## Poultry Sector in Georgia

## Sector Snapshots

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The poultry sector in Georgia enjoyed stable growth between 2007 and 2020 (i.e. since the global outbreak of bird flu had abated in 2006). The sector is the only agricultural sector to contribute VAT payments to the Georgian economy. The sector, as well as most other sectors of the economy, has been affected by the country's move toward approximation with European standards, especially in recent years. In this issue, which is largely based on our "Poultry Cluster Diagnostic Study in Kvemo Kartli Region", we provide a snapshot of the poultry production sector in Georgia, by overviewing recent developments, challenges, and key opportunities therein.

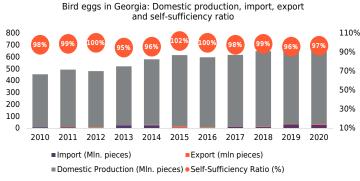
The two main focuses of poultry companies in Georgia are producing chicken meat and chicken eggs. In terms of poultry meat, Georgia is highly dependent on imports to meet domestic demand: in 2019, Georgia's self-sufficiency ratio (SSR)<sup>2</sup> for poultry meat amounted to 31%. However, this figure has been growing over the last decade or so, mainly due to the growth in the domestic production of poultry meat. Still, as more than two-thirds of demand is satisfied by imports, there is strong potential for import substitution in the sector.

While exports of poultry meat were relatively minuscule until 2015, in 2016 this increased significantly and more or less maintained that elevated level until 2020.

Poultry and Poultry meat in Georgia: Domestic production, import, export and self-sufficiency ratio 110% 90% 60 70% 40 50% 20 30% 10% 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 ■Domestic Production (Ths tones) ■Import (Ths tones) • Self-Sufficiency Ratio (%) Export (ths tones)

Source: Agriculture of Georgia reports by National Statistics Office of Georgia

The leading export markets for Georgian poultry meat include Kazakhstan (47.5% of total exports in 2015-2020), Azerbaijan, Armenia, and Turkmenistan. In terms of imports, the key import partners include Turkey, Ukraine, Brazil, the United States, and China. Meanwhile, Georgia imports high amounts of live poultry from Hungary and the Netherlands.



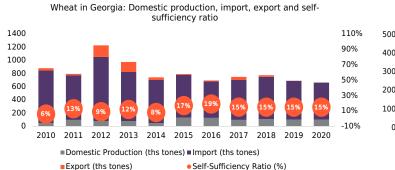
Source: Agriculture of Georgia reports by National Statistics Office of Georgia

In terms of chicken eggs, Georgia has a high level of self-sufficiency, as is demonstrated by an average SSR of 98% over 2010-2020. Exports and imports in this regard are both unremarkable, highlighting the potential for the sector to do more than meet the national need and to focus more on exports as well.

Chicken eggs from Georgia are mostly exported to Azerbaijan (74.2% of total exports in 2015-2020), Iraq, and Armenia. However, a lack of economies of scale is a major issue for the country's exporting of chicken eggs, and companies have to cooperate with each other to accommodate demands from abroad. Moreover, the presence of economies of scale in other countries makes it harder for Georgian egg companies to compete. The import of eggs is minuscule, with the top three importers including Turkey, Ukraine, and Bulgaria.

One of the most pressing challenges faced by the poultry sector in Georgia is its high dependence on imported inputs. The SSR of wheat, one of the most vital ingredients in poultry feed, amounted to just 15% in 2020, and the highest value for this indicator over the past decade was 19% in 2016. Moreover, over 80% of wheat imports were attributed to Russia each year over the period of 2015-2020, with Kazakhstan serving as the only major substitute. The problem for Georgia is likely to be exacerbated, given the export tax on wheat that was imposed by the Russian government in December 2020<sup>3</sup>. This issue makes the sector vulnerable to exchange rate fluctuations, with the depreciation of the GEL negatively affecting the cost structure of firms. In addition, due to the high dependence on inputs, the sector is unable to increase its international competitiveness when the national currency depreciates.

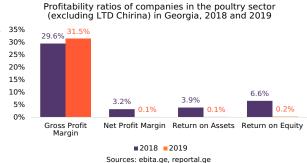
Corn is another major ingredient in poultry feed. While corn has a higher SSR compared to wheat, amounting to 68% in 2020, it is worth emphasizing that the ratio has experienced a sharp declining trend since 2012, when the SSR stood at 100%. Russia again plays a major role here, albeit not as prominently as in the case of wheat, with its share in corn imports averaging 80% over the period of 2015-2020. Ukraine and Turkey, as well as Austria are also important with regard to corn import.



Corn in Georgia: Domestic production, import, export and selfsufficiency ratio 110% 500 90% 400 70% 300 50% 200 30% 100 10% -10% 0 2012 2013 2014 2015 2016 2017 2018 2019 2020 2010 2011 ■Domestic Production (ths tones) ■Import (ths tones) Export (ths tones) Self-Sufficiency Ratio (%)

Source: Agriculture of Georgia reports by National Statistics Office of Georgia

The Georgian poultry sector consists of one large enterprise (LTD Chirina), as well as a number of medium and small enterprises. LTD Chirina stands out for its quality, diversified products<sup>4</sup>, export capacity<sup>5</sup>, circular business model, and the existence of its own laboratory. Still, it was not profitable in both 2018 and 2019, with its cost of goods sold being higher than its revenue (implying a negative gross margin). This could be largely attributed to large depreciation costs related to production. An 10% analysis of the profitability of the companies<sup>6</sup> (with LTD Chirina excluded from the analysis) for 2018 and 2019 is presented on the graph on the right. The data necessary for the conducting of the analysis have been provided by **EBIT Group**, a financial consulting company<sup>8</sup>.



The feed conversion ratio (FCR) is one of the key indicators measuring the productivity of the poultry sector. The FCR is equal to kg of feed consumed/kg of produced poultry products8. The lower ratio indicates a higher productivity and/or a higher quality of feed. The estimated FCR in Georgia (Kvemo Kartli) is 1.75-1.8, which is quite comparable to the FCR of some EU member states9. It is worth noting that when compared to those EU member states, Georgia has the highest estimated cost of combined feed (as measured in Euros per 100 kg), which could be attributed to the high import-dependence of key feed inputs. Based on the estimations based on the FCR, as well as farm gate and consumer prices, the margin for poultry meat is equal to 31.2%, while for eggs it eguals 12.7%.

In the table below, various apportunities for development in the poultry sector in Georgia are listed and described.

Business Opportunities for the Development of the Poultry Sector in Georgia						
Potential for increased domestic production	<ul> <li>Potential to substitute imported poultry meat with domestic poultry meat.</li> <li>Potential to substitute imported wheat with domestic wheat. Setting up a permanent storage facilit wheat in Georgia would help considerably here.</li> <li>Potential to substitute imported Turkish day-old chicks with domestic day-old chicks. Currently, it so that trust in the quality of domestic products is a major issue.</li> </ul>					
Export potential	- Potential to export eggs to neighboring countries and the Middle East. While currently export procedures are claimed to be one of the obstacles hindering the export to the EU and other markets, the establishment of both the DCFTA and the FTA with China represents an opportunity in the medium and long term.					
Product diversification potential	<ul> <li>Potential to diversify production by introducing other poultry (e.g. turkey or duck).</li> <li>Potential to diversify production by introducing a greater variety of value-added products (e.g. pate and sausages)<sup>4</sup>.</li> <li>Potential to diversify production by producing organic eggs and poultry meat.</li> </ul>					
Potential for circular business model	- Potential to utilize by-products in the production of organic manure and heating means.					
Potential for technological upgrade	- Utilization of more up-to-date technologies would support the development of the sector (for instance, utilizing hydroponics for poultry could serve as a potential alternative to traditional poultry feed).					
Potential for cross-sectoral linkages	<ul> <li>- Potential to utilize domestic bacteriophages (phages) as an alternative to antibiotics in poultry farming. This method could surpass traditional antibiotics as phages can potentially eliminate even antibiotic-resistant bacteria. Cooperation between the two sectors has already commenced, with BioChimPharm having received assistance of US\$150,000 from the EU and the FAO for producing veterinary phages<sup>10</sup>. The linkage provides an import opportunity via substituting domestic phages with imported antibiotics.</li> <li>- Potential to utilize Georgian fishmeal, which has been identified as a significant factor in combined animal feed, as a protein source ingredient in poultry feed<sup>11</sup>. With a high share of protein in Georgian fishmeal (75%), as well as an adequate quantity of all essential amino acids required by chicken and a great source of methionine and lysine27, there would be possible nutritional benefits of linking the fish processing and poultry sectors in Georgia. This linkage would provide an import substitution opportunity, namely by substituting a proportion of the imported poultry feed by domestically produced fishmeal.</li> <li>- Potential for fostering linkages of the industry with higher and vocational education institutions.</li> </ul>					

In sum, there are a few key areas where the poultry sector has potential to increase its competitiveness. Investing in exploiting the listed opportunities would contribute positively to the sector's profitability and its overall development in the medium and long term.

- 1 The study was conducted for United Nations Industrial Development Organization (UNIDO) under "EU Innovative Action for Private Sector Competitiveness in Georgia (EU IPSC)".

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  2 The self-sufficiency ratio (SSR) is defined as: SSR = production x 100/(production + imports exports). It is widely used in the context of food security.

  3 https://www.reuters.com/article/chirina-yoveltvlurad-somxetshi-200-250-tona-xorcis-eqsports-vaxorcielebt/89852/

  5 https://bm.ge/ka/article/chirina-yoveltvlurad-somxetshi-200-250-tona-xorcis-eqsports-vaxorcielebt/89852/

  6 The analysis is based on audited financial statements on reportal.ge. While this analysis does not allow to capture the whole market, it is aimed to provide a general idea of the situation in the sector. In this particular case, financial statements of 8 poultry companies were analyzed.

  7 EBIT Group processed the financial statements of Georgian companies and conducted an analysis which is available on the investment-analytical platform ebita.ge.

  8 For instance, if a broiler weights 4 kg, and its FCR is 1.5, it means that the broiler has consumed 6 kg of combined food. Essentially, the ratio measures live bird's ability to convert feed and nutrients into a certain amount of poultry meat and egg yield.

  9 Netherlands, Germany, UK, Denmark, France, Italy, Spain, Poland;

  10 https://biochimpharm.ge/news/evrokavshirisa-da-faos-mxardacherit/

  11 PMC RC (for UNIDO) Marine Fishing Cluster Diagnostic Study in Samegrelo-Zemo Svaneti Region, 2020

Basic Economic Indicators	2016	2017	2018	2019	2020
Nominal GDP (mln USD)	15 141.7	16 248.5	17 596.6	17,470.7	15,888.1*
GDP per Capita (USD)	4 062.1	4 358.5	4 722.0	4 696.2	4 274.6*
GDP Real Growth (%)	2.9%	4.8%	4.8%	5.0%	-6.2%*
Inflation	2.1%	6.0%	2.6%	4.9%	5.2%
FDI (mln USD)	1 652.6	1 978.3	1 306.3	1 310.8	616.9*
Unemployment Rate (%)	21.7%	21.6%	19.2%	17.6%	18.5%
External Debt (mln USD)	4 515.7	5 177.4	5 434.0	5 741.0	7 535.2
Poverty Rate (relative)	21.7	22.3%	20.5%	20.1%	-

\*preliminary data