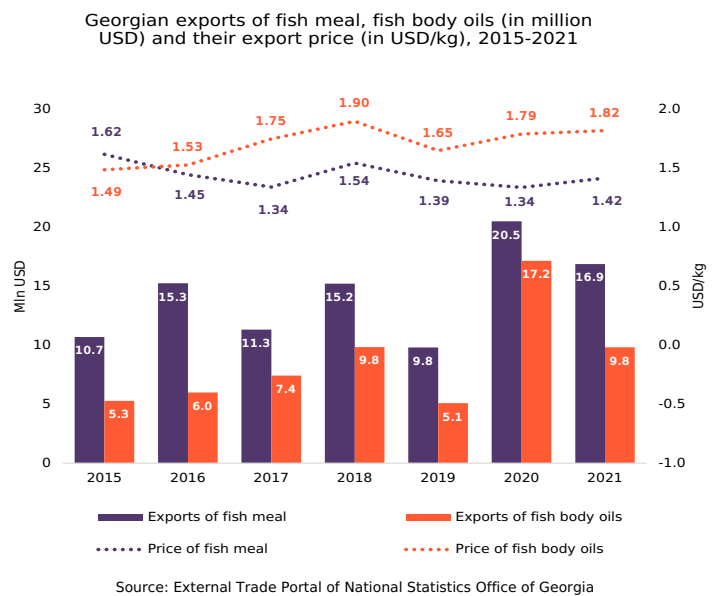


The marine fishing cluster in Georgia is mainly based in Poti in the Samegrelo-Zemo Svaneti region. The primary activity for companies therein is fishing in the Black Sea. The main local actors include five fish License Holder Companies (LHCs) engaged in fish processing, who account for 88% of the total annual fish catch quota set by the National Environmental Agency (NEA), and approximately 15 small-scale marine fishing companies (SMFCs) possessing 30-35 vessels and engaging mostly in fishing (making up 12% of total annual fish catch quota). In addition, Turkish fishing seiners are commonly hired by Georgian processing facilities to catch fish in the Black Sea. It is also worth noting that marine fishing activities are characterized by significant seasonality¹.

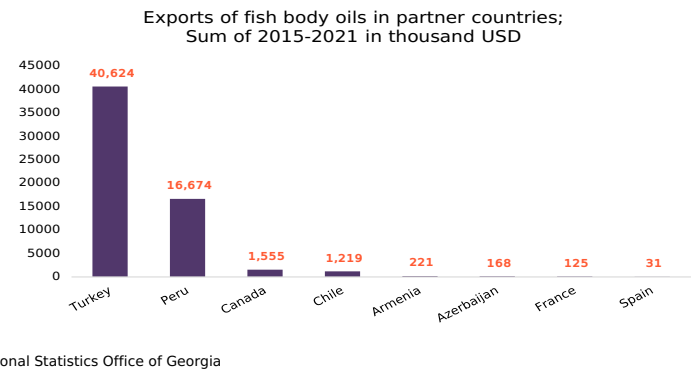
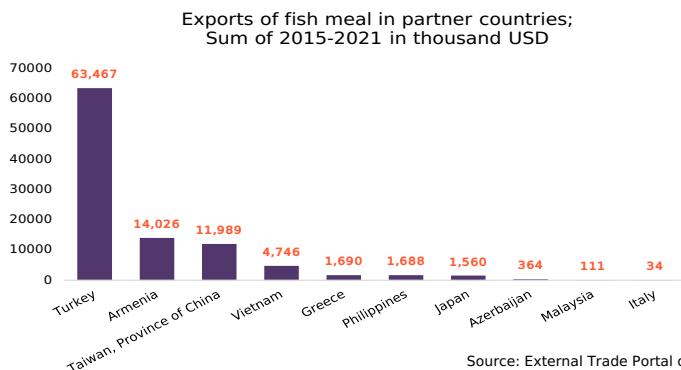
The main variety of targeted fish is the European anchovy, representing approximately 95% of the total fish captured. Some SMFCs bring small quantities of captured fish to their facilities for primary production, however the vast majority of captured fish are processed through complex production processes carried out by 5 LHCs in plants located in Poti, most of which transform raw fish into fish meal and oil which is later traded on export markets. An absolute majority of the processed fish sales are to Turkey with only a minor share going to the EU market and other nearby countries. From 2017, Georgia has consistently ranked 2nd after Turkey among Black Sea states in terms of European anchovy catch².

The exports of fish meal and fish body oils are the main fish products exported from Georgia, with the exports of fresh or chilled fish minuscule by comparison. The exports of fish meal and fish body oils from Georgia, on average, increased throughout the period of 2015-2021. In particular, the exports of fish body oils showed a significant increase with a compound annual growth rate (CAGR) of 9.3%, while the exports of fish meal returned a CAGR of 6.7%. However, it must be noted that the growth in exports of fish meal was not linear, and some fluctuations were noted throughout the reporting period, with exports reaching a period minimum of USD 9.8 mln in 2019.

Meanwhile, the exports of fish body oils reported a relatively stable increase throughout the period of 2015-2018. However, exports dropped by 48.3% in 2019 compared to 2018, reaching a period minimum of USD 5.1 mln. In 2020, exports of both types of fish goods increased significantly, reaching the USD 20.5 mln for fish meal (a 109.1% YoY increase) and USD 17.2 mln for fish body oils (a 236.9% YoY increase). In 2021, exports dropped again, but not below pre-2020 levels for both products. Part of this increase in 2020 could be attributed to the Enterprise Georgia (EG) program designed to stimulate the marine fishing sector.



Considering the increasing trends in the export of both goods, it is worth analyzing how prices changed over the course of 2015-2021. The average export price for fish meal fluctuated between USD 1.3/kg and USD 1.6/kg over 2015-2021, while for fish body oils the corresponding range was USD 1.5/kg to USD 1.9/kg. The price of fish meal reported a negligible decline (with a negative CAGR of 1.9%), while the price of fish body oils, on average, increased throughout the 2015-2021 period (with a CAGR of 2.9%). The price of fish body oils rose steadily, peaking at USD 1.9/kg in 2018, followed by a significant 13.1% YoY drop in 2019 and relative stabilization during 2020-2021. It must also be noted that the increased price of fish body oils did not impact negatively on the volume of exports. Similarly, the decreasing price of fish meal did not directly reflect on the volume of exports positively.



Among partner countries, the largest recipient of fish meal exports from Georgia is Turkey. In particular, throughout the 2015-2021 period, Turkey's share reached 63.7% of total exports. Turkey was followed by Armenia with 14.1% of total exports, and then Taiwan (12%) and Vietnam (4.8%). The share of EU countries (Greece and Italy) in total amounted to just 1.7% of fish meal exports over this period. Similar to the situation for fish meal, the top export destination for Georgian fish body oils was Turkey with 67% of total exports for the 2015-2021 period, followed by Peru (28%) and Canada (3%). The share of EU countries (France and Spain) in total amounted to only 0.3%. However, it must be noted that for both types of fish product, Turkey's share has been decreasing over time and exports, albeit at a low volume, to EU countries have only recently begun (from 2018). It must also be noted that in 2017, the EU included Georgia in a list of 3rd countries permitted to export fish products to the EU market, which represents a major development and opportunity for the sector³.

Challenges of the Marine Fishing Sector in Georgia

The main challenges faced by the marine fishing sector of Georgia were identified by PMC Research Center (PMC RC) in the “Marine Fishing Cluster Diagnostic Study in Samegrelo-Zemo Svaneti Region.”⁴ In particular, the most significant hindering factor for expansion was identified as the renewal of the Georgian vessel fleet. Currently, enterprises mainly deploy outdated, Soviet-era vessels in their operations, which are in acute need of upgrading. When comparing Georgian and Turkish ships and fishery technologies and their capacities, the same amount captured by Georgian seiners for the entire season, could be captured by Turkish seiners in approximately 16 days.

Significant measures have been taken to tackle this pressing challenge. On 20 December 2019, the Government of Georgia (GoG) added “marine fishing” to the priority sectors of the state program “Produce in Georgia,” and in June 2020 it was also added to the state program “Credit-Guarantee Scheme,” making the sector eligible to receive state support as stipulated by those programs. Initially, applicants were not eligible to apply for both preferential loans and the provision of loan collateral within the EG program, however this restriction has been lifted subsequently. As of 2021, the replacement of 13 fishing vessels had already been financed by those programs and approval had been granted for another seven vessels. As of August 2021, the total amount loaned within this program was GEL 46 mln, and 222 new jobs had been created⁵.

Considering the granted access to the EU market and the large extent of development needed in the marine fishing sector in Georgia, various opportunities are listed and described in the table below:

Business Opportunities in the Development of the Marine Fishing Sector in Georgia	
Product diversification	<ul style="list-style-type: none"> - Potential for an increased variety of products, especially by adding high-value-added products (i.e. those for both animal feed and human consumption), making them more qualified for export to the EU market. - Potential to create products for human consumption. - Potential to create products for animal consumption.
Infrastructure development	<ul style="list-style-type: none"> - Potential to establish the offshore/open sea aquaculture industry and the linkage of the marine fishing and aquaculture activities through the use of marine fish meal to feed farmed fish. Some LHCs have plans to expand in the field of aquaculture and to invest in fish farms in the open sea farms, as well as in the inland waters of Georgia. Meanwhile, other investors are also looking at developing open sea farms on the Black Sea coast of Georgia. - Potential to significantly increase capacity through the complete upgrade of the outdated vessel fleet, with the support of the EG programs. - Potential to improve fishing infrastructure through the construction of a dry dock in Poti, the current lack of which is deemed a significant constraint to the industry’s development. - Potential to establish laboratory infrastructure to control the quality of products. - Potential to expand SMFC enterprises through the supply of refrigeration farms.
Improved technologies	<ul style="list-style-type: none"> - Potential to improve fish landing technologies. - Potential to improve access to modern fishing technologies. - Potential to improve safety and quality measures on Georgian seiners.
Improved human capital	<ul style="list-style-type: none"> - Potential to improve the technical and technological knowledge of fishermen through providing accessible professional training in the region. In particular, the opening of the Batumi Marine Academy branch in Poti in 2020 will intensify cooperation between marine fishing companies and educational institutions. This educational establishment will deliver tailored courses for individuals interested in pursuing a career in the marine fishing industry and provide professional development opportunities for existing employees in the sector. - Potential to improve access to technology specialists.
Increased cooperation	<ul style="list-style-type: none"> - Potential for increased cooperation within the sector (especially between SMFCs and LHCs) through the Marine Fishing Cluster recently established by UNIDO. - Potential for capacity development and financing of the Fishermen’s Union, an association of SMFCs, contributing to more active and efficient lobbying of small marine fishing companies and the development of results-oriented cooperation between companies. - Potential to increase the capacity of the Association of Fishing Licensees.
Potential for cross-sectoral linkages	<ul style="list-style-type: none"> - Potential to establish an animal food processing factory in Georgia (potential linkage with the poultry sector) enabling the industry to receive higher value-added fish-derived products, which would eventually result in significantly higher export volumes. In particular, the marine fish processing industry has significant potential with regard to animal feed.

In sum, there are several key areas where the marine fishing sector has the potential to increase its competitiveness. Investing in exploiting the opportunities listed above would contribute positively to the sector’s success on the EU market and its overall development in the medium and long term.

1 European anchovy fishing is characterized by seasonality across the Black Sea coast, where Poti is the most important harbor. The principal period of the marine fishing season in Samegrelo-Zemo Svaneti region lasts for 6 to 7 months, from November to May. There are some fishing activities in summer as well, but not all cluster members engaged in fishing during this period.

2 Source: FAO FishStat Data

3 Source: <https://dcfta.gov.ge/en/news/99/Black+Sea+Fish+and+Fish+Products+Now+Available+for+Export+to+EU+Market>

4 PMC Research Center described both the history and the current reality of the marine fishing cluster in the Samegrelo-Zemo Svaneti region of Georgia, analyzed the business operations within it, developed a cluster map, and elaborated short-term objectives as well as a long-term vision for the development of this cluster. The study is part of the “EU Innovative Action for Private Sector Competitiveness in Georgia (EU IPSC)” program, which is a joint initiative of the European Union and the following four UN agencies: the United Nations Development Programme (UNDP); the Food and Agriculture Organization (FAO); the United Nations Industrial Development Organization (UNIDO); and the International Organization for Migration (IOM).

5 Source: Enterprise Georgia: Press release issued by the GoG in August 2021.

Basic Economic Indicators	2016	2017	2018	2019	2020	2021
GDP per Capita (USD)	4 062.1	4 358.5	4 722.0	4 696.2	4 255.7	5 015.3*
GDP Real Growth (%)	2.9%	4.8%	4.8%	5.0%	-6.8%	10.4%*
Share of Agriculture in GDP (%)	8.3%	7.2%	7.8%	7.4%	8.3%	-
Inflation	2.1%	6.0%	2.6%	4.9%	5.2%	9.6%
Producer Price Index	-0.1%	11.0%	6.1%	7.2%	8.6%	16.7%
Unemployment Rate (%)	21.7%	21.6%	19.2%	17.6%	18.5%	20.6%
FDI (mln USD)	300.6	535.4	212.4	373.8	-134.2	411.3*
External Trade Turnover	9 459.0	10 802.9	12 741.5	13 317.6	11 396.3	14 326.8

*preliminary data



DISCLAIMER

PUBLICATIONS presented on the website are prepared by PMC Research Center only for informational and/or marketing purposes. Nothing in the PUBLICATIONS constitute, or is meant to constitute, advice of any kind, and the reader is responsible for their interpretation of all content and acknowledges that any reliance thereupon shall be entirely at their risk. PMC Research Center cannot be held liable for any claims arising as a result of the reader's use of the materials.

The PUBLICATION is presented "as is" without any representations or warranties, expressed or implied.

Without prejudice to the general message of the first paragraph above, PMC Research Center does not guarantee that:

- o the PUBLICATION will be constantly available; or
- o the information contained in the PUBLICATION is complete, true, accurate, or non-misleading.

PMC Research Center reserves the right to modify the contents of PUBLICATIONS from time to time as it deems appropriate.

PMC Research Center absolves itself of any liability of violations of other parties' rights, or any damage incurred as a consequence of using and applying any of the contents of PMC Research Center's PUBLICATIONS. PMC Research Center will not be liable to the reader (whether under contract law, tort law, or otherwise) in relation to the contents of, use of, or other form of connection with, the PUBLICATION.

The reader accepts that, as a limited liability entity, PMC Research Center has an interest in limiting the personal liability of its officers and employees. The reader agrees that they will not bring any claim personally against PMC Research Center's officers or employees with respect to any losses suffered by the reader in connection with the PUBLICATION.

The reader agrees that the limitations of guarantees and liabilities set out in the PUBLICATION disclaimer protect PMC Research Center's researchers, officers, employees, agents, subsidiaries, successors, assignees, and sub-contractors as well as PMC Research Center itself.

If any provision of this disclaimer is, or is found to be, unenforceable under applicable law, that will not affect the enforceability of the other provisions of the PUBLICATION disclaimer.

Giorgi Khishtovani
Research Director
g.khishtovani@pmcginternational.com

Nika Kapanadze
Researcher
n.kapanadze@pmcginternational.com

Sopho Basilidze
Researcher
s.basilidze@pmcginternational.com

Nana Kajaia
Research Assistant
n.kajaia@pmcginternational.com