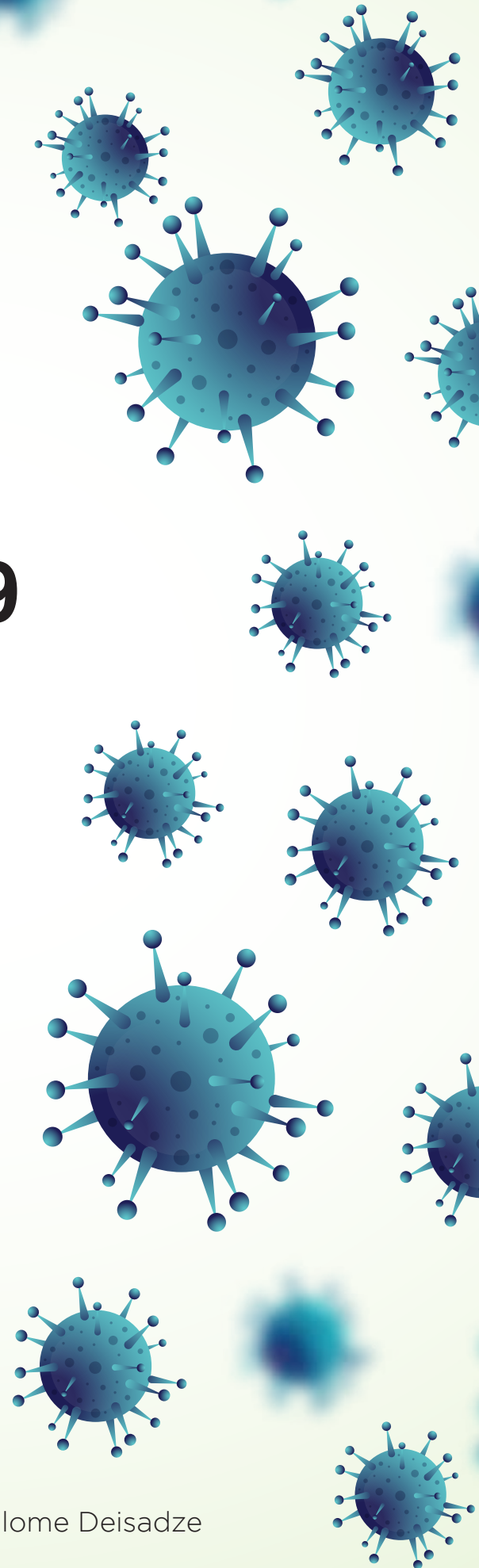


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# How Does Covid-19 Affect the Food Supply Chain in Georgia?

By Phati Mamardashvili, Salome Gelashvili, Ia Katsia, Salome Deisadze



## OVERVIEW OF THE CURRENT SITUATION

Images of empty shelves in grocery stores worldwide have emerged amid the COVID-19 pandemic. So far, this has had little to do with an actual shortage of food products but rather has reflected the behavior of panicked consumers who are hoarding food.

While some earlier publications (e.g., [IFPRI, March 10, 2020](#)) perceived no imminent threats from the pandemic to global food security, more recent articles (e.g., [IFPRI, March 20, 2020](#); [FAO, March 26, 2020](#); [FAO, The Guardian](#)) called attention to proper policy responses to reduce the potential negative impacts of COVID-19 on local and global food systems and food security. Potential disturbances in worldwide food trade are of increasing concern ([IFPRI, March 27, 2020](#)), as several notifications of food trade restrictions (e.g. Kazakhstan and Thailand) have already been registered by the [WTO](#).

As the pandemic is still evolving, its potential impact on food systems is difficult to predict. Nevertheless, considering the experience of previous crises as well as the unprecedented geographic coverage and scale of the current pandemic, many countries are undertaking precautionary measures to ensure a stable food supply for their population. So is Georgia.

On January 28, the [Inter-Agency Coordination Council](#) was established to take preventive measures against COVID-19. In the framework of the council, the Ministry of Environmental Protection and Agriculture (MEPA) [became](#) responsible for managing food stocks and supervising food logistics and transportation (MEPA, 2020). In March, the Government of Georgia (GoG) announced that the state will allocate 10 mln Georgian lari (GEL) from the MEPA budget to subsidize businesses and insure the prices of 9 food products: rice, pasta, buckwheat, vegetable oil, sugar, wheat, wheat flour, milk powder, and beans ([Legislative Herald of Georgia, 2020](#)). The program will be implemented from March 15-May 15 and will subsidize importers' additional costs due to exchange rate fluctuations. Furthermore, the Georgian government announced that an additional 16 mln GEL will be spent to buy sugar (5,000 tons), vegetable oil (1,500 thousand liters) and pasta (500 tons) stocks for the country due to the coronavirus outbreak.

Considering the fact that Georgia is a net importer of food products, there might be a need for further actions to ensure a safe, secure, and affordable food supply to the country's population. To have a better understanding of the expected trends and processes taking place on the Georgian food markets, we looked at the main food categories and their markets.

## WHEAT MARKET

Georgia's wheat market is very much dependent on imports. While the self-sufficiency ratio of wheat has been increasing in recent years, it was still only 15% in 2018 (GeoStat, 2020). The country's wheat imports are also highly concentrated. In 2019, out of the total imported wheat and meslin, 88% was imported from Russia, 10% from Kazakhstan, and the rest from the United States and Iran. Table 1 presents the key statistics regarding Georgia's wheat market.

Table 1. Wheat market

Product	Self-sufficiency ratio, % (2018)	Average annual intake per person (kg), 2018	Imports (tons), 2019	Exports (tons), 2019	Import markets, 2019	Export markets, 2019	Import market diversification level, 2019	Export market diversification level, 2019
Wheat	15%	130	477,301	715	Russia, Kazakhstan, United States	Armenia, Azerbaijan	Highly concentrated (HHI of 7914)	Highly concentrated (HHI of 9055)

Source: Trademap, 2020, Geostat 2020

Note: HHI – the Herfindahl-Hirschman index (HHI) is a commonly accepted measure of market concentration.

2019 was the first time in the last ten years when Georgia imported wheat from the United States. Even though the share of imports from the US is relatively small, they are still important strategically—a step towards market diversification of Georgia's wheat imports.

So far, the forecasts for global cereal markets are optimistic; [near-record wheat production](#) is expected in 2020. The [FAO's](#) Cereal Price Index decreased by 0.9% in February 2020 compared to the previous month. Wheat prices were kept low due to good harvests and increased supply in recent years. The recent price decrease was also associated with reduced demand originating from the COVID-19 pandemic.

As the largest share of wheat imported in Georgia comes from Russia, domestic wheat prices are largely determined by the price of wheat in Russia. So, one has to keep an eye on Russia's wheat harvest as well as its trade measures. Given the favorable weather conditions, in 2020 Russia expects a [good grain harvest](#) and has the intention of increasing both the harvest and the export volume of grain. [According to the USDA](#), it is forecasted that in Russia wheat production in 2019-20 will be at 73.5 million tons, higher than the previous year (71.6 million tons). The same publication also projects a small year-on-year decrease in Russia's wheat exports. Despite these projections, the further spread of COVID-19 raises concerns about potential distortions and shortages on wheat markets. For instance, to maintain the domestic supply of grains during the current pandemic, the [Russian government has already proposed limiting its grain exports](#) for the season. This of course creates concerns about the possible extension of this limit into next season. From the latest experience, such export restrictions are usually followed by other countries, driving grain prices further up. [An export ban already announced by Kazakhstan](#) deserves further notice in this regard.

Even in light of potential export bans, given the good wheat harvest, the Government of Georgia's (GoG) recent policy on price controls for wheat is likely to temporarily protect Georgian consumers from further increases in wheat prices.

## SUGAR MARKET

The sugar production in Georgia is very low and most of the consumed sugar is imported. In 2019, in total, Georgia imported about 128 thousand tons of cane or beet sugar. Out of the total amount, 40 thousand tons were imported from Poland (32%), 20 thousand tons from Azerbaijan (16%), and 19 thousand tons from the Russia (15%). Import markets for sugar are moderately concentrated (Table 2)

Table 2. Sugar market

Product	Self-sufficiency ratio, % (2018)	Average annual intake per person (kg), 2017	Imports (tons), 2019	Exports (tons), 2019	Import markets, 2019	Export markets, 2019	Import market diversification level, 2019	Export market diversification level, 2019
Sugar	NA	38.72 <sup>1</sup>	128,617	715	Poland, Azerbaijan, Russia	Azerbaijan, China	Moderately concentrated (HHI of 1794)	Highly concentrated (HHI of 9168)

Source: Trademap, 2020

Note: HHI – the Herfindahl-Hirschman index (HHI) is a commonly accepted measure of market concentration.

According to [FAO](#), Sugar Price Index increased by 4.5% in February 2020 compared to the previous month. The index has marked its highest value since May 2017. The sugar price increase is associated with the lower production in India, which is the world's second largest sugar producer. Furthermore, prices were pushed even higher due to the bad weather conditions in Thailand.

As GoG's recent policy on price controls applies for sugar, it will temporarily protect Georgian consumers from further increase in sugar prices, particularly from price rise related to weakening of the national currency.

## MILK AND DAIRY PRODUCTS MARKET

While Georgia is a net importer of milk and dairy products, dairy import markets are diversified, signaling relatively low exposure to risks. The major import partners for dairy products are Ukraine, France and Russia. Ukraine is a particularly

<sup>1</sup> Average annual intake per person in 2017, (FAO)

important partner for milk powder imports. Although total imports are diversified, milk powder imports are highly concentrated with high dependence on Ukrainian market (Table 3).

**Table 3.** Milk and dairy products market

Product	Self-sufficiency ratio, % (2018)	Average annual intake per person (kg), 2018	Imports (tons), 2019	Exports (tons), 2019	Import markets, 2019	Export markets, 2019	Import market diversification level, 2019	Export market diversification level, 2019
Milk and dairy products (total)	81%	178	34,662	1,143	Ukraine, France, Russia	Armenia, Azerbaijan, United States of America	Diversified (HHI of 1211)	Highly concentrated (HHI of 4498)
Milk powder	-	-	7,533	-	Ukraine, Islamic Republic of Iran, Turkey		Highly concentrated (HHI of 2743)	

Source: Trademap, 2020, Geostat 2020

Note: HHI – the Herfindahl-Hirschman index (HHI) is a commonly accepted measure of market concentration.

Milk powder falls under the list of products to which new state policy of price control applies. Given that domestic production of milk is seasonal and most of milk is produced by non-commercial households who cannot ensure stable raw milk supply, dairy producer companies are very much dependent on milk powder imports. Due to currency depreciation, import price of milk powder increases and state policy aims to weaken this increase. At the same time, since domestic production of milk starts to grow starting from April-May, the demand for milk powder is likely to decrease in upcoming months.

Therefore, in case of milk powder, there are two opposite effects: increased import prices due to Georgian Lari depreciation and decreased demand for milk powder. The final impact depends on the magnitude of change for each effect. If domestic production of raw milk is high enough, then the prices of milk products are not likely to increase.

## MEAT MARKET

Unlike, milk and dairy market, meat market is characterized by relatively low self-sufficiency ratio (52%) and high import dependency. Brazil, Ukraine and Turkey are the major import partners of Georgia. Brazil is leading in frozen meat imports, while Ukraine and Turkey dominate the fresh meat trade market (Table 4).

**Table 4.** Meat market

Product	Self-sufficiency ratio, % (2018)	Average annual intake per person (kg), 2018	Imports (tons), 2019	Exports (tons), 2019	Import markets, 2019	Export markets, 2019	Import market diversification level, 2019	Export market diversification level, 2019
Meat	52%	37	83,525	10,049	Brazil, Ukraine, Turkey	Islamic Republic of Iran, Armenia, Azerbaijan	Moderately concentrated (HHI value of 1826)	Highly concentrated (HHI value of 2715)

Source: Trademap, 2020, GeoStat, 2020

Note: HHI – the Herfindahl-Hirschman index (HHI) is a commonly accepted measure of market concentration.

Given the slowdown in economic activities followed by decreased incomes, the demand for meat might decrease in the upcoming months. Since meat does not fall into the price control policy list, its import price might increase, encouraging meat producers to increase production and leading to an overall increase in supply. The new equilibrium price and quantity depend on the magnitude of changes in supply and demand. If the change in supply is smaller than the change in demand, then both price and quantity are likely to decrease. If the change in supply is higher than the change in demand, then the new equilibrium quantity will increase but the new price, as in the previous case, will decrease. So in all cases, the price of meat is likely to decrease. New regulations restricting livestock exports will contribute to the increased supply of meat and reduce meat prices even further.

## FRUITS AND VEGETABLES MARKET

Georgia is a net importer of fruits. The main import partners are Turkey (44%), Ecuador (28%), and Azerbaijan (7%) (Table 5). Not only does Georgia import a large amount of fruit, but the country also exports a significant amount of fruit. More specifically, Georgia exports more than it imports in the categories of citrus, apples, and peaches and nectarines. As of 2019, the main destination countries for Georgian fruits were Russia (48%), Armenia (25%) and Ukraine (9%). Neither import markets nor export markets are diversified; they are highly concentrated.

Table 5. Fruit market

Product	Self-sufficiency ratio, % (2018)	Average annual intake per person (kg), 2018	Imports (tons), 2019	Exports (tons), 2019	Import markets, 2019	Export markets, 2019	Import market diversification level, 2019	Export market diversification level, 2019
Fruits	NA	NA	94,707	84,895	Turkey, Ecuador, Azerbaijan	Russia, Armenia, Ukraine	Highly concentrated (HHI of 2824)	Highly concentrated (HHI of 3988)

Source: UNComtrade, GeoStat, 2020

Note: HHI – the Herfindahl-Hirschman index (HHI) is a commonly accepted measure of market concentration.

Fruits did not fall under the price control policy which might led to an increase in import prices. In addition, fruit prices have been increasing for a couple of months; in February 2020, the annual price increase for this category accounted for 25.1% (GeoStat, 2020). Considering the Georgian lari's depreciation, consumers might expect further increases in fruit prices unless seasonal fruits appear on the market reflecting an increased supply.

As for vegetables, Georgia's vegetable market is characterized by a low self-sufficiency ratio (59%) and high dependence on imports (Table 6). As of 2019, the main import partners were Turkey (60%), Azerbaijan (10%) and Iran (10%). Similar to fruits, prices for vegetables have been increasing on an annual basis. In February 2020, the annual price increase for this category was 11.1% (GeoStat, 2020).

Table 6. Vegetable market

Product	Self-sufficiency ratio, % (2018)	Average annual intake per person (kg), 2018	Imports (tons), 2019	Exports (tons), 2019	Import markets, 2019	Export markets, 2019	Import market diversification level, 2019	Export market diversification level, 2019
Vegetables	59%	56	96,714	15,028	Turkey, Azerbaijan, Iran	Russia, Azerbaijan, Armenia	Highly concentrated (HHI of 3843)	Highly concentrated (HHI of 2654)

Source: UNComtrade, GeoStat, 2020

Note: HHI – the Herfindahl-Hirschman index (HHI) is a commonly accepted measure of market concentration.

From the vegetable category, the GoG will subsidize and cap the price of haricot/kidney beans and ensure that consumers have access to a relatively cheap product during this economic slowdown ([Legislative Herald of Georgia](#),

2020). For most vegetables, spring is the time for sowing. Meanwhile, fresh potatoes, which are characterized by a high self-sufficiency ratio (102%), are about to come into season.

Overall, Georgia strongly depends on imports of fruits and vegetables. The major partner is Turkey, which is experiencing excessive [food price increases](#), notably for fruit and vegetable products. Considering the fact that Russia switched its import of fruits and vegetables from China to Turkey due to the COVID-19 pandemic and increased demand for imports, there might be an increase in import prices of these goods. It is difficult to predict the direction of prices of fruits and vegetables as key products will come into season in the following months and domestic production will play an important role in determining market prices.

## VEGETABLE OILS MARKET

Similar to other food products, vegetable oil markets strongly depend on imports and are characterized by a high concentration. As of 2019, the main import partners were Russia (81%), Azerbaijan (6%), and Ukraine (5%) (Table 7).

**Table 7.** Vegetable oil market

Product	Self-sufficiency ratio, % (2018)	Average annual intake per person (kg), 2018	Imports (tons), 2019	Exports (tons), 2019	Import markets, 2019	Export markets, 2019	Import market diversification level, 2019	Export market diversification level, 2019
Vegetable oils	NA	NA	50,104	250	Russia, Azerbaijan, Ukraine	Azerbaijan, France, Armenia	Highly concentrated (HHI of 6664)	Highly concentrated (HHI of 2524)

Source: UNComtrade, GeoStat, 2020

Note: HHI – the Herfindahl-Hirschman index (HHI) is a commonly accepted measure of market concentration.

Within the category of vegetable oils, sunflower oil accounts for 90% of total imports (UNComtrade, 2020). As of 2019, the major importers were Russia (90%), Ukraine (5%), and Azerbaijan (5%). Sunflower oil falls under the price control policy, indicating that its price will be capped and subsidized by the GoG. To create stocks, GoG will buy [1,500,000 liters](#) of sunflower oil. There are several factors that might affect the price of sunflower oil in the upcoming months. In January 2020, Russia's vegetable oil union called for a restriction in sunflower seed exports, following a surge in domestic prices due to the depreciation of the national currency. This might lead to increased domestic production of sunflower oil in Russia. Moreover, Ukraine, which is an import partner for Georgia, [increased the production of sunflower oil](#) by 15.7% in January-February 2020. It is worth noting that international prices for vegetable oil dropped by 10.3% compared to January 2020 (FAOSTAT, 2020). The main driver of the change was the decreased price of palm oil reflecting a higher than expected output in Malaysia, a temporary drop in Indian import demand, and expectations of a slowdown in global demand following the outbreak of COVID-19. The final impact on sunflower oil prices will depend on the magnitude of the Georgian lari's depreciation. Notwithstanding, consumers will be able to buy sunflower oil at cheaper prices due to the price cap policy initiated by the GoG.

## CONCLUSIONS

To sum up, Georgia is highly dependent on imports for most food categories. Most of the strategically important foods' import markets are rather concentrated, increasing the related risks, particularly in the current situation with COVID-19. As part of global food value chains, Georgia will also share the challenges (current and expected) faced by worldwide food systems during the current pandemic. While many experts do not fear a reduction in the global availability of food, they point out potential systemic problems in food value chains, leading to food shortages, an increase in food prices and the further aggravation of food insecurity in the world. The following possible changes must be considered on the demand and supply sides of global food systems:

- **Demand side.** As many food products are “[income inelastic](#)”, food demand will, in general, be relatively less sensitive to an economic slowdown. Nevertheless, income reduction (due to current job losses) might be related

to a **contraction in consumption in poor countries**, as food demand is more elastic there than in more developed countries. Further, if price shocks are high during the crisis, it could lead to changes in consumption baskets and thus in nutrition. Consumers may **reduce the nutritional diversity** of their diets by switching away from more nutritious products such as meat or dairy toward consuming more grains (that are not perishable).

Yet another important point is that a large portion of demand for food in Georgia comes from restaurants and hotels which are currently shut down; therefore there will be a reduction in demand for food from Horeca.

- **Supply side.** The biggest concern in food value chains is **logistical** problems related to the movement of food. Transportation of fresh food products is of particular concern in this regard.

**The availability of the labor force** might become an issue in both primary agricultural production (e.g., if international labor movement continues to be blocked, it might lead to a shortage of seasonal workers in vegetable and fruit farming) and food processing (related to general quarantine regimes in many countries).

**Export restrictions** applied by some countries induce shortages on international markets, driving food prices up. Facing higher food prices, many governments usually decide to protect their own consumers by also imposing export restrictions, putting a further upward pressure on worldwide food prices. Such policies largely contributed to food price spikes in 2007-2008.

## RECOMMENDATIONS

GoG is already taking reasonable steps to cope with the potential challenges to food systems in the form of price caps and increased stocks. But further actions should be undertaken to ensure Georgia's food security. Some recommendations are related to the general development of Georgian agriculture and are thus the same as before the pandemic, while gaining importance in the current situation. These are:

- Given that around half of agricultural land of Georgia is **not cultivated**, the government should further encourage the cultivation of particular agricultural products on these land plots, carefully considering both the country's comparative advantages as well as some minimal level of self-sufficiency in basic food products.
- The government should elaborate on the design of current agricultural programs (e.g., "Produce in Georgia") by **prioritizing** products with **import substitution** potential.
- While Georgia's imports and exports in the main food categories show some degree of diversification, intensively pursuing further **diversification** is recommended, particularly for foods that have a high share in the consumption basket.
- Joint efforts of stakeholders are needed to ensure the adequate **enforcement of price caps** imposed by the government. All value chain actors including consumers have a role to play in this process.

Currently, the price caps introduced only apply to some imported food products. **Other imports**(e.g., fruits and vegetables) as well as **domestic food value chains** might see a rise in prices as a result of increased input prices as well as disturbances in food transport. As linkages between some value chain actors have been quite weak in Georgia anyway, the current regime might further complicate the issue and result in temporary food shortages. Considering these potential problems, in the short-run it is recommended to:

- Temporarily subsidize farm inputs.
- Strengthen value chain linkages by investing in logistical infrastructure (e.g. design temporary food collection centers) to ensure an uninterrupted food supply and distribution in line with food safety standards.
- Support farmers by involving them in different online platforms to help them sell their products.
- Provide targeted support to farmers affected by the dramatic decline in demand for full-service restaurant and hotel meals. Support measures may include: (1) identifying such farmers with the help of farmer associations and Regional Information Consultation Centers; (2) advising these farmers on restructuring their distribution channels; and (3) proactively helping them get involved in other food value chains, with end-consumers different than restaurants and hotels (e.g., connect such farmers to the nearest collection center, exporter, online food seller, etc.).

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