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International Diversification of Agricultural Trade of Armenia, Azerbaijan and Georgia

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Abstract

This paper describes the structure and development of agricultural trade of Armenia, Azerbaijan, and Georgia in the period 2002–2018. Despite different directions of economic integration followed by these countries, the CIS and Russia in particular have been major trade partners for all South Caucasus countries. Compared to its neighbors, Georgia is relatively less dependent on the Russian market, whereas Azerbaijan's trade dependency on Russia is the highest among the three countries. Moreover, Azerbaijan has the lowest trade diversification level compared to its neighbors. While the share of the EU in agricultural export is moderate for all three countries, this share is highest for Georgia. Increased diversification of agricultural trade would contribute to the stable development of these countries, by reducing their vulnerability to various external shocks as well as upgrading their food systems.

Introduction

Independence after the end of the Soviet Union has transformed the agricultural value chains of Armenia, Azerbaijan, and Georgia, including patterns of their agricultural trade. The three countries have started to explore new trade partners. A better integration with Western economies may contribute to modernizing agricultural value chains (e.g., upgrading food production standards) of the South Caucasus countries, leading to more efficient food systems and better export performance. Further, the diversification of agricultural trade is important for reducing countries' vulnerability to external shocks.

This paper analyses the structure and development of agricultural trade of Armenia, Azerbaijan, and Georgia in the period 2002–2018. The first section provides an overview of the features of agricultural trade of Armenia, Azerbaijan and Georgia, focusing on developments in size and composition of agricultural trade and main trade partners. The second section calculates trade diversification indices and outlines the importance of Russia in agricultural trade of the South Caucasus countries. The final section summarizes main findings and provides concluding remarks.

Characteristics of Agricultural Trade

Armenia

Before the collapse of the Soviet Union, agriculture was responsible for less than 20% of total employment in Armenia. The importance of agriculture increased after independence, and the sector contributed around 30% of total GDP and employed 40% of the country's total workforce in the 1990s (Millns 2013). Agriculture is still a significant contributor to economic output in Armenia, as it accounted for 13.7% of total GDP and around 30% of employment in 2018 (World Bank 2020).

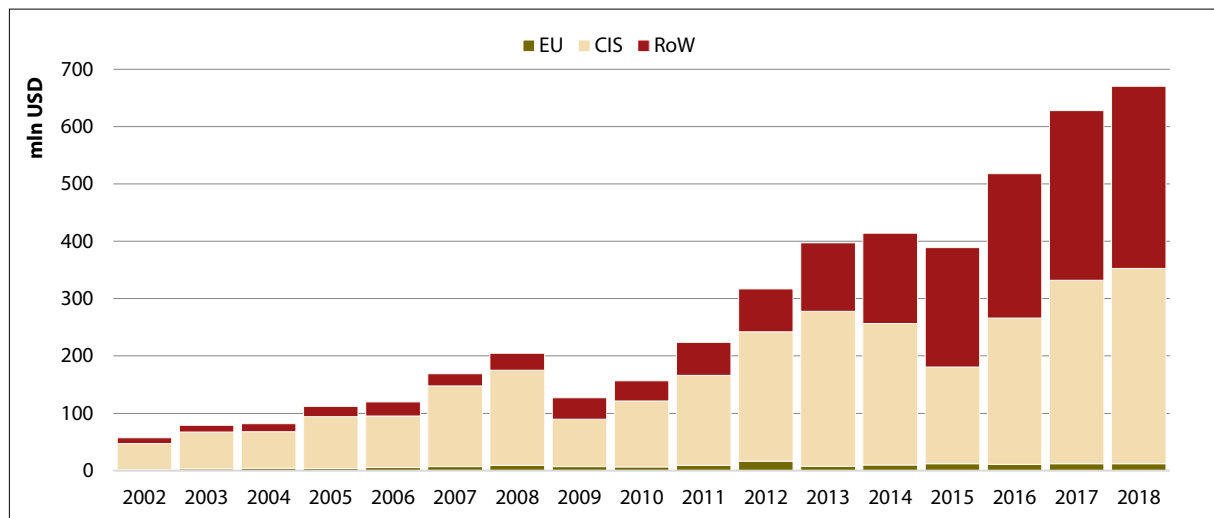
The country is characterized by a liberal foreign trade policy, with relatively low tariffs. Since 2015, Armenia has been a member of the Eurasian Economic Union (EAEU). This membership increased Armenia's average applied tariffs from 2.7% in 2009 to 7.5% in 2018 (WTO 2018). Armenia has Free Trade Agreements (FTAs) with member countries of the Commonwealth of Independent States (CIS) as well as with Iran. In 2017, Armenia and the European Union signed the Comprehensive and Enhanced Economic Partnership Agreement (CEPA), aiming at strengthening economic and political partnership between the two.

Armenia had a negative trade balance for agricultural products during the period 2002–2018 (Trademap 2020). Agricultural exports increased in value more than elevenfold, from \$57 million in 2002 to almost \$671 in 2018 (Figure 1). However, in 2009 the total agricultural exports dropped by 38% compared to 2008. In 2009 Armenia faced a severe economic recession, with GDP declining more than 14% due to the Global Financial Crisis (FAO 2009). The recovery was hindered by severe drought in 2010, which caused a significant decline in agricultural GDP (by 15.9%). The agricultural sector managed to recover after this period and has grown steadily since, with an average annual growth of 10% from 2011–2015 (Christensen 2017).

CIS countries are the largest consumers of Armenia's agricultural exports, but their proportion has been steadily decreasing, from 78% in 2002 to 51% in 2018 (Figure 1). In 2009, Georgia, which is one Armenia's main export partners, left CIS, which led to decreased share of CIS countries as a proportion of Armenia's agricultural exports, from 81% to 65%.¹ Another big decrease in share of Armenian agricultural exports bound for CIS countries was observed in 2015, when the corresponding share decreased from 60% to 43%, reflecting a 32% decrease in exports to Russian Federation. This can be explained by the one-year restrictions on imports of agricultural goods imposed by the Russian Federation in 2014 (President of Russia 2020)² as well as the strong devaluation of the Russian Ruble in 2014–2015.

During the period 2002–2018, the EU's share in Armenia's export was stable, but very moderate and constituted on average only 2–6% of total agricultural exports (Figure 1).

Figure 1: Agricultural Exports of Armenia



%	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
EU	4%	4%	5%	3%	5%	4%	5%	6%	4%	4%	5%	2%	2%	3%	2%	2%	2%
CIS	78%	81%	78%	81%	75%	83%	81%	65%	73%	70%	71%	68%	60%	43%	49%	51%	51%
RoW	18%	15%	17%	16%	20%	13%	14%	30%	23%	26%	24%	30%	38%	54%	49%	47%	47%

Source: Trademap, 2020

The composition of top import and export partners did not change significantly in 2002–2018. Russia remains Armenia's largest trade partner, importing 49% of total Armenian agricultural exports in 2018. As for the top five export partners of Armenia in 2018, Russia is followed by Iraq (22%), Syria (8%), the United Arab Emirates (5%), and Georgia (4%).

Azerbaijan

Prior to the end of the nineteenth century Azerbaijan was a primarily agrarian economy (CESD 2014). However, after discovering its rich natural resources, the country evolved from its agrarian economy into one of the world's major exporters of oil and gas (CESD 2014). Frequent volatility in oil prices affected the country's strategic vision, and current state policies are directed towards export diversification and strengthening domestic agricultural production to eventually supplant food imports (Berkum 2017). In 2018, agriculture accounted for 5.2% of GDP and 36% of employment (World Bank 2020).

During 2002–2018, Azerbaijan had a negative agricultural trade balance (Trademap 2020). CIS countries have the biggest share in Azerbaijan's agricultural exports, and their proportion increased during the 2002–2018 period. In 2002, the share of CIS countries in Azerbaijan's agricultural exports was 52%, reaching 78% in 2018 (Figure 2). In 2009, the share of CIS countries in Azerbaijan's agricultural exports decreased from 90% to 75% due to Georgia's exit from CIS.³ The latter affected Azerbaijan's exports to CIS in 2010 as well. Another significant decrease in share of CIS countries in Azerbaijan's agricultural exports was observed in 2015, reflecting a 36% decrease in exports to Rus-

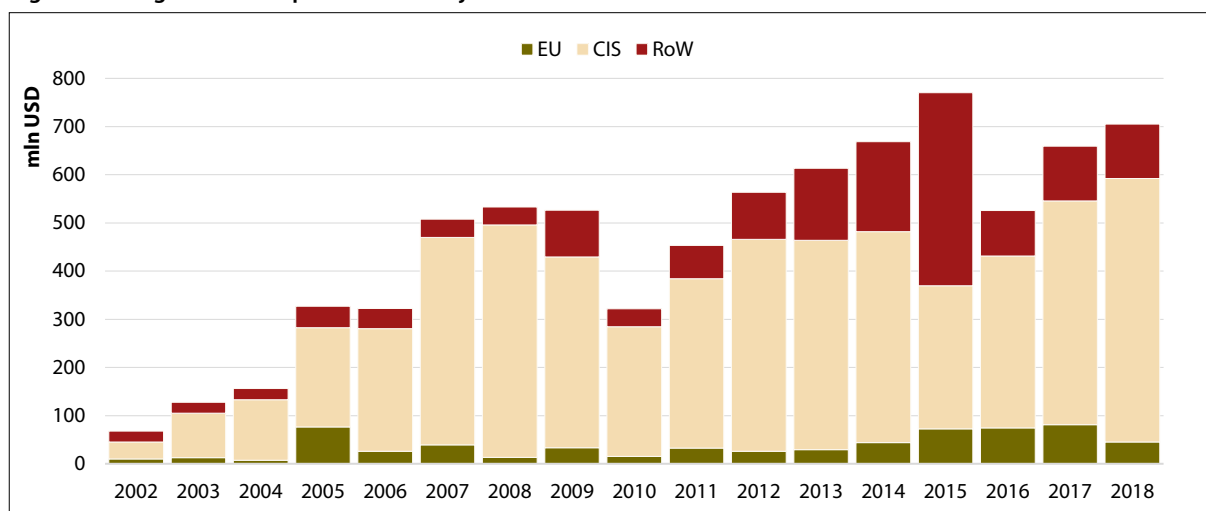
¹ During 2004–2008, on average 13% of Armenia's agricultural export in CIS countries were destined to Georgia.

² <http://en.kremlin.ru/events/president/news/46404>

³ During 2004–2008, on average 13% of Armenia's agricultural export in CIS countries were destined to Georgia.

sia due to the Russia's one-year ban on imports of particular agricultural goods in 2014 (President of Russia 2020)⁴ as well as the aforementioned devaluation of the ruble.

Figure 2: Agricultural exports of Azerbaijan



%	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
EU	15%	10%	5%	23%	8%	8%	2%	6%	5%	7%	5%	5%	7%	9%	14%	12%	6%
CIS	52%	72%	81%	63%	79%	85%	90%	75%	84%	78%	78%	71%	66%	39%	68%	71%	78%
RoW	33%	18%	15%	14%	13%	7%	7%	18%	12%	15%	17%	24%	28%	52%	18%	17%	16%

Source: Trademap, 2020

As to the exports to EU countries, the share of Azerbaijani agricultural exports bound for EU countries was very moderate and averaged 9% in the period 2002–2018. An exception was 2005, in which EU countries accounted for 23% of Azerbaijan's agricultural exports. This was mainly caused by increased exports of fruits and nuts to EU countries by more than 15 times (Trademap 2020).

Despite some efforts to diversify export markets, Russia remains Azerbaijan's largest export market, with a share of 74% in Azerbaijan's total agricultural exports in 2018. Apart from Russia, Azerbaijan's top export markets include Georgia, Turkmenistan, Italy and Germany.

To support trade diversification, the state has established an export promotion agency, AZPROMO, which supports exports of non-oil products and now has offices in many countries (O'Connell and Hradzsky 2018). This initiative may also contribute to Azerbaijan's accession to the WTO, heretofore hindered by the country's restrictive trade regimes and excessive focus on oil exports.

Georgia

Georgia has traditionally been an agrarian country and agriculture still constitutes an important part of the country's economy. The sector's share in Georgia's total employment is 39% (GeoStat 2020). Agricultural exports constitute an important part of Georgia's economy, accounting for about 25–30% of the country's total exports (Deisadze, Mamardashvili and Zhorzholiani 2019).

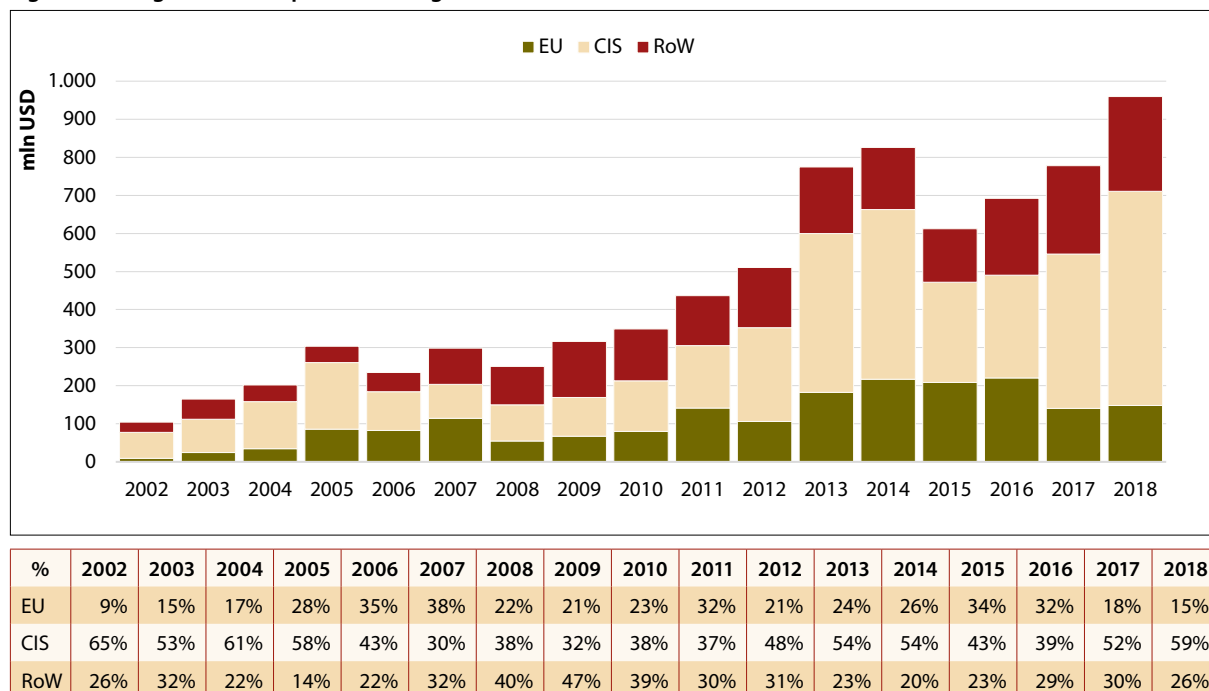
Georgia has a liberal foreign trade policy that is reflected in the country's tariff policies on imports, with an average applied MFN tariff of 2% and the simple average MFN agriculture tariff of 6.3% in 2015 (WTO, ITC and UNCTAD 2016). The country has FTAs with CIS countries, the EU, Turkey and China. In 2014, Georgia and the EU signed an Association Agreement (AA), including the integral Deep and Comprehensive Free Trade Area (DCFTA), which came into force in 2016.

Georgia is a net importer of agricultural products. During the period 2002–2018, the values of both Georgia's agricultural exports as well as agricultural imports have exhibited an upward trend. In 2018, the most important export destinations of Georgia's agricultural exports were Russia (25%), Azerbaijan (16%), Ukraine (9%), Kazakhstan (7%) and Armenia (6%) (Trademap 2020).

⁴ <http://en.kremlin.ru/events/president/news/46404>

CIS countries are among the largest trade partners for Georgia, with a share of 59% and 23% of the country's agricultural exports and imports in 2018, respectively (Trademap 2020). Georgia's agricultural exports decreased by 23% in 2006 after Russia imposed an embargo on Georgian exports. Consequently, the share of exports bound for CIS countries decreased from 43% to 30%. After the embargo was ended in 2013, the share of CIS countries in Georgian agricultural export increased again, to 54% (Figure 3). In 2015, the share of CIS countries in Georgia's agricultural exports decreased from 54% to 43%, reflecting decreased exports to Russia by 45% due to its one-year ban on imports of agricultural goods in 2014 (President of Russia 2020)⁵ as well as the 2014–15 ruble devaluation.

Figure 3: Agricultural Exports of Georgia



Source: Trademap, 2020

The EU accounts for a smaller share of the Georgian agricultural exports, varying between 9%–38% (Figure 3). In 2016, when the DCFTA came fully into force, the value of agricultural exports to the EU increased by 6%. Georgia's agricultural exports to the EU decreased by 36% in 2017, reflecting a significant decrease in hazelnut exports. The main reasons for this decrease were various fungal diseases and the Asian Stink Bug invasion in 2017, reducing hazelnut production (Deisadze, Mamardashvili and Zhorzholiani 2019).

Georgia is still highly dependent on the Russian market, exposing it to additional economic risk (e. g. the 2006–2013 Russian embargo). To diversify its agricultural export and reap the potential benefits of DCFTA, the country should undergo dynamic changes in agricultural value chains. Better education, improving information on EU markets, organizing tours for entrepreneurs from EU to Georgia, investing in trade infrastructure, setting up collection centers and focusing on quality improvements of agricultural goods are among the needed changes (Koester, 2017). Complying with EU food safety standards should be considered a long-term investment that will open export markets for Georgia's agricultural products not only in the EU, but in other countries with similar requirements (Von Cramon-Taubadel, 2014).

Trade Diversification and Importance of Russia as a Trade Partner

To measure agricultural trade diversification trends in the South Caucasus region, Herfindahl-Hirschman Indexes (HHIs)⁶ were calculated for the last 17 years (Table 1). Results show that the agricultural trade of Armenia and Azerbaijan is characterized by "highly concentrated" export markets, whereas Georgia's agricultural exports became "diver-

⁵ <http://en.kremlin.ru/events/president/news/46404>

⁶ HHI is a common measure of the diversification of trade value across destinations or products. In this paper, we focused on the dispersion of agricultural trade by destination (geographic diversification index).

sified” after 2008. As for import markets, Armenia’s and Georgia’s agricultural imports are “diversified”, whereas Azerbaijan’s imports are “moderately concentrated”.

Table 1: HHI for Armenia, Azerbaijan and Georgia

Year	Azerbaijan		Armenia		Georgia	
	Export	Import	Export	Import	Export	Import
2002	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2003	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2004	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2005	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2006	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2007	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2008	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2009	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2010	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2011	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2012	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2013	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2014	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2015	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2016	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2017	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated
2018	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated	Highly concentrated

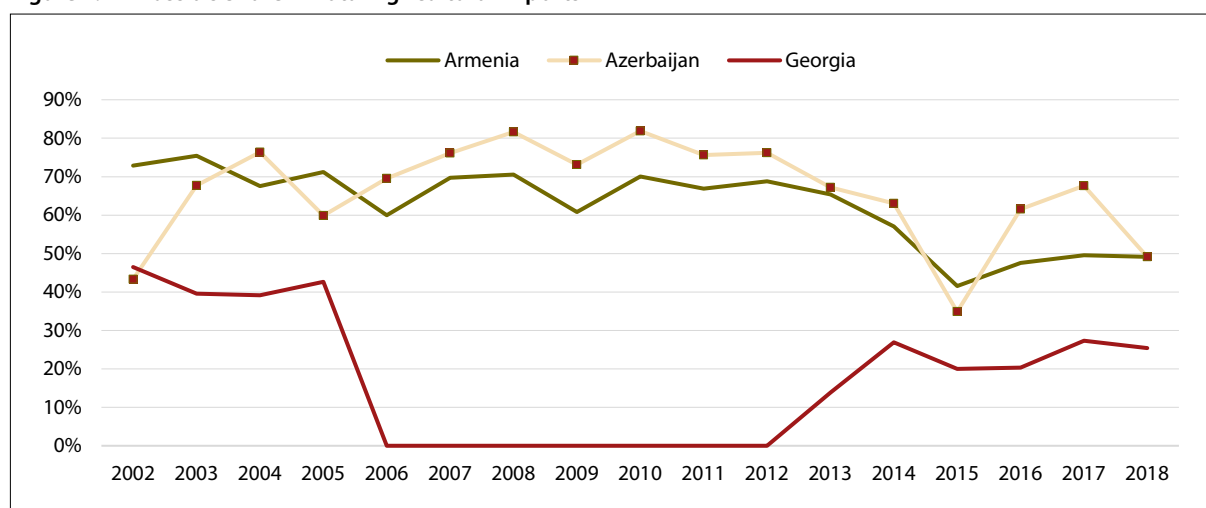
Note:

Color code	HHI value	Type of market
Lightest shade	less than 1500	“diversified”
Medium shade	1500–2500	“moderately concentrated”
Darkest shade	more than 2500	“highly concentrated”

Source: Authors’ calculations; Trademap 2020

Russian Federation tops the list of largest trading partner of Azerbaijan, Armenia and Georgia, and its share in total agricultural exports was 74%, 49% and 25%, respectively in 2018. Georgia did not trade agricultural products with Russia in 2007–2012 (Russia’s share is 0%) due to the embargo imposed by Russia; after the lifting of the embargo, Russia’s share significantly increased, but never again reached pre-embargo levels (Figure 4).

Figure 4: Russia’s Share in Total Agricultural Exports



Source: Trademap 2020

Conclusions

Agricultural trade in the countries of the South Caucasus is characterized by high dependency on regional markets. The composition of main export and import markets has remained more or less the same over the last 17 years (2002–2018), and CIS nations have been the main trade partners for export and import of agricultural goods of three countries during this time period. In 2018, the CIS share of agricultural exports was 51%, 78% and 59% in Armenia, Azerbaijan and Georgia, respectively. As for imports, in 2018 37% of agricultural goods entering Armenia originated in CIS countries, while the same indicators for Azerbaijan and Georgia are 11% and 23%, respectively (Trademap 2020). This trend is related not only to the proximity and the existence of traditional ties with nations of the former Soviet Union, but also to lower quality requirements and weaker competition in CIS markets compared to Western markets.

Even though the South Caucasian countries have chosen different directions in terms of their economic and political integration, Russia has remained an important trade partner for all three countries over the last 17 years. Agricultural export trends of Armenia and Azerbaijan have shown particularly high dependence on Russia in recent years; in 2018, 49% and 74% of their agricultural exports went to Russia, respectively (Trademap 2020). Russian embargo on Georgia's agricultural exports in 2006 led to a considerable decline in Georgian agricultural exports in 2007. Yet Georgia's agricultural exports to Russia were quickly resumed after the embargo was lifted in 2013, and Russia's share of the country's agricultural exports increased to 25% in 2018 (Trademap 2020). A notable decline in the agricultural exports of Armenia and Georgia in 2015, as well as a decline of Russia's share in agricultural exports of all three countries in that year, coincides with the period of strong devaluation of the Russian Ruble (2014–2015), hinting at the spillover effect of this devaluation on Russia's trade with the South Caucasus countries.

During the last two decades, the South Caucasus countries have also started to explore new trade partners. While the process of market diversification has been moderate in all three countries, it has been highest in Georgia and lowest in Azerbaijan. The more diversified trade of Georgia compared to its neighbors can be explained by diversification pressure created by the Russian embargo in 2006 as well as general aspirations of Georgia to become more integrated with Western countries. While all three countries trade with EU countries, the EU share of both agricultural exports and imports are highest for Georgia. Nevertheless, no consistent trend of increased agricultural exports to the EU could be observed for Georgia after DCFTA went into force (2016). In 2017–2018 this share even went down due to the decrease of hazelnut exports (the main agricultural export of Georgia to the EU). Obstacles in exporting to the EU are related not only to tariffs but also to non-tariff trade barriers. In this regard, both DCFTA (between Georgia and the EU) and CEPA (between Armenia and the EU) aspire to parity with EU regulations and standards. While this approximation is related to high initial costs (particularly for Georgia, which has stricter obligations with this regard), in the long run it has a potential to facilitate the development countries' agricultural sectors and food systems and increase their agricultural exports to EU countries.

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“The Cradle of Wine Civilization”—Current Developments in the Wine Industry of the Caucasus

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Abstract

Wine has been cultivated in the Caucasus for thousands of years. Caucasian viticulture experienced its greatest evolution and development during Soviet rule. However, Gorbachev's anti-alcohol policy and the transformation processes in the 1990s led to a dramatic decline in wine production. For the last 15 years, the viticulture in this region has experienced rediscovery, renewal, and growth. Although Russia remains the largest and most important export market for the wines from Georgia, Armenia, and Azerbaijan, all three countries try to diversify export destinations and to penetrate non-CIS countries. The following article outlines the developments in the wine industry of these three Caucasian countries and identifies similarities between them.

Introduction

The Caucasus mountain range, with a length of 1100 km, runs between the Black and Caspian Sea. It is located within the borders of Russia, Georgia, Armenia, and Azerbaijan. Despite the diverse cultural heritage and distinct national