Cheshora"	Farm was established in 2016 and was granted with approximately 61,000 ha Oni municipality owned land for 25 years. Farm is designed for more than 60 heads of livestock and is equipped with modern technologies.	Contact Person: Irakli Grdzelishvili- Director Mob:
Giorgi Dadianidze	Giorgi owns livestock farms with 120 heads of cattle. Farm operated under "Buy-fattening-slaughter" model. The livestock is purchased in agrarian markets, mainly in Marneuli, also from individual farmers. In addition to livestock farm Giorgi has poultry farm and sells egg through the online shop "Soplidan.ge". Giorgi is aware in farm management practice and applies measures to ensure stress free conditions for livestock. In addition to this, it is planned to open animal feed production factory soon. Farmer participates in state supported programs, he obtained preferential agro credit and was also cooperating with Enterprize Georgia.	Contact Person: Giorgi Dadianidze- owner Mob:
Rafik Mamedov	Farmer owns livestock farm with around 70-80 heads of cattle. Farm is located in Tsikhisdziri village, Shida Kartli region. Farm operates on "Buyfattening-slaughter model". Livestock is purchased in Kabala Agrarian market, Kakheti region. There are mainly mixed breeds in the farm. However, in recent period there appeared so called "Bogdanovka" cattle breeds in the market. Farmer uses feed lot and pasture feeding for fattening livestock. Fattening period is around 8 months. During the summer livestock is send to pastures by car, the cost of hiring car is 300 GEL. The livestock is mainly sent to Manglisi, Didgori and Kazbegi pastures. Farmer sell beef to local slaughterhouses which supplies the large shops and local retail sellers. Farmer is beneficiary of preferential agro credit program,	Contact Person: Rafik Mamedov- owner Mob:

	however, since the loan was issued in USD recent increase in USD/GEL exchange rate increased the financial burden and farmers experiencing the lack of liquidity. Owns livestock farm in Tsikhisdziti village, Kvemo Kartli region. The number of livestock ranges between 70-80 heads of cattle. Farmer owns mixed	
Vitali Mamedov	cattle breeds which are purchased from Marneuli (Kvemo Kartli) and Zestafoni (Imereti) agrarian markets. Sometimes cattle is purchased from individual farmers and rural households as well. Farmer uses feedlot and pasture feeding. Fattening period lasts for 8 months, the livestock is slaughtered in local slaughterhouses. Farmer sells beef to slaughterhouses which supply large hypermarket chains and local retail sellers. Farmer is beneficiary of Preferential Agro Credit Program.	Contact Person: Vitali Mamedov- owner Mob:
Roman Jalilov	Farmer owns 250 heads of cattle in village Tsikhisdziri, Shida Kartli region. The livestock is purchased in MArneuli and Zestafoni Agrarian markets. Farmer owns mixed cattle breeds; the average beef yield is 50-57%. Farmer applies mixed feeding type, uses feedlot and pasture feeding. During summer livestock is sent to Manglisi, Didgori and Kazbegi pastures by car. The farmer sells beef to local slaughterhouses which supply beef to large hypermarkets and local retail sellers	Contact Person: Roman Jalilov- owner Mob:
Slaughterhouse ²¹		
LTD Gigilu	Slaughterhouse is located in village Likhauri, Guria region. Company was established in 2015 and has 9 full time employees. Around 3-6 cows are slaughtered per day, the clients are mainly local meat sellers. Fee for Slaughtering service is 35 GEL	Contact Person: Avtandil Makharadze-owner Mob:
LTD Ertoba	Slaughterhouse was established in 2014 and is located in Chokhatauri, Guria region. Company has 9 employees that mainly. Arounda 10-15 Cows are slaughtered per day, fee for slaughtering is 30 GEL. Together with slaughtering services slaughterhouse also works on direct sourcing and supplies meat to retail market in Ozurgeti and Batumi	Contact Person: loseb Mamaladze-owner Mob: E-Mail:
Amiran Kakuria	Slaughterhouse is located in Chokhatauri, Guria region. Slaughterhouse was established in 2012 and currently is one of the biggest slaughterhouses in Guria. On average 35-60 cows are slaughtered per day. Slaughterhouse also works on direct sourcing, participates in tenders and supplies meat to kindergadens, restaurants and meat shops.	Contact Person: Amiran Kakuria Mob: E-Mail: N/A
LTD "Abasha Nobati"	Slaughterhouse operates since 2013 in Abasha, Samegrelo region. Copmany has 9 employees and	Contact Person: Noe Katcharava Mob:

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 $^{^{21}}$ Information is obtained from the report "Meat Sector Development in Georgia" , prepared by Mercy Corps and funded by ALCP program

	provides slaughtering service for meat sellers from Batumi, Kutaisi, Poti and Zugdidi. On average 4 cows are slaughtered per day. Fee for service is 25 GEL.	E-mail: N/A
Iber Meat Georgia	Natakhtari – The slaughterhouse is doing export of slaughtered sheep to Iran, Iraq and Kuwait. It is slaughtering about 12 000-15 000 sheep monthly. Slaughterhouse has got temporary recognition from NFA since March, 2016. The cost of the processed leather is 0.50 Gel of one piece. The collected leather is sent to Turkey.	Contact Person: Irakli Adeishvili Technical Director Mob: E-mail: N/A
Halal Group Ltd	Perma village, Kaspi, Shida Kartli. Slaughterhouse has been in operation since 2014. It has recognition from NFA. Provides cattle and sheep slaughtering services, about 600 cattle and 150-200 sheep monthly. Mainly they are collecting, slaughtering and selling in Tbilisi supermarkets and markets, such as Carrefoure, Slaughtering fee 35 Gel per cow, 13 Gel per sheep.	Contact Person: Ana Kirvalidze Mob: E-mail: N/A
Tskhovelta Sasaklao Saamkro	Tetritskaro - The slaughterhouse provides cattle slaughtering services for farmers (about 100 heads of cattle monthly) living in Kvemo Kartli regions and sometimes slaughtering own (about 120 – 180 heads of cattle) cattle. The cost of one service is 50 Gel per cow. The processed meat is sold in agrarian markets and in the warehouse, which is located in Agladze st. #32 in Tbilisi. Slaughterhouse has got temporary recognition from NFA. In the future, the meat processor plans to export sheep to Arab countries, currently the company is in negotiation with Arabian intermediaries and buyers.	Contact Person: Zviad Sukhitashvili Mob: E-Mail: N/A
Matador LTD	Sagarejo, Kakheti – The slaughterhouse has been operating since 2011. It provides cattle and pig slaughtering service, 55 Gel per service, 30 services per month. Slaughterhouse is serving Sagarejo municipality villages and meat shop owners located there.	Contact Person: loseb Kokhtashvili Mob: E-Mail: N/A
Tsikhisdziri 2014	Kaspi. Tsikhisdziri village, The Slaughterhouse has been in operation since 2014, Provides cattle slaughtering services for farmers. Service fee – 30-35 GEL/cow. It is slaughters 400-500 cows per month and has recognition from NFA. The hides are sold in 1.5 Gel/kg to company in Tbilisi.	Contact Person: Ramaz Mukhtar Oghli-owner Mob: E-mail: N/A
LTD "Meskheti Product"	"Meskheti Products Ltd, an abattoir and a meat products manufacturer and trader company has been operating since 2004.	Contact Person: Giorgi Goderdzishvili Mob: E-Mail: N/A
LTD Tsikara	Slaughterhouse was established in 2014 and operated in Vani, Imereti region. Slaughterhouse provides as slaughtering service also works on direct sourcing and supplies meat to Batumi Agri Market. Around 1-3 cows are slaughtered per day, fee for service ranges from 15 to 35 GEL.	Contact Person: Nikoloz Popkhadze- Director Mob: E-Mail:

Emzar Jimsheleishvili	Slaughterhouse is located in Tskaltubo, Imereti region and operating since 2012. The slaughterhouse clients are meat sellers from Kutaisi and Tskaltubo Agri Markets. On average, 4-5 cows are slaughtered per day. Fee for service ranges from 15 to 35 GEL.	Contact Person: Emzar Jimsheleishvili-owner Mob: E-Mail:
Tengiz Khocholava	Slaughterhouse operates in Senaki, Samegrelo region since 2014. Slaughterhouse provides service for meat sellers from Senaki and Batumi Agri markets. On average 4-5 cows are slaughtered per day. Fee for service ranges from 15 to 35 GEL	Contact Person: Tengiz Khocholava-owner Mob: E-mail: N/A
Togo LTD	Slaughterhouse operates since 2015 in Imereti, Meskheti village. Slaughterhouse has 7 full time employees and mainly works on the direct sourcing model. On average, 250 calves are slaughtered per months and produced veal is supplied to HORECA industry in Batumi and Kutaisi.	Contact Person: Gocha Togonidze- owner Mob: E-mail:
Bochola LTD	Located in Vani, Imereti region. Slaughterhouse was established in 2011 and has 5 full time employees. Slaughterhouse provides only slaughtering services and slaughters average 3-7 heads of cattle per day. Fee for service ranges between 20-25 GEL	Contact Person: Darejan Vashakmadze-owner Mob: E-Mail: N/A
Kharebi LTD	Gardabani - The slaughterhouse provides cattle slaughtering service for farmers and meat shop owners from Nazarlo, Kesalo, Jandara, Kapanakhchi, Lemshveniera, Vakhtangisi villages. Slaughterhouse is slaughtering about 300-350 cows per month. The cost of one service is 40 Gel. The slaughtered cows/processed meat is sold in Tbilisi based warehouse, which is located in Agladze st. #32 in Tbilisi.and in Navtlugi agrarian market.	Contact Person: Valeri Kakauridze Mob: E-mail: N/A
Nisha LTD	Slaughterhouse operates in Gardabani and provides only cattle slaughtering service for Gardabani municipality: Gachiani, Gamarjveba villages. It slaughters about 120 cattle (The cost of one service is 35 Gel) and 100 Sheep (The cost of service is 10 Gel) per month. The slaughterhouse has got the temporary recognition form August, 2017.	Contact Person: Vasil Orjonikidze Mob: E-Mail: N/A
LTD Shula +meat products	Marneuli, Shulaveri village - The slaughterhouse provides cattle slaughtering services for Shulaveri Village based meat shop owners. It is slaughtering about 100 cattle per month. The cost of one service is 50 Gel, which includes delivery of meat o meat shop. The processed meat is sold in local meat shops based in Shulaveri village. The leather, processed in brine by the meat processor is sold in 1.70 Gel/kg to the private company, which is collecting and exporting cattle leather to Turkey	Contact Person: Zaza Chokhonelidze-owner Mob: E-mail:
Cooperative Ramazani	Slaughterhouse is located in Gardabani and provides slaughtering service for farmers from Nazarlo and Kesalo Villages. On average 300-600 cattle is slaughtered per months. The fee for service is 40 GEL	Contact Person: lashar Pashaevi Mob: E-mail: N/A

Zurab Somkhishvili	Tetritskaro - The slaughterhouse provides cattle slaughtering services for farmers living in Kakheti, Samtskhe-Javakheti regions and Tsalka municipality. It is slaughtering about 150 - 300 cattle monthly. The cost of one service is 30 Gel. The processed meat is sold in Tbilisi meat shops and agrarian markets.	Contact Person: Zurab Somkhishvili Mob: E-mail:
LTD Ori Gio	Slaughterhouse is located in Keda municipality, Kokotauri village and provides only cattle slaughtering service for farmers living in Gorjomi, Agara, Satsikhuri, Didajara communities. The cost of one service is 0.40 Gel per kg/cattle, from which 80% is paid by municipality of Khulo and 20% by farmer; it is funded by Livestock Support Program. On average 200 heads of cattle are slaughtered monthly. It participated in the tender to supply processed meat to kindergartens in Keda, Khulo and Shuakhevi villages. The processed meat is sold in Batumi meat shops and agrarian market. The processed leather is exported to Turkey by the private company, which pays 0.80 Gel, sometimes 1 Gel per kg.	Contact Person: Temuri Beridze- Director Mob: E-mail: N/A
Nika LTD	Tsnori, Kakheti – The slaughterhouse has been in operation since 2012. Currently it provides 150 slaughtering services of cattle and pigs per month, service fee 30-35 Gel. Slaughterhouse is serving Tsnori and Bodbiskhevi villages, 5 meat shops in total. The leather is sold to Turkish company Starleather Ltd for 1.6 GEL per Kg	Contact Person: Lia Bagalishvili Director Mob: E-mail:
Khortskombinati 2016 LTD	Slaughterhouse was established in 2016 and is located in Khashuri, Shida Kartli. Currently it is slaughtering 200-300 cows monthly; service fee is 25 Gel per service. Slaughtered cattle are sold to Khashuri agrarian market and small meat shops in Khashuri and Tbilisi. the leather is sold to Turkish company, 1.30 Gel/kg	Contact Person: Gela Gelashvili Mob: E-mail:
Niko Beridze	Owns Slaughterhouses in Aspindza, Akhaltsikhe and Natakhtari. Currently operates only one slaughterhouse in Aspindza the remaining two are temporary stopped. Fee for slaughtering service is 20 GEL. Around 20 heads of livestock are slaughtered per day.	Contact Person: Niko Beridze- owner Mob:
Food Processors		
Nikora LTD	Nikora LTD produces up to 500 kinds of products including processed meat products. Company has its own retail stores and distribution chain. Company has processing plant in Poti and a representative office for the distribution network in Imereti.	Contact Person: Merab Mamulashvili Phone: Mob: E-mail:
LTD Lider Food	Liderfood produces up to 100 types of meat products: boiled sausages, sausages, cold cuts and sauces. Tönnies' is a German company supplying Liderfood with raw materials, moreover it is considered as one of the largest suppliers of Europe and developed countries.	Contact Person: Ilia Vazagashvili Phone: Mob: E-mail:N/A

LTD "Deutscher Metzger 2010"	LTD "Deutscher Metzger 2010 was founded by Georgian and international technology in 2010. It produces more then 20, 100% natural varieties of meat products. And distributes it over the whole Georgia.	Contact Person: Giorgi Jangidze- Director Phone: Mob:
Retail Sellers		
Goodwill	'GOODWILL''- The first hypermarket chain in Georgia. Providing wide range of products through its retail stores and exercising continuous control over the quality of products GOODWILL is one of the biggest importers of German, Holland, Italian, French, Bulgarian and Ukrainian food and non-food products in Georgia. Up to 70 different variety of meat products are sold in Goodwill Chain.	Contact Person: David Rusia Commercial Director Phone: Mob:
JSC "Food mart"	Foodmart was founded in 2013. Nowadays it is presented by two brands - "Foodmart" and "Ioli Gastronomy". Company has 51 trading shops presented in Tbilisi, Batumi and Kutaisi. Foodmart has more than 1000 employees	Contact Person: Archil Gegenava- Director Mob: E-mail:
LTD Satrapezo	LTD Satrapezo (LTD Shinhoffer before) was founded in 2005. The company has its own warehousing, distribution infrastructure, processing plant and delicacy specialised market "Loidl". Meat products imported by company represent 20 % of market volume.	Contact Person: Mikheil Okujava- Director Phone: Mob: E-mail:
Nikora Trade LTD	Nikora LTD produces up to 500 kinds of products including processed meat products. Company has its own retail stores and distribution chain. "Nikora" owns more than 280 retailing units of "Nugeshi", "Libre" and "Sunday" and the number of employees of the company is more than 6000.	Contact Person: Merab Mamulashvili Phone: Mob:
Carrefour	Carrefour opened its first hypermarket in Georgia in 2012, and currently has 13 stores in different districts of Tbilisi and one large store in Batumi	Phone:
Belaruski	Belaruski is a retail shop chain with 5 shops presented in Tbilisi. The company appeared on Georgian market in 2016 and since it has extended its stores.	Mob: E-mail:
Blauenstein Georgia	Blauenstein Georgia was established with Swiss investment and operates in Oni municipality, Racha region. Blauenstein holds high productive Swiss cattle breeds and produces raw milk and beef products. Blauenstein has its branded shop in Tbilisi and plans to extend its chain and add three more shops in Tbilisi, Kutaisi and Batumi,	Contact Person: Tatia Arabidze Director Mob: E-mail:
Online store Soplidan.ge	Soplidan.ge is an online store that offers delivery of agricultural products produced by rural farms.	Web site:
Producers/suppliers of anim	al feed and veterinary preparations	
Invet LTD	Company Invet was established in 2001 and provides import and realization of the latest European standards veterinary products. Invet offers its	Contact Person: Nikoloz Bibilashvili- Director Mob:

	customers wide range of products including: antibacterial, anti-inflammatory, vaccines, vitamins, minerals, disinfectants, feed additives, pet production, balanced food for poultry and livestock. In 2006-2010 years number of European partners had increased and Invet became an exclusive representative of several global, leading veterinary companies, including Ceva (France), Interchemie (Netherlands), Biochek (Netherlands), Biomin (Austria), Hipra (Spain) and others. In 2014 Company made diversification of its activities and was originated as "Invet Group", which combines the following directions: • "Invet Product" (Veterinary products) • "Invet Service" (Veterinary service/modern technologies)	Email:
	"Invet Feed" (Feed additives/compound food) "Invet Zoo" (Pet products and service) Today the company owns 8 branches and 3	
	warehouses in regions of Georgia, one head office in Tbilisi and distribution network covering the whole country	
Nutrimax LTD	LTD Nutrimax was established in 2009 and produces animal and poultry feed. Company's purpose is to provide farmers with high-quality animal and poultry feed, feed supplements and modern feeding methods. Company's annual output of animal, poultry and fish feed reaches approximately 50,000 tons. The company offers to farmers complete feed, as well as the best quality premixes and concentrates for the effective growth of agriculture livestock. Farmers are provided with free consultations, in order to maintain and even improve farming standards.	Contact Person : Beqa Beqaia Managing Partner Mob: E-mail:
Roki LTD	Roki LTD was established in 2006 (Till 2011 organization's name was "Agromix") and successfully operates on Georgian veterinary Market. "ROKI" provides full spectrum of preparations, vaccines and serums, food and food supplements, accessories and subjects for care. It has a distribution network operating in accordance with high standards.	Web-site : Phone:
Geo Vet	Geovet appeared on Georgian market in 2013. It is concentrated on veterinary pharmacy, import and realisation of veterinary medicine.	Web-site: <u>www.geovet.ge</u> Mob: E-mail:
Rolandi Meladze	Roland owns shops chain and supplied animal feed and veterinary medicaments to the market. Currently he owns 4 shops which are located in Kareli, Khashuri and Igoeti. Roland imports concentrated feed and veterinary drugs from Hungary and sell to local market. In addition, Roland	Contact Person: Rolandi Meladze- owner Mob:

Artificial Insemination Servi	has hired veterinarian which provides veterinary consultancy service to local farmers. Roland plans to expand its business in nearest future and open shops in Kakheti region as well. Ce Providers	
Caucasus Genetics	Caucasus Genetics is the main provider in the sphere of livestock farming, farm equipment provision, milk and meat processing, livestock breeds supply and artificial insemination in the country. The company provides following services: • Development and implementation of projects and concepts of modern type farms of cattle, pig and poultry breeding; • Import of highly productive milk and meat cattle, pig and goat breeds from Europe; • Development of animal feed minerals (feed supplements) feed manufacturing technologies and balanced feed ration; • Artificial insemination in cattle and pig farming – distribution of cattle and pig semen and embryo materials and follow on service provision; • Equipment, projection, and montage of livestock breeding farms (cattle, pig and poultry farming); • Production lines, projections, engineering and consulting services for meat and milk processing; • Consultations and training programs provision;	Contact Person: Dimitri Kvirikashvili Manager Mob: E-mail: Web-site:
Farmer Associations	The association is a union of commercial dairy farms	Contact Person: Merab
Georgian dairy production Association	that manage their business with modern methods and have relevant infrastructure for this. Farmers can join the association if they satisfy criteria provided by the association. It aims to help the dairy farmers to develop their business.	Chkhartishvili, Director of Association Mob:
Georgian Animal breeders Association	Association aims to support development of local breeds and improve productivity of livestock	George Khatiashvili, Director of Association Mob: Email:
Georgian Farmers association	The Georgian Farmers' Association (GFA) was founded in 2012 and is a non-commercial, non-for-profit legal entity. Currently, the organization unites about 4,000 farmers across Georgia. The Association acts as a facilitator between the government and farmers. GFA actions and initiatives are implemented in line with its mandate adopted by its members. GFA works effectively with government agencies, contributed to the preparation of the Agricultural Development Strategy and participates	Contact Person: Nino Zabakhidze Director of Association Mob:

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	in policy-making processes. The Association is a member of various governmental and nongovernmental boards, such as the Georgian Chamber of Commerce and Industry (GCCI) and the Georgian Alliance for Agriculture and Rural Development (GAARD).	
Veterinars' Regional Association of Georgia	Was established in 2010 within the framework of the USDA's Animal Health Program. The aim of the association is to support private veterinary development and animal health improvement. Association unites veterinarians from all regions of Georgia. Establishment and development of the professional veterinary associations were initially started in four regions of Georgia - Samegrelo-Zemo Svaneti, Samtskhe-Javakheti, Shida Kartli and Kakheti. Later, Adjara, Imereti and Kvemo Kartli regions were added. Association conducts following activities: Prepares Research and Needs Assessment Studies Conducts Educational and Training Prorgammes Support popularization of veterinary field and professional development Provides consultancy to local farmers about veterinary services	Web-site: www.veterinaria.ge Mob:
Farmer of the future	Was established in 2007 with the aim to support of adoption of innovation and technology in the agriculture. Organization has members in all regions of Georgia. Association unites professional vets, scientists and farmers. Association provides following services and activities: Provides assistance to adopt modern technologies and standards in production and sales Provides assistance to communicate with financial institutions and international organization to obtain funds Provides marketing consultancy Conducts educational activity and shares experience about best farming practice Provides assistance to establish modern cattle-breeding technologies	Contact Person: Rusudan Gigashvili Head of the association Mob: E-mail:
CSOs and Donor Funded Programs		
Mercy Corps	Mercy Corps implements various projects in Georgia to support development of agriculture and strengthening capacity of local farmers to get acquainted with modern technologies and produce high quality products. Mercy Corps with the support of ENPARD program implemented various development project in 21 Municipalities of Georgia.	Contact Person: Lika Marghania Mob: E-mail: Website:

	Mercy Corps is headquartered in Tbilisi and has 7 regional offices in GEorgia	
IFAD	IFAD supports Georgia to reduce rural poverty by implementing target oriented programs. IFAD's country strategy programme (COSOP) is fully aligned with the strategies of the Government of Georgia. promoting investments by smallholder farmers and agribusiness to foster competitive climate-smart value chains; Currently IFAD in cooperation with MEPA implements AMMAR projects aimed to support investment in agriculture, support development of infrastructure and enhance production value chain. The total budget of program is 30.8 million USD. In addition IFAD started to implement MIDDA project which is targeted to development of dairy industry in Georgia. The total budget of the program is 53 million USD.	Contact Person (for AMMAR project): Lali Durmishidze E-mail:
DANIDA	The program supporting young entrepreneurs in rural area, - "Young Entrepreneur" is implemented by APMA with the funding of DANIDA. Program provides co-financing of agricultural projects, including establishment of farms holding high-production cattle breeds, processing factories, storage facilities and other agricultural project.	Website: http://danida.apma.ge/Phone:
CNFA	CNFA is USAID funded project operating almost 13 years in Georgia and supporting development of local agricultural industry. CNFA supports improvements across existing input and service networks—from village-level agro-dealers, regional wholesalers, as well as major input manufacturers and distributors—and facilitates investments in business expansions and startups.	Contact:
USAID ZRDA Acitvity	USAID ZRDA Activity in Georgia targets to development of Tourism and Agriculture sector. The goal of the program is to support productivity and income growth among small rural households. Program targets to three priority areas: vegetables, fruits (berries and orchard fruits), and bee products.	Website: <u>www.zrda.georgianeo.ge</u> Phone: