"Strategy without tactics is the slowest route to victory. Tactics without strategy is the noise before defeat."

— Sun Tzu: Art of War

Impacts
of Armenia's Eurasian Economic Union Membership
on
the Local Economy and Agriculture

By Hasmik Hovhanesian and Artak Yergenyan
Edited by Thomas Lines

Yerevan – 2017
OXFAM Armenia
Disclaimer:

This research was conducted under “Improving Regional Food Security through National Strategies and Small Holder Production in the South Caucasus” project implemented by Oxfam and funded by the European Union.

The information and views set out in this research do not necessarily reflect the official opinion of the European Union and Oxfam. The content of this publication is the sole responsibility of the authors. Neither Oxfam nor the European Union institutions, bodies or any person acting on their behalf may be held responsible for the use, which may be made of the information contained therein.
# Table of Contents

## Abbreviations

## About the project

## Executive Summary

1. Overview of Armenia’s Economy and Food and Agriculture Sector

2. The Agriculture and Food Sector in Armenia

3. The System of Standards of Russia and the EAEU

4. Food and Agriculture Markets in the EAEU

5. The Comparative Advantage of Armenia’s Food and Agriculture in World Markets and the EAEU

6. Outcomes of Survey

7. Four Scenarios on EAEU Membership

8. Recommendations
Abbreviations

CIA – Central Intelligence Agency (USA)
CIS – Commonwealth of Independent States
DFA – Development Foundation of Armenia
EAEU – Eurasian Economic Union
EAEC – Eurasian Economic Commission
EASC – Euro-Asian Council for Standardization, Metrology and Certification
EU – European Union
FDI – Foreign Direct Investment
GDP – Gross Domestic Product
GMO – genetically modified organism
GoA – Government of Armenia
GOST – Gosudarstvenny Standart (Государственный Стандарт), an official standard recognized in the CIS
ha – hectare(s)
HS – Harmonized [Commodity Description and Coding] System
ISO – International Organization for Standardization
KR – Kyrgyz Republic
NSS – National Statistical Service of the Republic of Armenia
OXFAM – Oxford Committee for Famine Relief
QI – Quality Infrastructure
RCA – Revealed Comparative Advantage
R&D – Research and Development
RF – Russian Federation
SMART – Single Market Partial Equilibrium Simulation Tool
SME – small or medium-sized enterprise
SSAD – Strategy of Sustainable Agricultural Development
TCI – Trade complementarity index
TNC – Transnational corporation
TR – technical regulation
UN – United Nations
USD – US dollar
VAT – Value-added tax
VPSS – Federal Service for Veterinary and Phytosanitary Surveillance (in Russia)
WCO – World Customs Organization
WTO – World Trade Organization
About the project

In September 2013, Oxfam in Armenia, Azerbaijan and Georgia started a 4-year EC-funded project “Improving Regional Food Security through National Strategies and Small Holder Production in the South Caucasus”. Central to the project is the publication of gender sensitive food security and nutrition strategies in Georgia, Armenia and Azerbaijan, formulated and developed within multi-stakeholder Working Groups involving project partners, government, the private sector, NGOs, MFIs, research institutions, and representatives of small holder farmers. There are three envisaged results of the Project: 1) Inclusive and gender-sensitive FSN strategies (which define the priorities and policies on the availability, access and nutritional content of food) are developed and implemented in the 3 targeted countries; 2) Enacted food security and nutrition legislations support local food production and consumption in the 3 targeted countries; 3) Increased representation of civil society through alliances and working groups in FSN strategy/policy decision making processes.

About OXFAM

Oxfam is a confederation of 17 Oxfam affiliates working in over 90 countries, all working as one Oxfam on 6 goals that support its shared vision of a just world without poverty.

Whether it is running life-saving emergency responses, life-changing development projects or campaigning at the grassroots to tackle poverty, Oxfam's work is always rooted in a vision of a world where women and men are valued and treated equally, able to influence the decisions that affect their lives and meet their responsibilities as full citizens. Oxfam's 6 goals put local communities and the voices of poor people at the centre of change - our best hope for ending the injustice of poverty.

1. Help people claim their right to a better life

More women, young people and other poor and marginalised people will be able to exercise their civil and political rights, influence the decisions of people in power and hold them accountable for their actions.

2. Champion equal rights for women

Women are still massively under-represented and often oppressed. Oxfam will help more poor and marginalised women claim their rights, and work to significantly reduce the prevalence of violence against women.

3. Save lives, now and in the future

When natural disasters strike - or in times of war – Oxfam will be there to save lives, providing clean water, food, sanitation and other fundamental needs. Fewer men, women and children will die or suffer illness, insecurity and deprivation.

4. Safeguard global food supplies

Oxfam is working to protect food supplies so that people always have enough to eat. More people who live in rural poverty will enjoy greater food security, income, prosperity and resilience through fairer global food systems.

5. Help people claim a fairer share of natural resources

Natural resources are vital for prosperity. Oxfam will work to help the world’s most marginalized people become significantly more prosperous and resilient, despite increasing competition for land, water, food and energy sources, and stresses caused by a changing climate.
6. Increase money for basic services

Oxfam is pushing for more and better-targeted money to go to basic development such as health and education, so that more women, men, girls and boys can participate fully in the economic, social and democratic life of their societies.
Executive Summary

Armenia’s food and agriculture sector has never been characterized by abundance and self-sufficiency. Even during the flourishing time of the Soviet era, Armenia was a net importer of agrofood products, although there were many ranges of products for export due to their special or unique qualities.

In 2015, Armenia became a full member of the EAEU. The EAEU market has a population of about 183 million. Russia, which is the ninth most populated country in the world with 146 million people, counts for 77 percent of that. Most “Made in Armenia” agro products are exported to the Russian market. The major characteristics of the Russian and EAEU markets are higher incomes, exotic and quality-oriented tastes, and high e-commerce.

However, there is also documentation required for customs clearance. The number of documents required has decreased, but Armenia still has no direct road access to any EAEU member state, which means that products traded in either direction must cross a third country’s borders and, thus, most documents required by Customs are still necessary. Thus, Armenia’s membership of the EAEU brings fewer benefits than to other member states. This applies to SMEs in Armenia as much as any other part of the economy.

To assess the opportunities within the EAEU for the national economies of the member states, each country’s revealed comparative advantage (RCA) was estimated, which should indicate the mutual benefits available. Armenia’s RCA lies in products such as animal and food products, minerals, textiles and clothing, stone and glass as well as minerals. Comparison of Armenia’s RCA with other members of the EAEU shows that Armenia is strongest in processed food products covered by the HS Codes 16-24. The GoA would be well advised to continue to improve its position with products in Codes 1-16 (animal and vegetable products and foodstuffs), 28-38 (chemicals) and 50-71 (textiles and clothing, footwear, and stones and glass).

To have a full picture of the possible impacts of EAEU membership on Armenia’s agro-industry, a small targeted survey was conducted of representatives of government, educational, private, non-governmental and international organizations. Overall, the respondents’ expectations of Armenia’s membership of the EAEU were positive. SME representatives were concerned with possible monopolies in export transportation in Armenia, making the cost of it too high for them, as well as lack of easily accessible information about opportunities in the EAEU market and how to export to this market.

Possible impacts were further assessed through a partial-equilibrium economic model. The strongest outcomes of the model related to food and agriculture in Armenia are the impacts on tariff revenues, trade creation, prices and trade diversion. New quality requirements under the EAEU could lead to price increases of domestic products and are an additional burden, especially for SMEs which have limited access to finance. On one hand consumers in the EAEU market are not wealthy on average and price will be one of the key factors in entering the market, while on the other hand, quality requirements are higher, creating additional costs for Armenian producers.

As a member of the EAEU, Armenian producers should familiarize themselves with the Union’s standards, which will soon be domestic standards as a result of the common market. Information in Armenian should be prepared for domestic producers so that they can be ready for the expected changes in technical regulations.

As has been mentioned, Armenia is in a less advantageous position than other member states of the EAEU as there is no common border, making transport costs higher for Armenian producers. Standards will add to production costs, while for small farmers they are almost unaffordable. All these requirements will increase the export prices of Armenian produce. Some possible solutions to this problem will be presented below, targeted on smooth procedures to create good-quality but not costly infrastructure, especially for small farmers. Otherwise, small producers will leave the sector and oligopolistic markets will develop.
State incentives should be introduced for SMEs and the Government should require the big processing companies to help the SMEs to upgrade their standards. This should be of interest to the big companies by providing them with guaranteed inputs for further processing.

The common external tariff among EAEU member states will increase the domestic prices of goods imported from non-EAEU members. It will indirectly raise some prices of domestically produced goods that have imported inputs. Armenian consumers and small and medium-sized farms are the groups that are most vulnerable to price increases. Where agricultural cooperatives can be developed, the problem can be reduced by taking advantage of economies of scale in purchasing. At the same time, the Government of Armenia (GoA) should be able to supply information on substitute agricultural inputs and resources from EAEU member states. Belarus for example specializes in agricultural techniques and technology, providing a real basis for substitution.

For Armenian farmers, fertilizers and other inputs imported from Russia will become more affordable and competitive with those imported from third countries, which will attract new tariffs. Likewise with production equipment of Belarusian and Russian compared with third-country origins. For smallholder farmers the prices of agricultural tools and inputs (pesticides, fertilizers etc) imported from third countries would increase and sometimes become unaffordable. This fear was expressed by representatives of the private sector in the survey. Currently, the larger items of agricultural equipment and machinery used for primary products are out of date. Most of the new equipment was part of foreign governmental assistance. Any bought by the GoA was mostly from Belarus or Russia.

More costly imported foodstuffs from outside the EAEU should increase demand for domestic products, benefiting farmers as domestic processing companies will purchase more from them.

The impacts of EAEU membership, especially on small farmers, were also assessed under four scenarios: worst, bad, good and best. If the Government of Armenia wants to be better-off from membership, it should pursue active policies, while the private sector should be ready to take the opportunities presented below.

These are the main recommendations:

- the role of SMEs in Armenia’s agriculture is strong, and it should be promoted by the GoA in view of the current unstable situation within the Union as well as the global economy;
- It is also strongly recommended for Armenia to develop high-tech sub-sectors for each industry of the country;
- Although Armenian farmers have considered the creation of unions and SME federations in their sector, they do not understand that this model must be self-financed rather than based on financing from grants.
- It would help efficiency to create a virtual market information system within the EAEU as there is a lack of information about supply capacity at the small and medium production levels;
- Low-cost finance should be provided for smallholder farmers, based on equal gender division and taking into consideration the “non-manageable climatic conditions” of Armenia.
- It is strongly advised that the DFA provide practical assistance to farmers for exports, and not just participation in trade fairs.
1. Overview of Armenia’s Economy and Food and Agriculture Sector

Armenia is a small landlocked country with limited human, capital, and natural resources. Both Azerbaijan and Turkey have imposed economic blockades on the country. It has two access routes to world markets: through Georgia and Iran. Until now Iran is considered a “closed” country because of its internal policies as well as internationally imposed sanctions that were only recently lifted. Georgia’s relations with Russia have been cool ever since the brief war between them in 2008. Although the obstacles to Armenia’s economic development are great, the country continues to develop with moderately positive growth rates in GDP.

Since its independence, serious actions by the Government of Armenia have helped transform the centrally planned economy into a market-oriented one. The positive impacts were seen in double-digit growth rates in all spheres of the economy, which lasted until the global economic crisis in 2008. Although the economy started to recover the following year, the drop in oil prices on the world market in 2016 caused concern about possible negative impacts on the Armenian economy. That concern could be explained by several factors, such as:

- Overdependence of the economy, politics, and trade of Armenia on external factors and the world economy;
- The high ratio of natural resource exports in foreign trade;
- Dependence on remittances to the country, especially from Russia (remittances accounted for 19.7 percent of GDP in 20151);
- Closed borders with two neighboring countries.

Although the Armenian economy started 2016 with positive macroeconomic movements, the slowdown of the Russian economy saw negative movements in Armenia’s economy, including exports and imports. Moreover, the escalation of the Nagorno-Karabakh issue in April 2016 also had negative effects on the Armenian economy. The GDP growth rate for 2016 was 0.5 percent, with the construction sector down 10.6 percent and agriculture down 5.2 percent, mainly due to climatic conditions. Agriculture constituted 19.6 percent of GDP in 2016.2 In 2015 and 2014, GDP increased by 3.1 and 3.5 percent, and the agricultural sector 11.7 percent and 7.2 percent, respectively3.

In 2016, FDI in Armenia increased by 47 percent, accompanied by a 20 percent increase in exports and only a 1.6 percent increase in imports.

For 2016, exports increased to the CIS (by 43.5 percent) as well as the EU (by 15.9 percent), including increases of exports to Russia of 51.5 percent, Kazakhstan 42.9 percent and Ukraine 29.7 percent. The increases in exports to the EU countries were largely to Bulgaria, Denmark, Finland, Cyprus and Poland4.

The Armenian economy is considered to be strongly dependent on Russia’s economy. There are large cash transfers from Russia and the seasonal work market for Armenian men constitutes the main part of income for consumption in the Armenian market. Table 1 shows the trends of the GDP growth rate for the last eight years of the five member countries of the EAEU and China, the EU, and the United States as the leaders of the world economy to understand the dependence of the Armenian economy on regional and global changes. Overall, it could be stated that trends in Armenia’s GDP are positively correlated with GDP trends of the Russian Federation and the world economy. China continues to follow its own trends. See Table 1.

---

3 Calculated from data from the National Statistical Service of Armenia (www.armstat.am)
4 As above.
Table 1. GDP trends (annual percentage changes)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>5.2</td>
<td>-7.8</td>
<td>-0.8</td>
<td>4.3</td>
<td>3.5</td>
<td>1.3</td>
<td>0.7</td>
<td>-2.8</td>
<td>-0.8</td>
</tr>
<tr>
<td>Armenia</td>
<td>6.9</td>
<td>-14.2</td>
<td>2.2</td>
<td>4.7</td>
<td>7.2</td>
<td>3.3</td>
<td>3.5</td>
<td>3.1</td>
<td>0.5</td>
</tr>
<tr>
<td>Kyrgyz</td>
<td>8.4</td>
<td>2.9</td>
<td>-0.5</td>
<td>6.0</td>
<td>-0.1</td>
<td>10.9</td>
<td>3.6</td>
<td>3.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>3.3</td>
<td>1.2</td>
<td>7.2</td>
<td>7.5</td>
<td>5.0</td>
<td>6.0</td>
<td>4.4</td>
<td>1.2</td>
<td>-0.8</td>
</tr>
<tr>
<td>Belarus</td>
<td>10.5</td>
<td>0.2</td>
<td>7.7</td>
<td>5.5</td>
<td>1.7</td>
<td>1.1</td>
<td>1.6</td>
<td>-3.9</td>
<td>-3</td>
</tr>
<tr>
<td>EU</td>
<td>0.5</td>
<td>-4.4</td>
<td>2.1</td>
<td>1.8</td>
<td>-0.4</td>
<td>0.2</td>
<td>1.4</td>
<td>2.2</td>
<td>1.9</td>
</tr>
<tr>
<td>China</td>
<td>9.6</td>
<td>9.2</td>
<td>10.6</td>
<td>9.5</td>
<td>7.8</td>
<td>7.7</td>
<td>7.3</td>
<td>6.9</td>
<td>6.6</td>
</tr>
<tr>
<td>USA</td>
<td>-0.3</td>
<td>-2.8</td>
<td>2.5</td>
<td>1.6</td>
<td>2.3</td>
<td>2.2</td>
<td>2.4</td>
<td>2.6</td>
<td>1.6</td>
</tr>
<tr>
<td>World</td>
<td>1.5</td>
<td>-2.1</td>
<td>4.1</td>
<td>2.8</td>
<td>2.3</td>
<td>2.4</td>
<td>2.5</td>
<td>2.9</td>
<td>3</td>
</tr>
</tbody>
</table>

Sources: World Bank and CIA

The unemployment rate is high in Armenia. In 2016 it was 18 percent, little changed from 2015 (18.5%) and 2014 (17.6%).

Armenia’s major trade partners are Russia, the EU, the USA, Canada, Iran, China, Georgia, and Turkey. Armenia’s major exports are minerals, jewelry, food products, non-precious stones and metals, clothing, and food products. A positive trend in Armenia’s foreign trade is the increased diversification in export partners and lists of products (see Table 2). In 2005, the major export products of Armenia were precision and non-precision stones and metals followed by processed foods and mining, while in 2016 they were mining, processed food, followed by precision and non-precision stones and metals, clothing, agricultural products and software.

Membership of the EAEU creates threats among the private sector that foreign trade with third countries might be restricted at some time, according to the survey’s evidence – for example, if one of the member states of the EAEU imposes political sanctions against a third country and forces other members to do the same.

Table 2. Armenia’s Exports and Imports with Leading Partners in 2005 and 2016 (percent)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>20.8</td>
<td>30.3</td>
<td>15.5</td>
<td>7.9</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>8.5</td>
<td>1</td>
<td>13.7</td>
<td>0.5</td>
</tr>
<tr>
<td>Georgia</td>
<td>8.2</td>
<td>3</td>
<td>13.1</td>
<td>8.2</td>
</tr>
<tr>
<td>Germany</td>
<td>7.8</td>
<td>5.7</td>
<td>12.5</td>
<td>13.2</td>
</tr>
</tbody>
</table>

5 National Statistical Service of Armenia.
<table>
<thead>
<tr>
<th>Country</th>
<th>2022</th>
<th>2023</th>
<th>Country</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>7.8</td>
<td>0.4</td>
<td>Israel</td>
<td>11.8</td>
<td>5.9</td>
</tr>
<tr>
<td>Iraq</td>
<td>7.7</td>
<td>0</td>
<td>USA</td>
<td>6.5</td>
<td>6.3</td>
</tr>
<tr>
<td>China</td>
<td>5.4</td>
<td>10.9</td>
<td>Georgia</td>
<td>4.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Iran</td>
<td>4.2</td>
<td>5</td>
<td>Iran</td>
<td>4</td>
<td>4.7</td>
</tr>
<tr>
<td>Switzerland</td>
<td>4.2</td>
<td>1.4</td>
<td>Switzerland</td>
<td>3</td>
<td>2.6</td>
</tr>
<tr>
<td>UAE</td>
<td>3.6</td>
<td>1.7</td>
<td>China</td>
<td>2.7</td>
<td>3.6</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2.9</td>
<td>0.9</td>
<td>Canada</td>
<td>1.1</td>
<td>1</td>
</tr>
<tr>
<td>USA</td>
<td>2.2</td>
<td>2.7</td>
<td>UAE</td>
<td>1</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Source: National Statistical Service of Republic of Armenia

Armenia joined the WTO in 2003. However, the country backtracked on signing a Deep and Comprehensive Free Trade Agreement with the EU after joining the EAEU in 2015. But Armenia and the EU continue to stress their readiness to work toward closer economic relations.

There is also documentation required for customs clearance. The number of documents required has decreased, but Armenia still has no direct road access to any EAEU member state, which means that products traded in either direction must cross a third country’s borders and, thus, most documents required by Customs are still necessary. Thus, Armenia's membership of the EAEU brings fewer benefits than to other member states. These unequal geographical conditions are reasonable grounds for the negotiation of better conditions for Armenian business, especially in relation to foreign trade and taxation.
2. The Agriculture and Food Sector in Armenia

Armenia’s agrofood industry has never been characterized by abundance and self-sufficiency. Even during the flourishing time of the Soviet Era, Armenia was a net importer of food and agricultural products, although there were many ranges of products for export due to their special or unique qualities. National food self-sufficiency is not more than 60 percent, according to various sources. The big food-processing companies are mostly located in Yerevan, the capital of Armenia, while primary producers are mainly small and micro-businesses in rural areas.

About 40 percent of the country is not suitable for cultivation and pasture. Out of 1.39 million ha of agricultural land only 35 percent is arable. Land is heavily dependent on irrigation supplied by a mostly underdeveloped infrastructure, with inadequate rural services. Agricultural productivity in general is low. Besides the dry and unreliable climate, another challenge for farmers lies in meeting costly corporate, national or international standards in sales to wider markets.

Armenia’s food and agriculture sector collapsed after independence in 1991. The loss of markets and an economic blockade on the country were devastating, and skills and knowledge were lost as well as linkages between farmers and processing operations. A slow recovery began after five to ten years of independence. With an 11.5 percent average annual growth rate after 2008, in 2016 agriculture constituted 19.6 percent of GDP and the food processing sector constituted 60 percent of processing industry and 37.2 percent of total industry.

Food and agricultural production is mainly in private hands. The main crops produced are cereals, potatoes, other vegetables, and legumes and oilseeds, while livestock include cattle, pigs, and some sheep and poultry. The next comparatively well-developed sub-sector is fruit. Fish farming is another sub-sector with high potential for growth if the standards for feeding are kept up to EU requirements.

The agricultural sector of Armenia is dominated by small, household-based farms (on average 1.37 ha per holding). In 2015, the value of food and agricultural production was 1.5 billion AMD, a 0.6 percent decrease compared to 2014. The growth of the sector is not stable, although there was on average more than 11 percent annual growth during the last seven years. See Figure 1. The decrease in 2009 was explained by the world crisis, which affected the economy of Russia, too. Any changes in the Russian market are liable to be directly mirrored in Armenian agriculture.

Figure 1. Annual percentage growth rates of Agro Industry of Armenia, 2009-2016
The agro-industry of Armenia is broadly defined here to include: food products; agriculture, forestry and fisheries; tobacco products; and beverages. In 2016 agriculture (not including forestry and fisheries) comprised 63 percent of the sector, food processing 20 percent, tobacco and tobacco products 9.4 percent, and alcoholic beverages 7.7 percent. In 2015 the leading sub-sectors of food processing were: the production of bread, fresh pastry goods and cakes (36 percent of the total); milk and dairy products (17.8 percent); cereal products, starches, and starch products (16.5 percent); cocoa, chocolate, and sugar confectionery (7.2 percent); meat processing (6.8 percent); sugar refining (4.5 percent); fruit and vegetable processing and canning (4.3 percent); and coffee and tea processing (3.4 percent).

Currently, the major government programs include the Strategy of Sustainable Agricultural Development of the Republic of Armenia for 2010-2020, the Concept Paper on Administrative Consolidation of Rural Communities in the Republic of Armenia, and socioeconomic development programs in Armenia’s regions.

Employment in the agricultural sector was the highest in 2015 with 35.3 percent of total employment in the country.

Some 53.3 percent of the sector’s labor force are women. In addition, the number of women employed in the “informal” agricultural employment structure comprises 87 percent of total informal employment in the industry. Although the number of women at the top tier of companies is small, the proportion in second-level management is high in large and medium-sized companies, while in small companies the role is higher. Based on the outcomes of our surveyed companies, it could be stated that 95 percent of them had a male director, with the same figure having female deputy directors. More than 90 percent of the labor force was women in the companies surveyed in this research. Thus, in reality women are considered to be producing a greater portion of agricultural products than presented by statistics explained by objective and subjective factors, such as the following:

- Most men in rural areas of Armenia are not home during cultivation seasons since they seek work mainly in Russia;
- Women are the guarantors of food supply within their families;
- Women are the main “financiers” of their households.

---

Despite the predominant role of women in the agricultural sector of Armenia, they are excluded from most of the national programs on the sector’s development. For example, the 2010-2020 SSAD, the Concept Paper on Administrative Consolidation of Rural Communities, and socio-economic development programs in the regions, do not mention gender roles in the sector and their plans are not gender-sensitive. We recommend that the Government of Armenia should define minimum quotas for women in higher positions within communities in each region. Stereotypes will most likely then break down since few currently appreciate that women can do such work.

In 2015, the average monthly wage rate in the agricultural sector was around 120,000 AMD, which is 1.9 percent less than the previous year and 36.5 percent below average wages overall. Wages in this sector varied from 30,000 AMD for an ordinary worker to 400,000 for managers in large companies. Small employers do not offer fixed wage rates and in most cases their workers are seasonal.

The foreign trade of food products of Armenia has sharply increased over the last ten years, but after 2014 it fell into reverse due to setbacks in important foreign markets. A two-digit decrease was registered in imports to Armenia, which could be explained by factors such as import substitution, a decrease in foreign remittances (mainly from Russia due to the economic crisis there), and the high rate of emigration. See Table 3.

**Table 3. Annual percentage changes in exports and imports by food and agriculture HS codes, Armenia, 2008-2015**

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-05_Animal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>16.5</td>
<td>100</td>
</tr>
<tr>
<td>2009</td>
<td>6.1</td>
<td>-21.4</td>
</tr>
<tr>
<td>2010</td>
<td>20</td>
<td>2.8</td>
</tr>
<tr>
<td>2011</td>
<td>76.7</td>
<td>33</td>
</tr>
<tr>
<td>2012</td>
<td>58.8</td>
<td>1.9</td>
</tr>
<tr>
<td>2013</td>
<td>54.4</td>
<td>6.2</td>
</tr>
<tr>
<td>2014</td>
<td>-0.4</td>
<td>1.6</td>
</tr>
<tr>
<td>2015</td>
<td>-2.5</td>
<td>-27.7</td>
</tr>
<tr>
<td>2016</td>
<td>-18.4</td>
<td>-12.3</td>
</tr>
<tr>
<td>06-15_Vegetable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>39.7</td>
<td>27.8</td>
</tr>
<tr>
<td>2009</td>
<td>91.3</td>
<td>-9.9</td>
</tr>
<tr>
<td>2010</td>
<td>16.2</td>
<td>5.8</td>
</tr>
<tr>
<td>2011</td>
<td>79</td>
<td>14.3</td>
</tr>
<tr>
<td>2012</td>
<td>93.3</td>
<td>6.5</td>
</tr>
<tr>
<td>2013</td>
<td>33.9</td>
<td>-4</td>
</tr>
<tr>
<td>2014</td>
<td>-23.2</td>
<td>-5.7</td>
</tr>
<tr>
<td>2015</td>
<td>3.2</td>
<td>-19.7</td>
</tr>
<tr>
<td>2016</td>
<td>98.4</td>
<td>-10.5</td>
</tr>
<tr>
<td>16-24_FoodProd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>79.4</td>
<td>35.4</td>
</tr>
<tr>
<td>2009</td>
<td>-39.7</td>
<td>-23.8</td>
</tr>
<tr>
<td>2010</td>
<td>28.8</td>
<td>16.7</td>
</tr>
<tr>
<td>2011</td>
<td>36.5</td>
<td>12.9</td>
</tr>
<tr>
<td>2012</td>
<td>53.4</td>
<td>2.2</td>
</tr>
<tr>
<td>2013</td>
<td>21</td>
<td>11.2</td>
</tr>
<tr>
<td>2014</td>
<td>9.2</td>
<td>-6.7</td>
</tr>
<tr>
<td>2015</td>
<td>-8.8</td>
<td>-11.9</td>
</tr>
<tr>
<td>2016</td>
<td>36</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Source: Calculated from UN Comtrade statistics
The share of food and agriculture in Armenia's total exports for 2016 was 29.4 percent. The dominant sub-sectors were tobacco and tobacco products, with 40 percent of the sector's exports, and beverages, spirits and vinegar with 33.8 percent. See Figure 2. Most of the exports of these sub-sectors are from big processing companies but many other exports are from SMEs and small farmers.

Russia has implemented sanctions against both Turkey and the EU, the leading exporters of food products to the Russian market. This created opportunities for Armenian exporters, who could not previously match the lower prices offered by Turkish and Polish producers. Thus, with a well-developed strategy, membership of the EAEU could assist the development of the food industry in Armenia. This situation creates opportunities for small producers too, if they can combine with other small producers in cooperatives.

Figure 2. Armenian Exports of Food Products (thousands of USD)

![Graph showing exports of food products over years]

Source: Calculated from UN Comtrade statistics

The leading imports are tobacco products and cereals. The trends of imports of food products are presented in Figure 3, which shows an overall decline since about 2013. The share of imports of all agro-industry products during the last five years was about 19-20 percent of total imports of the country.\(^7\)

---

\(^7\) Based on data from UN Comtrade Database, [https://comtrade.un.org/](https://comtrade.un.org/) (June 2017).
The major weakness of the food industry of Armenia appear to be:

- The small size of farms;
- The slow formation of agricultural capital;
- Outdated equipment;
- Insufficient or inadequate use of fertilizers and pesticides;
- Inadequate farm management practices;
- Lack of cheap finance;
- High cost of transport and closed borders;
- Lack of information about foreign markets;
- Existence of high risks related to natural disasters (droughts, floods, storms);
- Lack of assistance for exports;
- Inadequate infrastructure.

Opportunities for food and agriculture include:

- An increase in agricultural productivity, partly arising from improvements in management and investment infrastructure as well as more effective use of land, water, labor and intellectual resources;
- A diaspora preferring to consume products from the “homeland”;
- Access to the EU and other European and Asian markets;
- Development of high-value crops and products;
- Knock-on effects of international sanctions by Russia on Turkey, providing opportunities for Armenian exporters.

In summary, Armenia has not developed the agrofood sector to its fullest potential, especially related to exports and import substitution. The potential of smallholder farmers is underestimated by state officials and food processors, and their economic and financial problems are ignored. This process is slow-moving, but a good government strategy could be achieved within a short period. This will be discussed later in this paper.
3. **The System of Standards of Russia and the EAEU**

This part gives a general picture of the complicated and time-consuming procedures for exports within the EAEU market. These add to costs and are unaffordable for SMEs. At the same time, economies of scale can be achieved only with exports because of the small size of the domestic market, so exports are vital for the economy. As a member of the EAEU, Armenia’s producers will have to observe all these standards to comply with EAEU technical regulations by 2018 as part of the common market. Until then, Armenian companies are only required to comply with relevant national legislation. For some products (examples: furniture and vehicles), the new requirements will go into effect later.

**Possible Impacts of Quality Requirements on Domestic Prices in Armenia**

After the collapse of the Soviet Union, GOST standards came into common use in 12 countries (Russia, Belarus, Ukraine, Moldova, Kazakhstan, Azerbaijan, Armenia, Kyrgyzstan, Uzbekistan, Tajikistan, Georgia, and Turkmenistan), administered by the Euro-Asian Council for Standardization, Metrology and Certification (EASC). Russia’s national standards are called GOST R standards, but they are being replaced under the EAEU by a new unified system of conformity.

While consumers in the EAEU market are not wealthy on the whole and prices are a key factor in entering the market, the EAEU’s quality requirements are becoming more demanding, mostly on Moscow’s initiative. This creates additional costs for Armenian producers. As a member of the EAEU, those producers need to become familiar with the standards required by the Union, which will soon become domestic requirements under its common market. Information should be made available in Armenian to prepare domestic producers for the associated changes in technical regulations.

As already mentioned, Armenia is at a disadvantage next to other members of the EAEU as there is no common border, so transport costs are higher for Armenian producers. Standards are an additional cost, and for small farmers they are barely affordable. Thus, the new procedures will increase export prices. The current challenge is that consumers in the EAEU market are not wealthy on average, while Armenian small and medium-sized producers and farmers cannot afford quality standards.

Several possible solutions to this issue will be presented below. In all cases private institutional bodies are recommended for this purpose, without excessive costs, especially for small farmers. Otherwise, small operators will leave the sector.

State incentives and advantages for SMEs also need to be introduced. At the same time, the Government should require big processing companies to help SMEs to go through the standards procedures. This kind of cooperation will guarantee good-quality inputs for further processing by the big companies.

**Conformity Assessment and Accreditation in the EAEU**

The EAEU’s new rules for conformity assessment have come into effect, and all manufactures can now obtain common certificates and declarations of conformity in all five member states. All necessary information related to the required documents and a list of accredited bodies and laboratories is published on the Eurasian Economic Commission (EAEC)’s official website. Outside the unified list, conformity is required with the national standards of the country of final destination.

Rules on the safety of food production follow the principles of HACCP (Hazard Analysis and Critical Control Point) and are specified in the technical regulation ‘On Food Safety.’ The safety of production can be overseen by the manufacturer independently or by a third party. This adds costs, especially for small farmers, although processing companies can take responsibility for small farmers’ standards, including

---

8 The EASC, also known as the Interstate Council for Standardization, Metrology and Certification of the Commonwealth of Independent States, is the CIS intergovernmental body operating in this field. See [www.easc.org.by/english/mgs_org_en.php](http://www.easc.org.by/english/mgs_org_en.php) (June 2017).

education and training. This is widely practised internationally, for example by Nestlé. But it will raise the prices of exported food products.

While the Federal Customs Service of Russia is in charge of customs fees, charges and controls, the Ministry of Industry and Trade administers that country’s non-tariff regulations for imports, including licensing and quotas. The Federal Agency for Technical Regulation and Metrology of Russia (Rosstandart or Rostekhregulirovaniye), part of the Ministry of Industry and Trade, is responsible for national standards and certification.

The Declaration of Conformity is registered by the Accredited Certification Authority. Products exported to Russia or EAEU countries must be labeled in Russian (or in Russian and the national language in all member states other than Russia) with the approved symbol of conformity and contain mandatory information for the product. Appliances and equipment must be accompanied by operating manuals written in Russian. The requirements of the issuance of conformity declarations are set by EAEC Decision No. 293 of 2012. The list of products where certification is required includes agricultural and food products.

There are two sets of documents dedicated to the Technical Regulations and Sanitary Regulations within the CU: the Certificate of Conformity/Declaration of Conformity and the Certificate of State Registration. Conformity assessment under the Technical Regulation (TR) of the CU 017/2011 must be done before a product will be placed on the EAEU market. The assessment is documented in a certification form or by issuing a conformity declaration. The highest level of certification in the CU is a certificate of conformity with the Technical Regulations of the CU. If no Technical Regulation applies to the product, the necessity of certification should be verified at the national level. For manufacturers of mass-produced products:

- The certification applicant must have a formal contract with a legally registered domestic organisation. Under GOST rules, this was not required.
- Mandatory factory audits are performed by a Russian certification body. With GOST, a test laboratory in Russia could do this.

Overall the standards system of Russia and the EAEU can be summarized as in Figure 3 below.

---

10 There are seven major organizations governing standards in Russia:
1. Federal Agency on Technical Regulating and Metrology - www.gost.ru
5. Russian Research Institute for Certification - www.vniis.org
7. Federal Agency of Communications - http://eng.rossvyaz.ru
A list of Russian certification bodies can be found at www.gost.ru/wps/portal/pages.en.SertificationOrgans?lien_externe_oui=Continue (June 2017; requires log-in).

11 The conformity symbol of the EAEU is:

12 The symbol is:
Besides the Conformity Declaration, there are two types of safety requirement: general and specific.

Additional State Registrations are required for such goods as food additives, foods made from GMOs, diet foods, certain cosmetics, disinfectant cleaners, mineral water, alcohols, paints and lacquers, packaging for foodstuffs, products of personal hygiene, apparel for children under 3 years, and water treatment equipment or equipment in contact with drinking water.

In 2012, Russia became a member of the WTO. Currently, Russia implements the Harmonized Customs System with 11,032 tariff lines. Imports to Russia are subject to VAT (18 percent and 10 percent for children's clothes) on the CIF value plus applicable duties.

State Regulatory Bodies for Imported Foodstuffs and the Federal Veterinary and Phytosanitary Surveillance Service (VPSS or Rosselkhoznadzor) are responsible for monitoring veterinary and phytosanitary conditions within Russia, enforcing Russian legal requirements. The Federal Service for the Protection of Consumer Rights and Human Wellbeing of the Ministry of Health and Social Development (Rospotrebnadzor) is responsible for food and foodstuff safety. Other state bodies related to the issues of importing foodstuffs in Russia are:
- The Federal Service for Technical Regulation and Metrology (Rostekhregulirovaniye)
- The Federal Customs Service of Russia; and
- The Ministry of Industry and Trade.

---

13 Markinvest Oy, Lahti, Finland, [www.gost-r.fi/?setlang=en](http://www.gost-r.fi/?setlang=en) (June 2017).
Trademark and intellectual property laws are based on Federal Law No. 3520-I of September 23, 1992, as amended.

Certification of Food Products

The Federal Service for the Protection of Consumer Rights and Human Wellbeing of the Russian Federation (Rospotrebnadzor) is responsible for food and foodstuff safety with the right to prohibit the sale of products that do not meet official requirements.

The import requirements for Russia for certain categories of foodstuff are as follows.

**Fresh Fruit:** Fresh fruits that are imported to the Russian market must be accompanied by a sanitary-epidemiological certificate and are subject to phytosanitary inspection. Fruits can enter the country only with permission from the VPSS (Federal Service for Veterinary and Phytosanitary Surveillance). Moreover, a product certificate issued by the appropriate Russian certification establishment, with accompanying documents, is required for customs clearance.

**Fresh Vegetables or Other Plant Products and Frozen or Processed Vegetables:** Imports of fresh vegetables require the VPSS' permission and a sanitary-epidemiological certificate with a phytosanitary inspection must be carried out.

**Nuts:** Nuts are also subject to phytosanitary inspection.

**Fish:** Standards related to fish are regulated by RF Government Decree No. 982, which was adopted on December 1, 2009, with specifications under various GOST R standards.

**Food additives:** Within the EAEU, issues related to food additives are regulated by the Technical Regulation of the Customs Union on “Safety Requirements for Food Additives, Flavorings, and Technological Aids” (TR TS 029/2012). It contains a list of food additives allowed for use in food product manufacturing. Prohibited food additives include E121, E123, E240, E924a, E924b, Е216, Е217, and E128.

**Wine, Beer, and Other Alcoholic Beverages:** Federal Law 171 of 1995 is the legislative basis for the production and handling of ethyl alcohol, alcohol products, and products containing alcohol in the Russian Federation, including products with alcohol content exceeding 0.5 percent. Official registration is required and a warning must be displayed on the label about the health risks associated with excessive alcohol consumption. Imported alcohol products must have excise stamps before they enter the Russian Federation.

There is also a less prescriptive Technical Regulation on the “Safety of Alcoholic Beverages” in the EAEU. It sets unified requirements for alcohol products and the processes of manufacturing, storage, transport, disposal and recycling, terminology, packaging, labeling, product safety, preventing action misleading consumers, and systematizing the provisions of the regulations of the EAEU member states.

**Products under Sanitary-Epidemiological Control:** The list of products subject to sanitary-epidemiological control is defined by CU Commission Decision No. 299 of May 28, 2010. All documents, labels, and markings must be translated into the Russian language, and copies and their translations must be certified in accordance with the established procedure. Rospotrebnadzor is responsible for handling such registration for Russia according to its Administrative Regulation.

**Biotech Crops:** Currently, 23 genetically engineered crops can be legally imported into Russia covering 12 maize lines, 7 soya bean lines, 1 rice line, 1 sugarbeet line, and 2 potato lines. Feed is considered to be biotech-free if the product contains 0.5 percent or less of a non-registered biotech product or 0.9 percent or less of any registered biotech product. The procedure for registration of genetically engineered crops for cultivation is being delayed in Russia. Registration of genetically engineered crops for imports and subsequent use in feeds and food continues in accordance with existing Russian legislation.
Products under Veterinary Control: Veterinary control is regulated by CU Commission Decision No. 317 and its amendments, which covers: live animals; meat and meat by-products, including poultry; milk and dairy products; food products processed from eggs; materials of animal origin; feed and feed additives for animals, including pet food; and fish and seafood products and products processed from them.

There is no official unified list for mandatory safety assessments for the EAEU.

Declarations of conformity are usually valid for three years and allow importers to mark products with a sign of conformity. Export veterinary certificates are replaced at the border with Russian domestic veterinary certificates.

Import permits are required for most products subject to veterinary control, and cover either individual imports by one Russian importing company for a calendar year, or general imports for a calendar year with an unlimited number of Russian importers and unlimited volume.

Products under Phytosanitary Control: CU Commission Decision No. 318 of June 18, 2010 approved the “Regulation on the Procedure of Phytosanitary Quarantine Control at the Customs Border of the Customs Union” and the “Common List of Regulated Products Subject to Quarantine Phytosanitary Control.” Phytosanitary certificates are issued for each lot of a product.

Only imported products of high phytosanitary risk require a phytosanitary certificate, issued by the exporting country.

Labeling

A single EAEU labeling standard has been written, but for exports to Russia the Russian one remains in force until all members countries apply the common standard. Until then, labeling in Russia must follow the existing GOST R standard and is regulated by the Law for the Protection of the Consumer. All information on a label must be in Russian except the names of the importers and producers. Labels must be affixed to the product. The labeling must include the following information:

- Kind of product;
- Model;
- Name and address of the producer or distributor;
- Country of origin;
- Fiber content (by order of importance with percentage);
- Size (according to the Russian size system);
- Care instructions;
- Gosstandart logo of conformity;
- Code of recommended age for children’s clothing.

The general requirements for labeling of food products are stated in the Russian federal law “On Protecting Consumer Rights” alongside the details on labeling prescribed by special standards, including the Codex Alimentarius (on food packaging) and prepackaged food regulations. The labeling of diet products, baby food, and other special products is regulated by relevant GOSTs and in Sanitary Rules and Norms.

The general requirements for information to be presented on the label are:

- Product name;

---


15 Details of the Russian regulation may be found in Russian at Garant, http://base.garant.ru/4178234/ (June 2017).
• Information about the manufacturer and the organization authorized to accept claims from consumers;
• Trademark;
• Net weight, volume or quantity;
• Ingredients;
• Nutritional value;
• Storage conditions;
• Use-by or expiry date;
• Date of production and packaging;
• Regulatory or technical documents with which the products can be identified (this requirement is optional for imported products); and
• Confirmation of the conformity stamp.

There are special requirements under GOST R 51074 – 2003 for labels of ‘sea products’ (no more precisely defined than that) to be imported into Russia.

Under the EAEU’s TR TS 022/2011, the marking and labeling of food products requires the product’s name, ingredients, nutritional contents and value, quantity, date of production, date of expiry, the addresses of the manufacturer and the importer, and the presence (if any) of GMOs.

Packaging in the EAEU

The EAEU’s TR CU 005/2011 covers requirements for packaging, both for finished products and as part of the manufacturing process. This TR regulates various things, including safety requirements and markings on packages.

Overall, food packaging must comply with hygiene requirements and have an obligatory confirmation of compliance. There are additional regulations on specific foodstuffs such as fat- and oil-based products, juice, meat, alcohol and dairy products, and specialized dietary products. Packing materials and transport containers must complete sanitary and epidemiological inspections and have the appropriate certificate of conformity.
4. Food and Agriculture Markets in the EAEU

The EAEU has a population of 183 million. Russia, which is the ninth most populated country in the world, covers almost 77 percent of the area and has a population of 146 million. It is the largest importer of Armenian agricultural produce. Russia is one of the world’s major importers of food due to its arid climate, inconsistent rainfall, and inefficiencies in food production. Those negative points were inherited from the Soviet era.

Russia and the EAEU have generally higher incomes than in Armenia, exotic and quality-oriented tastes, and highly developed e-commerce.

According to CIA’s estimates, the agriculture sector’s share of Russia’s GDP was 4.7 percent in 2016. Currently, there are price increases for food due to international sanctions but local food production has increased to fill the gap created by reduced imports. Due to climatic conditions there is still a list of products that are produced in lower quantity, and so the market is not saturated. Thus, food products made in Armenia with low market presence have an opportunity to enter Russia’s large market and establish their niche, even if sanctions are lifted in the near future: for example apricots, raisins and greens.

Now, the Russian market is consolidating through national retail chains. The supermarket/hypermarket is the main retail channel for sales of food products. Open markets are the second biggest-selling venue. In third place are small grocery or convenience stores and then kiosks. After retail, the second biggest consumer of food products is the food-processing sector, although it uses less expensive and lower-quality products. FDI is concentrated mainly in the food-processing industries, which have grown substantially in recent years. Value-added products are less developed.

The most attractive markets for Armenian food products are beverages, fresh and processed fruits and vegetables, dried fruits, fish, and tobacco. The trends and structure are presented below.

Beverages – alcoholic and non-alcoholic

Although Russia and most CIS countries are high consumers of vodka, during the last few years in Russia the demand for hard alcohol has decreased, while the consumption of lower-alcohol beverages, such as beer and wine, increased. Vodka is by far the leading consumed spirit in the CIS, varying from 75 percent to almost 90 percent of the market. Currently, the ethyl alcohol and alcohol industry is strictly regulated and controlled by the Russian Federation, which has led to a sharp drop in the number of distilleries.

The brewing industry is one of the most highly developed of Russia’s grain-processing industries. Russia is the world’s fourth largest producer of beer and the share of imported products in the beer market does not exceed 3 percent. Beer is imported to Russia from Ukraine, the Czech Republic, and Germany. All international brewing companies are present, taking almost 85 percent of the market. Among them are Carlsberg (owner of Baltika Breweries), Anheuser-Busch InBev (which recently took over SABMiller), Anadolu-Efes and Heineken. Pilsener (pale or lager) beer covers almost 95 percent of production.

Vegetables

Over the last decade, consumption of vegetables in Russia has shown steady growth despite serious problems in the industry. Tomatoes occupy the largest share of imports (40 percent), followed by onions

---

and garlic. Turkey and China are the largest exporters of tomatoes to Russia. Canned vegetable sales are also growing, although home-made canning of vegetables and fruits continue to prevail in the country. Canning companies with large market shares include Bonduelle, Le Group d’Aucy, EKO of Hungary and Baltimor (a domestic producer).

**Fruits and berries**

Fruit production is developing more slowly than vegetable production in Russia, but still at approximately 15 percent annually. Imports comprise three-fourths of the fruits and berries market. The major sources of imports are Turkey, China, and Ecuador (for bananas). The leading imported fruits are bananas, apples, and oranges.

**Fruit and berry processing**

Fruit and berry processing in Russia is underdeveloped, making the market attractive. Thus, 95 percent of deep-frozen and processed fruits and berries have foreign origins. The main import sources are Poland, China, the Netherlands, and Ukraine.

Fruits and berries are mainly processed for the juice industry. It only uses about 15 percent domestic raw materials since the unfavorable climate prevents sufficient production of apple, plum, and tomato concentrates. This market is growing at 12 percent annually, on average. Experts say that sales of deep-frozen vegetables and fruits in Russia will grow by 7.2 percent annually, on average.

**Dried Fruits**

The consumption of dried fruits in Russia is growing based on a “healthy lifestyle” trend among consumers. Modern retail chains offer a wide assortment of dried fruits. Traditionally, most dried fruits reach Russia from Iran (raisins and dates), Tajikistan (dried apricots and dried fruit mixes), Uzbekistan (raisins), Turkey (dried apricots), Chile, and Argentina (prunes).

Dried fruits in Russia are subject to epidemiological and phytosanitary inspections, and each shipment must be accompanied by phytosanitary certificates. The epidemiological requirements are posted by the EAEU at www.eurasiancommission.org/ru/act/texnreg/depsanmer/sanmeri/Pages/P2_299.aspx.

**Juices and drinks**

The juice market is saturated and enjoys strong competition. The key players are PepsiCo, Coca-Cola, OJSC Wimm-Bill-Dann Foods (66 percent owned by PepsiCo), and OJSC Nidan Juices. After the merger the PepsiCo firm was reported to have a 42 percent market share. Products are predominantly imported from the Netherlands, China, Ukraine, Israel, and Poland.

The major trends in the market are:

1. Soft drinks recorded a substantial fall due to the economic decline in Russia.
2. Russians are more interested in natural drinks with healthy properties.

**Tea and Coffee**

It is forecast that kvass and iced teas will drive the beverage market over the coming years, outperforming the juice segment. Russia continues to be a tea-consuming country. Coffee beans are preferred to instant coffee.

---

**Medicinal herbs**

The Russian medicinal herbs market is also showing growth. The market is represented by Krasnogorskleksredstva, Medifarm, and the People’s Medicine Medical Company and is largely based on imported raw materials, mainly from Poland, Bulgaria, and Egypt.

**Tobacco**

Russia takes third place in the world in cigarette production after China and the US but produces little raw tobacco. The market is represented by two groups of producers: transnational (such as Philip Morris, British American Tobacco, Japan Tobacco International) and second-echelon or domestic (Donskoy Tabak, Balkan Star [Altadis], Nevo-Tabak, Astra and Usman-Tabak). Imports comprise only 1 percent of consumption.

**Livestock**

Livestock production in Russia includes the poultry industry, pig breeding, and cattle breeding. Natural forage allows for the production of cheap beef with minimal labor costs. Russian consumers prefer poultry (almost 38 percent of the market) followed by pork (32.3 percent) and beef (25.9 percent).

**Meat Processing**

The Russian meat-processing industry strongly depends on imported raw materials. In first place is pork mainly imported from Germany, Denmark, Spain, France, and Belarus. Poultry takes second place, although imports are in rapid decline. The main products of the meat-processing industry continue to be sausages, the supply of which is controlled by Russian manufacturers.

**Dairy**

Milk production volumes did not register any serious changes during the last 10 years due to stable milk consumption. Still, the dairy market has significant growth potential. Currently, the dairy market structure of Russia is led by milk and fermented milk products followed by cheeses (capturing 40 percent of dairy product imports) and butter. The major players in the market are Wimm-Bill-Dann, Unimilk, and Danone.

**Eggs**

The egg market of Russia is saturated—Russia is one of the largest producers of hens’ eggs in the world.

**Fish production**

Russian fish production is mainly based on domestic fish yields predominantly from oceanic waters—96 percent. However, production facilities are lacking and most of the yield is exported to other countries for processing. So Russia exports low-value fish yields and imports processed and frozen high-value fish products. The main supplier of fish products is Norway, taking 39 percent of the import market with its trout and salmon. Recently, Russian consumers started to eat mussels and other types of shellfish as well.
5. The Comparative Advantage of Armenia’s Food and Agriculture in World Markets and the EAEU

To assess the opportunities arising from trade within the EAEU for its member states, a good starting point is Ricardo’s standard theory of international trade and its concept of comparative advantage. Bear in mind that the RCA measures the existing state of affairs, not potential advantages. It can inform further strategies of development for the government. In this part of the paper we report measurements of Armenia’s revealed comparative advantage (RCA)\(^{18}\) in its trade with the rest of the world and then with each other member state of the EAEU.

In trading with the rest of the world, Armenia’s RCA lies in animal and food products, minerals, textiles and clothing, stone and glass (see Table 4).

**Table 4. Index of RCA of Armenia in the World Market**

<table>
<thead>
<tr>
<th>Product HS Code</th>
<th>RCA – 2016</th>
<th>RCA – 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-05 Animal</td>
<td>0.98</td>
<td>0.56</td>
</tr>
<tr>
<td>06-15 Vegetable</td>
<td>1.16</td>
<td>0.51</td>
</tr>
<tr>
<td>16-24 Food Products</td>
<td>7.27</td>
<td>4.32</td>
</tr>
<tr>
<td>25-26 Minerals</td>
<td>18.29</td>
<td>15.46</td>
</tr>
<tr>
<td>27-27 Fuels</td>
<td>0.58</td>
<td>0.32</td>
</tr>
<tr>
<td>28-38 Chemicals</td>
<td>0.1</td>
<td>0.10</td>
</tr>
<tr>
<td>39-40 Plastic and Rubbers</td>
<td>0.12</td>
<td>0.34</td>
</tr>
<tr>
<td>41-43 Hides and Skin</td>
<td>0.62</td>
<td>0.23</td>
</tr>
<tr>
<td>44-49 Wood</td>
<td>0.07</td>
<td>0.05</td>
</tr>
<tr>
<td>50-63 Textile and Clothing</td>
<td>1.15</td>
<td>0.14</td>
</tr>
<tr>
<td>64-67 Footwear</td>
<td>0.15</td>
<td>0.18</td>
</tr>
<tr>
<td>68-71 Stone and Glasses</td>
<td>3.82</td>
<td>3.91</td>
</tr>
<tr>
<td>72-83 Metals</td>
<td>1.9</td>
<td>4.40</td>
</tr>
<tr>
<td>84-85 Machines and Electronics</td>
<td>0.04</td>
<td>0.11</td>
</tr>
<tr>
<td>86-89 Transportation</td>
<td>0.07</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Source: Calculated from UN Comtrade statistics

It is also important to understand the RCAs between Armenia and the EAEU’s other member countries. For this purpose, the RCA was calculated for Armenia compared to Russia, Belarus, Kazakhstan, and Kyrgyzstan, and is presented in Tables 5-8. Thus, Armenia has an RCA with Russia in HS Codes 01-26 (Animals, Vegetables, Food Products and Minerals), 41-43 (Hides and Skins), 50-63 (Textiles and Clothing), and 68-71 (Stone and Glass). This reveals an advantage for Armenia in exporting most food and agricultural products to Russia.

**Table 5. Index of RCA of Armenia compared with Russia**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01-05 Animal</td>
<td>1.71</td>
<td>3.23</td>
<td>0.62</td>
</tr>
<tr>
<td>06-15 Vegetable</td>
<td>3.61</td>
<td>2.50</td>
<td>1.34</td>
</tr>
<tr>
<td>16-24 Food Products</td>
<td>10.21</td>
<td>8.81</td>
<td>12.89</td>
</tr>
</tbody>
</table>

---

\(^{18}\) The formula is \( \text{RCA} = (X_{cg}/X_c)/(X_{wg}/X_w) \), where \( X_{cg} \) is the exports of good \( g \) by country \( c \) (e.g. Armenia), \( X_c \) is total exports of country \( c \), \( X_{wg} \) is world exports of good \( g \) and \( X_w \) is total world exports. The same can be calculated for the relative comparative advantages of two countries.

\(^{19}\) The Harmonized Commodity Description and Coding (HS) System was developed by the World Customs Organization (WCO). General information about it can be found at www.wcoomd.org/en/topics/nomenclature/overview/what-is-the-harmonized-system.aspx and a list of the main categories is at www.foreign-trade.com/reference/hscodelist.htm (June 2017).
### Table 6. Index of RCA of Armenia compared with Belarus

<table>
<thead>
<tr>
<th>Product HS Code</th>
<th>RCA - 2016</th>
<th>RCA - 2015</th>
<th>RCA - 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-05 Animal</td>
<td>0.48</td>
<td>0.06</td>
<td>0.35</td>
</tr>
<tr>
<td>06-15 Vegetable</td>
<td>10.99</td>
<td>0.45</td>
<td>2.16</td>
</tr>
<tr>
<td>16-24 Food Products</td>
<td>1.81</td>
<td>16.14</td>
<td>59.39</td>
</tr>
<tr>
<td>25-26 Minerals</td>
<td>0.42</td>
<td>1.65</td>
<td>29.20</td>
</tr>
<tr>
<td>28-38 Chemicals</td>
<td>7.07</td>
<td>0.35</td>
<td>2.15</td>
</tr>
<tr>
<td>50-63 Textile and Clothing</td>
<td>15.39</td>
<td>0.58</td>
<td>0.11</td>
</tr>
<tr>
<td>68-71 Stones and Glasses</td>
<td>0.03</td>
<td>11.70</td>
<td>3.11</td>
</tr>
<tr>
<td>84-85 Machine and Electronics</td>
<td>0.02</td>
<td>0.05</td>
<td>0.07</td>
</tr>
</tbody>
</table>

Source: Calculated from UN Comtrade statistics

Armenia’s advantages compared with Belarus are mostly limited to HS Codes 06-15, 16-24, 28-38 and 50-63. See Table 6.

### Table 7. Index of the RCA of Armenia compared with Kazakhstan

<table>
<thead>
<tr>
<th>Product HS Code</th>
<th>RCA - 2016</th>
<th>RCA - 2015</th>
<th>RCA - 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-24 Food Products</td>
<td>10.12</td>
<td>7.32</td>
<td>12.75</td>
</tr>
<tr>
<td>28-38 Chemicals</td>
<td>0.84</td>
<td>0.48</td>
<td>1.27</td>
</tr>
<tr>
<td>68-71 Stone and Glasses</td>
<td>0.02</td>
<td>11.21</td>
<td>19.96</td>
</tr>
<tr>
<td>72-83 Metals</td>
<td>0.46</td>
<td>0.08</td>
<td>0.40</td>
</tr>
<tr>
<td>84-85 Machines and Electronics</td>
<td>4.06</td>
<td>0.19</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Source: Calculated from UN Comtrade statistics

The RCAs with Kazakhstan are limited to food products, stone and glass. However, Armenia could improve its position in the chemicals sector, where it had an RCA with Kazakhstan in 2010. See Table 7.

### Table 8. Index of RCA of Armenia compared with Kyrgyzstan

<table>
<thead>
<tr>
<th>Product HS Code</th>
<th>RCA - 2016</th>
<th>RCA - 2015</th>
<th>RCA - 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-24 Food Products</td>
<td>1.82</td>
<td>2.16</td>
<td>5.06</td>
</tr>
<tr>
<td>28-38 Chemicals</td>
<td>8.21</td>
<td>8.15</td>
<td>7.38</td>
</tr>
<tr>
<td>84-85 Machines and Electronics</td>
<td>1.54</td>
<td>0.70</td>
<td>0.35</td>
</tr>
</tbody>
</table>

Source: Calculated from UN Comtrade statistics

With Kyrgyzstan, the RCA covers food and chemicals (Table 8). This limited scope is explained by the small trade turnover between these countries due to lack of market information and geographical distance.
Most of Armenia’s trade in food products with other EAEU members is with Russia, the exports in 2016 being mostly of beverages. Besides Russia’s size and relative wealth, the reasons for its dominant position are:
- the same product standards;
- better Armenian knowledge of the Russian market;
- easy communication because of the language;
- a similar style of business.

However, since 2015 foreign trade with Kazakhstan, Kyrgyzstan and Belarus has increased.

According to UN Comtrade statistics, Armenian food and agriculture depends on Russia not only as an export market but also for import supplies. However, the Russian share of exports and imports in Armenia is not stable as a result of global crises, the Russian economic and political situation and other factors.

Although Russia is Armenia’s major trade partner for food and agricultural products, the major partners of Russia itself are Kazakhstan and Belarus. Armenia is in third place, followed by Kyrgyzstan. Possible explanations are:
- Armenia and Kyrgyzstan only recently acceded to the EAEU;
- both countries have small markets;
- both countries have less production opportunities.

Overall, Armenia’s revealed comparative advantage within the EAEU is in processed food products covered by HS Codes 16-24 (Foodstuffs). To improve its position with other products, the GoA could provide tax advantages, assist the attainment of EAEU standards and provide finance for R&D, as well as information about EAEU member states’ markets and possible partners.
6. Outcomes of Survey

Surveys were conducted in the state, private, international, educational, and NGO sectors of Armenia. A survey was also taken among the participants at the annual conference on *EAEU: Armenia and cooperation*, in which producers and NGO representatives from Russia, Belarus, and Kazakhstan took part.

Overall, the respondents at this conference had positive expectations about Armenian membership of the EAEU. But the representatives of other EAEU member states stressed the lack of information about each other's economies and asked for a platform about each other's economies to be created where companies could obtain information and find business partners.

The summaries of the surveys are presented below.

State Representatives

Four representatives of state organizations took part in the survey. There was agreement among them that there was a lack of information about EAEU regulations. The EAEU is still in its formation stage and Armenia is in transition to it.

State officials did not mention any serious gender issues in the industry, arguing that while men occupy the highest positions, the chief accountants, vice presidents and other senior officials are females.

Representatives of Education

Two workers in education took part. They recommended the creation of unions of food and agriculture SMEs, to protect their members' interests both domestically and within the EAEU. At the same time, they stressed that the relevant education and training institutes need more modern equipment and laboratories to develop new seed varieties.

NGO Representatives

Five NGO representatives took part, including one from another member state. They stressed the lack of information in Armenian for domestic producers and suggested that training programmes were required for obtaining this information. The EAEU's website was too complicated and time-consuming, and finding the required information was difficult.

NGOs see the creation of unions as an important part of the sector's development.

Regarding the gender issue in the agrofood sector, they stressed that higher-level positions in the industry favor males, although women are mostly employed as the labor force.

Private Sector Representatives

Thirty representatives of large, medium-sized and small companies took part, including five from Russia. Almost all of them complained about the lack of information about the laws, legislation, technical regulations, and markets of the EAEU. Moreover, almost all companies that were already exporting to Russia mentioned that the partnership started because they had a friend in Russia. They were ready and willing to export to Belarus and Kazakhstan, but had no information or contacts in those markets.

29 out of 30 companies of the private sector representatives mentioned that they would prefer the union and/or association or coalition model of the sector's development. They mentioned that unions would initially require government assistance before becoming self-financing. The unions would need to be proactive in protecting members' rights and interests, finding buyers and suppliers, and forming an advisory body for members.

Representatives of the private sector had several concerns related to Armenia's membership of the EAEU:
- Risks of restrictions on business links with third countries under the EAEU by various means;
- Effective protection of the largest members of the EAEU.

Other important worries were:

- Risk of monopolies arising in the transport of agrofood products in Armenia.
- The cost of finance for the agrofood industry, where profitability is not as high as in other sectors.
- Before membership, the GOST excise mark labeling took a maximum of 1.5 months for alcohol products, whereas now it takes at least three months and changes need to be made for acceptance of the Armenian mark.
- Familiarization with standards is expensive for start-up companies and assistance is necessary.
- All documents required within the EAEU should be available and accepted in all member states. Applying to Moscow for the paperwork required to export to Russia is time-consuming and expensive.
- Contracts in Russian rubles bring exchange rate risks. The Armenian government should come up with suggestions to decrease this risk as Armenian agrofood producers have endured serious losses in the past.
- The DFA should assist with information and finding potential partners’ contacts, and not just with participation in fairs.
- Loan privileges should be created for agrofood exporters;
- Companies exporting agrofood products have to pay VAT if the receiving companies do not send a receipt showing they have paid the VAT. Exporters also pay VAT if the receiving company goes bankrupt. Thus, exporters are concerned about cases which amount to double taxation of VAT. A more efficient cross-border system needs to be introduced.
- Respondents proposed subsidised insurance against losses incurred with damaged agrofood products due to closed borders. Besides the cost, this damages exporters’ credibility.
- A virtual portal that provides full relevant information about the EAEU was considered essential.
Four Scenarios on EAEU Membership

Four scenarios were developed on the possible impact of membership. The scenarios were ranked as worst, bad, good, and best, with the emphasis on smallholder farmers. All suggested actions are for the Government of Armenia, while the impacts affect all level of society, including smallholder farmers and low-income consumers.

**Worst Case:** International crisis or war

The worst-case scenario assumes:

- The possibility of war between Armenia and Azerbaijan (high risk), Turkey (medium risk), Iran (low risk), which could inflict serious damage on the sector and lead to a difficult recovery.
- Leaving the EAEU, possibly resulting in a ban on trade with the EAEU market. There would be a decline in the sector due to the need to find new markets.
- Dissolution of the EAEU (unlikely).
- A global crisis (possible).

Under this scenario, negative growth for two to five years is assumed, depending on the case. The most vulnerable producers would be smallholder farmers as in most cases they are located near the border, while medium-sized and large companies are located near the big cities of Armenia. Overcoming the obstacles strongly depends on government policy, which has to develop an alternative strategy. The following actions are recommended for it:

- Food supplies to the army would be assured by the GoA purchasing from small domestic suppliers via public tenders;
- Smallholder farmers would be exempt from paying taxes;
- Contracts would be signed with potential exporters and importers in other countries to facilitate shipments of agrofood products as soon as possible;
- Companies would receive assistance in getting information about foreign market opportunities, including business regulations and QI
- Inflows of FDI would increase TNCs’ interest in peace in the region;
- Lobbying Iran to build a new land transport route from Armenia via Nagorno-Karabakh, Iran and the Caspian Sea to other Asian countries under sponsorship from the Armenian Diaspora. The project could be a highway involving private capital.

These actions should be included in a contingency plan and not left until a crisis arises.

**Bad Case:** Passive Role of Government

A bad scenario would be where the GoA plays a passive role in protecting the interests of the country's businesses and consumers in the EAEU, bringing a risk of maximizing imports from EAEU member countries and minimizing imports from third countries. The most negatively affected producers would again be smallholder farmers due to low-priced competition from other members of the EAEU.

As a result:

- The more advanced member states of the EAEU would develop the economic and legal frameworks within the organization to protect the sectors where they have advantages, at the expense of other members.
- Well-qualified labor would move to more advanced EAEU member countries due to wage differentials.
- This scenario would be much more severe for Armenia than most other member states since it does not share a border with any of them. Under this scenario, Armenia would lose its markets in the EAEU, alongside any privileged conditions for trade with third countries as a result of its membership of the EAEU;
- Smallholder farmers would sell up or stop production and import dependence would increase.

**Good Case: Active role of Government**

The good scenario assumes active participation of the GoA in the decision-making processes of the EAEU. This means that the GoA will be actively engaged in almost all initiatives taken by the pro-active members of the EAEU.

Some changes would have to be made in the initiatives developed by the pro-active member countries to protect their producers and consumers, including promotion of the rights of SMEs and the improvement of logistics in the sector.

Active EAEU members would maintain their market share within the EAEU market. Income levels would be stable, with a moderate outflow of the qualified labor force, mostly into non-member countries. Government revenues would remain at current levels for active member countries, while for pro-active members production, trade and income would increase.

Under this scenario large Armenian companies would gain most but they would face competitive risks from other EAEU members’ producers. Impacts on smallholder farmers would be neutral in the short and medium terms, with possible negative impacts in the long term due to the lack of economies of scale.

**Best Case: Pro-active Role of Government**

The best case assumes the GoA would adopt a pro-active stance in the decision-making process of the EAEU and the business life of Armenia. Taking into consideration that Armenia cannot be a leader in the organization, initiatives that lead the Armenian economy to prosper would have to be based on mutual benefits for all members of the EAEU, with a view to their transformation from resource exporters into exporters of scientifically intensive products, including in the agrofood sector. Armenian economic and legal initiatives could include:

- Emphasis on the role of smallholder farmers in all member states. This would increase the Union’s flexibility in world markets, although in the long run it could lead to the consolidation of small farms into bigger ones (as in Japan, South Korea and other countries).
- Assisting with information for producers about market opportunities in all EAEU member countries.
- Strongly promoting FDI from non-member countries in complementary sectors to the most efficient ones in EAEU members.
- Armenia acting as a bridge to bring in Iran as a member of the Union, which would expand land transportation in the EAEU.
- Working with Iran to build a new land route from Armenia via Nagorno-Karabakh, Iran and the Caspian Sea to other Asian countries under sponsorship from the Armenian Diaspora.
- Developing a framework for the cooperation of Russia, Iran, and Kazakhstan in the sphere of oil and gasoline.
- Taking into consideration that Armenia could not satisfy all the food-sector demands of the EAEU, preference could be given to third countries which produce complementary food products to those of the EAEU, for imports to be processed in Armenia for consumption in the EAEU’s markets.

As a result there would be the following:
- An increase in the economic role of the EAEU in world markets;
- An increase in production, income, employment, and trade among member states and third countries;
- An increased role for small producers in the economy, accompanied by high rates of self-employment;
- Expanded government revenues.

The GoA should also:

- Develop a food-safety system in line with international standards;
- Expand non-agricultural employment in rural areas and improve farm incomes. One way to do this is to decentralize production from Yerevan to other regions through tax and other incentives;
- Develop infrastructure in rural areas (including energy and water supplies, waste disposal, transport, and information and communications technology);
- Strengthen agricultural support services and improve access to them. NGOs, big companies and government bodies should operate to assist smallholder farmers in increasing their productivity and expanding production;
- Promote production of high-value agricultural and food products. Processing companies should be given incentives to assist small farmers with training, skills and technology transfer;
- Develop agro-tourism and organic agriculture.
8. Recommendations

This final section of the report makes policy recommendations arising from findings in the previous sections. First, some recommendations will be made from particular parts of the report, and then a series of general recommendations arising from the study overall. The particular recommendations are:

- The small survey of stakeholders in Armenian society identified positive expectations of EAEU membership despite the severe criticisms made by the political opposition.
- Based on SMART analysis it could be stated that there are several aspects/indexes with positive impacts accompanied with negative ones too. In most cases, the negative ones related with the fact that Armenia had already free trade regime with the member-countries of the EAEU. Positive ones much depend on the conducting policy and strategy of Armenia within this institution.
- Armenia’s circumstances leave no other choice than to be pro-active within the EAEU, if the country wishes to choose the path of prosperity. But there must be a contingency plan for the worst-case scenario.

Taking all in all, these recommendations are made:

- The EAEU will work best if it allows trade to develop according to the comparative advantages of its member states, without the stronger states necessarily assisting the financially weaker states. The RCA of each country is presented above; in Armenia’s case it is strongest in processed food products covered by HS Codes 16-24 (Foodstuffs).

- Armenia is one of the least advantaged countries geographically within the EAEU. If Russia is the leading trade partner for Armenian agrofood products, the reverse is not the case. Russia’s main trading partners within the EAEU for agrofood products are Kazakhstan and Belarus, with Armenia in third place. Thus, it is strongly recommended for Armenia to play a pro-active part within the Union, including:
  
  ✓ Creating a platform for easy access to information on EAEU markets, skills and technology;
  ✓ Developing a food-safety system in line with international standards as the one within the EAEU is too complicated and over-documented. For this there should be a Government co-financing mechanism for Armenian producers to reach international standards. The GoA should encourage big domestic producers to assist small farmers in improving their working conditions as well as the acquisition of skills, knowledge and production equipment;
  ✓ Expanding non-agricultural employment in rural areas and improving farm incomes;
  ✓ Developing rural infrastructure;
  ✓ Strengthening agricultural support services and improving their accessibility;
  ✓ Promoting production of high-value agricultural products;
  ✓ Promoting access for smallholders to public and private supply chains;
  ✓ Encouraging big companies to assist small farmers’ development by the use of tax incentives and other means;
  ✓ Creating a ‘virtual’ market information service, supplying information about exporters and importers within the EAEU as well as market analyses;
  ✓ Promotion of agro-tourism and organic agriculture.

- Armenia should draw up a contingency plan for the worst-case scenario, to include the following actions:
  ✓ Food supplies to the army should be assured by the GoA purchasing from small domestic suppliers via public tenders;
  ✓ Smallholder farmers should be exempt from paying taxes;
Contracts should be signed with potential exporters and importers in other countries to facilitate shipments of agrofood products as soon as possible;
Companies should receive assistance in getting information free of charge about foreign market opportunities, including business regulations and QI;
Any inflow of FDI would increase TNCs' interest in peace in the region;
Lobbying Iran to build a new land route from Armenia via Nagorno-Karabakh, Iran and the Caspian Sea to other Asian countries with sponsorship from the Armenian Diaspora. The project could be a paid highway involving private capital.
This contingency plan should be fully worked out in advance and not left until a crisis arises.

- Raise the domestic technology level as Armenia's production potential is limited by a shortage of natural resources;
- There should be mechanisms to increase the role of NGOs within the EAEU;
- Provide preferential finance for farmers, taking into consideration Armenia's non-manageable climatic conditions;
- The DFA should provide farmers with practical assistance for exports, going beyond mere participation in trade fairs.