

## **Egyptian Grain Market and its Importance over the Bulgarian Production and Export of Agricultural Products**

PhD candidate Desislava Ivanova  
University of Economics - Varna, Varna, Bulgaria  
desislava\_ivanova@ue-varna.bg

### **Abstract**

*The Egyptian market is essential market, having influence over the global pricing within the international grain markets, as Egypt is playing key role in the import and demand of raw materials through government tenders. Delivering the food to the right place at the right time appears to be very much important, due to the rising concerns about the uncertainty of food security and nutrition of the population. Having knowledge and information about the imports in Egypt is giving opportunity to Bulgaria to be more competitive among the competitors, to popularize the Bulgarian agricultural products, such as wheat, corn, barley and to create a better image for the country. The main purpose of this study is to analyze the Egyptian grain market in terms of the imported products, as far as the country is considered to be one of the main net importers of wheat and to reveal the opportunities for Bulgaria to supply grain products to this market. The purpose of the publication is to study the impact of key indicators in Egypt on the production, prices and wheat sales in Bulgaria.*

*Keywords: grain market; food security; import; export; commodities; nutrition; trade.*

*JEL Code: F1*

### **Introduction**

As a result of the global political, economic, social and financial recession as well as the pandemic situation the international grain markets are facing several obstacles in terms of the supply and demand in different areas. The overpopulation of certain regions as a result of globalization leads to problems related to the nutrition of the population and food security. Egypt with its strategic location appears to be attractive market for the import of raw materials and grain trading. The country is among the major importers of agricultural products, which through organized government tenders has an impact on pricing and price dynamics in the international grain markets. Price volatility is relevant topic as the more expensive supplies lead to disruptions in the supply chain and put poorer regions in conditions of food insecurity. The Egyptian market is an opportunity for countries like Bulgaria to trade their agricultural products, as the Egyptian market is focused on supplies from the Black sea region, and Bulgaria is part from this area. It is necessary the Egyptian grain market to be examined in terms of the commodities, which are imported in the country in order the potential of this market for Bulgaria to be revealed.

The subject of this study is the grain trade and in particular the exported wheat from Bulgaria to Egypt.

The study defends the thesis that as a result of gaining more knowledge for the Egyptian import market the Bulgarian grain traders as well as the Bulgarian government can improve its competitiveness in the international grain market.

### **1. Literature review**

A wide range of sources have been used to write this article, including: specialized scientific literature such as reports, articles; documents from the Ministry of Agriculture and Land Reclamation in Egypt; reports from world international organizations such as the UN and FAO; information is also derived from reliable Internet sources.

### **2. Methodology**

The study uses methods and approaches to summarize, to compare and to analyze the collected data. The article analyzes trends based on statistical methods and the survey is based on

secondary statistics. The collected information about the Egyptian import of grains is for the past three years.

### 3. Results

In the specialized literature, Egypt is cited as an example of a country, which is importing basic agricultural products, whose participation in international markets is influenced by a number of heterogeneous factors (Kostadinov, 2014). According to a publication of Enghiad, Countryman, Ufter 2017 in the international journal of agronomy the grain market is influenced by a number of complex economic factors and, by its very nature, has a leading role in food security at both national and global levels.

As a result of the Covid-19 pandemic situation, the Egyptian government started to organize a number of government tenders to stock the country with agricultural products, in particular commodities, such as wheat, corn and barley (GASC, 2021). The stockpiling is mainly due to expected difficulties and disruption of the food chain caused by logistical problems and high price levels. The measure taken by the Egyptian government aimed to avoid a possible recession in the country regarding the shortage of basic food raw materials. On the other hand, the implementation of a quota principle in countries such as Russia and Ukraine hindered the supply of raw materials to Egypt, which resulted in cancellation of government orders as well as led to increase in the price of grains both on the local and on the international markets (FAO, 2021).

Egypt is considered one of the large markets in the region because of its location, population, and different consumption patterns which makes it the focus of investors' attention to meet the needs of this large market, especially in the strategic food commodities sector.

Based on official statistical data of the Ministry of Agriculture and Land Reclamation, 2021 Egypt consumes 56 million tons on average annually of strategic food commodities, about half of them are produced locally, and the rest through imports. Wheat and corn occupy two-thirds of this quantity, where wheat is used for human nutrition and corn is mostly for fodder purposes (Grain and Feed Annual, USDA, 2020). Data for the imported grain quantities are presented in Table 1.

Table 1. The input quantities for the period year 2018 – Q1 / 2021

year	wheat		corn		barley	
	production	imported	production	imported	production	imported
Y 2018	8 346 672.00	12 344 325.00	7 428 718.00	9 026 789.00	84 206.00	15 536.00
	20 690 997.00		16 455 507.00		99 742.00	
Y 2019	8 558 807.00	13 108 880.00	6 961 000.00	10 391 401.00	106 978.00	13 718.00
	21 667 687.00		17 352 401.00		120 696.00	
Y 2020	9 088 478.00	13 033 139.00	6 401 715.00	9 950 179.00	105 503.00	13 611.00
	22 121 617.00		16 351 894.00		119 114.00	

Source: Misr Information Services and Trading, 2021

The data from the table for the fundamental agricultural products in Egypt presents a relative stability for the past last three years, which is confirmed by publicly available data for the first quarter of 2021. The relative change of main local grain production and import is presented in Table 2.

Table 2: Change in the traded volume of grain in Egypt for the period 2018-2020

	Wheat			Corn			Barley		
	Production	Import	Total	Production	Import	Total	Production	Import	Total
Relative change 2019/2018 (%)	2,5%	6,2%	4,7%	-6,3%	15,1%	5,5%	27,0%	-11,7%	21,0%
Relative change 2020/2019 (%)	6,2%	-0,6%	2,1%	-8,0%	-4,2%	-5,8%	-1,4%	-0,8%	-1,3%

The data in Table 2 convey an increase in the amount of wheat sold in Egypt, but at the expense of increased local production. In the three analyzed commodities – wheat, corn and barley there is a decrease in the imports for 2020 compared to 2019, as this negative change refers most to the corn (-5.8%), followed by the barley (-1.3%) and the wheat (-0.6%).

Based on MISR, 2021 report during the past years, Egypt have been seeking to reduce the gap of agricultural needs between production and consumption in all agricultural commodities (vegetables, fruits, grains and oilseeds) through the following axes:

- Horizontal expansion: Increasing the cultivated areas.
- Vertical expansion: improving the strains and using high-quality and productive seeds.
- Expansion of contract farming system.

GASC imports by announcing international and local tenders to purchase Commodities with specific conditions and specifications and receives offers only from companies which are registered as their suppliers, and Commodities from their authorized origins as well. It also opens the door for acceptance for companies that meet the conditions to be registered in the lists of suppliers

GASC also operates with two payment systems (GASC, 2021):

- As for the 180-day payment facility.
- Or (At Sight) system

The Ministry of Supply represented by GASC purchases about 3.5 million tons annually of local production and imports about 6.75 million tons annually from different origins, mostly Russian wheat. GASC imports more than half of the total imported wheat to Egypt and it's considered the largest governmental importer in the world (The Ministry of Supply, 2021).

Egyptian importers prefer Black Sea wheat due to the low shipping “cost & time”, where the percentage of Black Sea wheat in the annual average reaches 85% of the total imports and Russia is ranked the first in the exporting countries to Egypt with an average of 65% annually, followed by Ukraine. (MISR,2021).Based on the data of report of USDA, 2020 for the Grain and Annual Feed in Egypt the wheat import for 2020/21 is up almost with 0.4 % from 2018/2019 reaching 12.85 MT. The largest foreign suppliers in 2018/2019 to the Egyptian market included countries such as Russia (7.36 MMT), Ukraine (1,93MMT), followed by Romania (1.25MMT), and the USA (847 000MT). For the period 2019/2020 the main exporters to Egypt were Russia (3.87MMT), Ukraine (2.18MMT), Romania (660 000MT) and France (252 000MT).

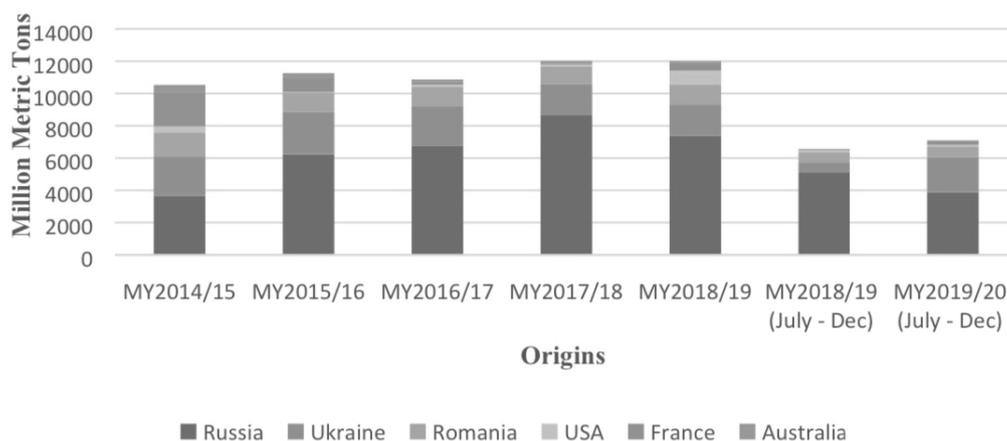


Figure 1: Major Origins Exporting Wheat to Egypt (MY 2014/2015 to MY 2019/2020)

Source: Grain and Feed Annual, USDA, 2020

On contrary the Situational-Perspective Analysis of Wheat of the Ministry of Agriculture and Food in Bulgaria is showing small volume of wheat export to Egypt for the period 2015/2016 –

2020/2021. For 2018 Bulgaria exported to Egypt 62 076.00 MT, which represented 0, 50 % of the total wheat imports. For 2019 the exported quantity from Bulgaria – 12 012.00 MT wheat, which represented 0.09 % of the total imports in comparison with 2020 when the exported quantity reached 65 751.00 MT (USDA, 2021) - figure 1. The main supplies of around 85 % of the imported wheat are to several Egyptian ports such as Alexandria, Damietta and Dekheila ports (MTS, 2021).

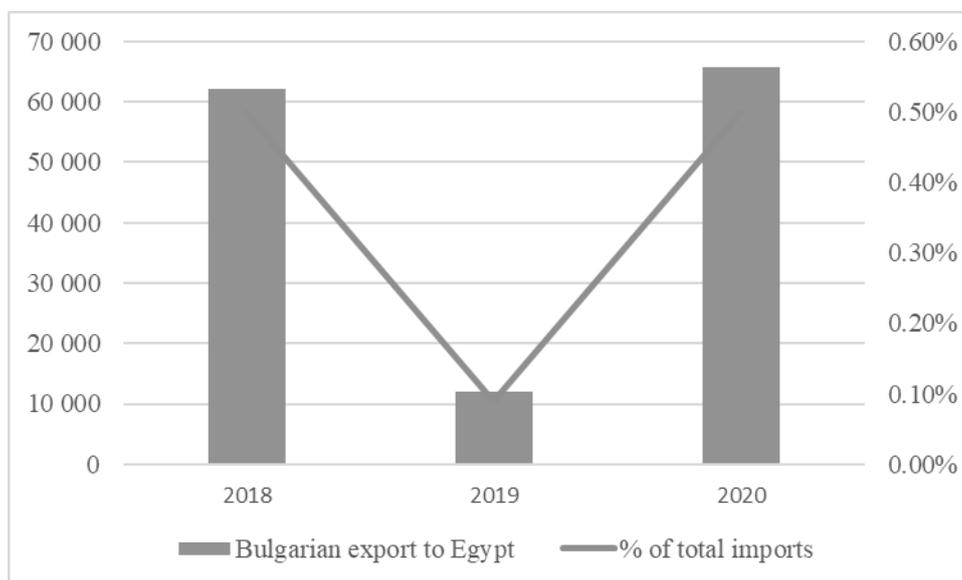


Figure 2: Bulgarian wheat export to Egypt as % of total imports

Source: Situational-Perspective Analysis of Wheat of the Ministry of Agriculture and Food in Bulgaria

The Situational-Perspective Analysis of Wheat of the Ministry of Agriculture and Food in Bulgaria convey that for the period 2010 – 2019 the Bulgarian export to third countries like Egypt, Libya, etc. constitute a lower percentage compared to the export to EU. This is mainly due to infrastructure, exchange rates, approved import origins, export taxes and duties. Bulgaria is a country in which the euro-dollar exchange rate is from great importance when exporting to third countries, as the export to Egypt for example is in us dollars.

Other strategic commodity, which is preferable for the Egyptian market is the corn. It is mainly used for feed and starch.

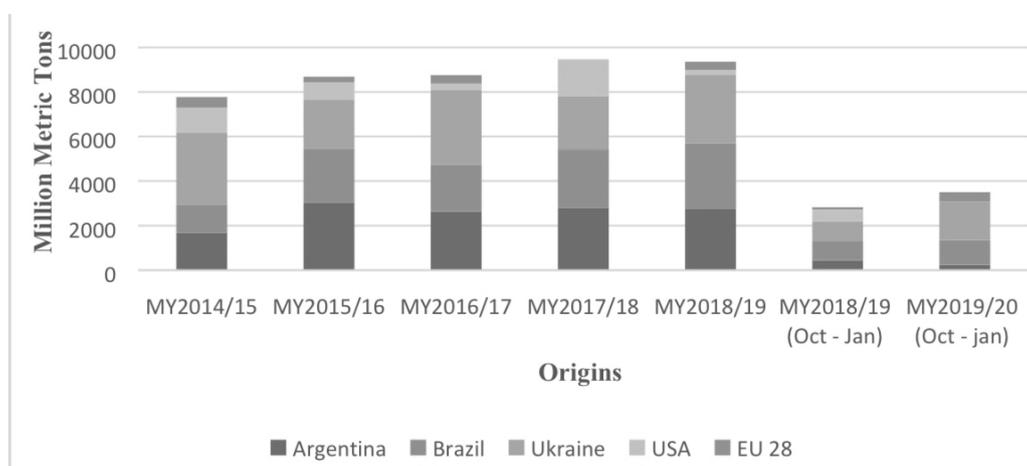


Figure 3: Major Origins Exporting Corn to Egypt (MY 2014/2015 to MY 2019/2020)

Based on the data of report of USDA, 2020 for the Grain and Annual Feed in Egypt the corn import for 2020/21 consists of five main suppliers- countries such as Ukraine, Argentina, Brazil, USA and EU. For 2018/2019 Ukraine supplied 14.8MMT, Argentina 12.8 MMT, Brazil 11.4 MMT, USA 4.0 MMT and EU-28 1.4 MMT. For 2019/2020 the main deliveries were from Ukraine 1.7 MMT and from Brazil 1.1 MMT.

With some conditionality it can be assumed that this is due to the competitive advantage in terms of the favorable climate conditions in these countries, as well as specific cargo specification and well-developed port infrastructure allowing them to export big cargo volumes.

According to Aleksiev, 2012 in order to achieve a competitive advantage in the supply chain, the availability of a well-developed infrastructure is from great importance. Countries such as Russia, Ukraine and Romania are building their infrastructure and the result of this modernization is increasing their efficiency, gaining their greater competitive advantage, which allows them to become among the leaders in the sector. On contrary the USDA annual agricultural report from 2013 state that the lack of well-established port infrastructure and functioning in Bulgaria hinders the Bulgarian exports of agricultural products.

Due to the lack of good port infrastructure, the Bulgarian producers are not listed in a regional branch of the Chicago Stock Exchange and the Bulgarian ports are also not included in the contract specification for Black Sea wheat on the Chicago Stock Exchange, unlike Romania, for example, which is having grain terminal, allowing the country to export not only its own agricultural products, but also grain products from countries such as Hungary, the Czech Republic and Slovakia (Kostadinov, Mollov, 2015). One of the main requirements for the Bulgarian ports to be included in the specification of Black Sea Wheat cargo ports is the ports to have the ability to accommodate large vessels, a requirement that Bulgaria does not meet due to a restriction on the depth of the ports. The lack of the infrastructure slows down the discharging operations, which leads to high logistic costs for the traders. On the other hand, this does not give the country a competitive advantage, which appears to be the reason why the Bulgarian grain is traded in small volumes in Egypt.

### **Conclusion**

The Egyptian commodity market is an attractive market, which imports huge quantities of grains on annual basis. The last makes the country an important leading factor both in the international grain trade and in the global grain pricing. From the findings of the present study it was found that Bulgaria has relatively small share in the supply of agricultural products in Egypt. However, the better knowledge of the Egyptian market as well as its importance for the world grain trade enables Bulgaria to focus on the commodity export to this country. Bulgaria's participation in the state tenders of Egypt provides an opportunity to popularize the Bulgarian grain and to create a better image for our country.

Based on the provided and analyzed data in the present article the following conclusions are reached:

First: Egypt retains its position as a participant in the international grain market during the pandemic COVID-19 situation.

Second: Egypt is an attractive market continues to be a major player and keeps the leading positions in the world pricing, as the country imports large quantities of grain through its state tenders.

Third: Due to a lack of well-developed port infrastructure and modernization in the grain sector Bulgaria is unable to defend its traditional positions within the market. Therefore the country is unable to compete with the other countries, which are main suppliers to the Egyptian grain market.

### **Acknowledgement**

This publication is supported by the Scientific Research Fund: POZESIN project. The project "Land relations and European policy: opportunities for synergies for Bulgarian agriculture" is implemented by the Institute of Agricultural Economics, Agricultural Academy - Sofia, in partnership with the University of Economics - Varna and the Agricultural University - Plovdiv, 2019-2022. The author thanks the Scientific Research Fund for the support in carrying out the work on the POZESIN project, contract № KII-06-H35/2-18.12.2019

### **References**

1. Alexiev A. Competitive opportunities of the grain sector. Academic Publishing House of the Agricultural University. Plovdiv. 2012
2. Aliakbar Enghiad, Danielle Ufer, Amanda M. Countryman, and Dawn D. Thilmany. Journal of Agronomy, An overview of Global Wheat Market Fundamentals in a Era of Climate Concerns, 2017 - <https://www.hindawi.com/journals/ija/2017/3931897/>
3. Egyptian Businessmen's Association –
4. GASC, 2021 - <http://www.gasc.gov.eg/>
5. Grain and Feed Annual, USDA, 2020 EG2020-0005 – [https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Grain %20and%20Feed%20Annual\\_Cairo\\_Egypt\\_03-15-2020](https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Grain%20and%20Feed%20Annual_Cairo_Egypt_03-15-2020)
6. Kostadinov, A. Simeonov, The Impact of International Grain Prices on the Bulgarian Grain Market, 2014, Evdemonia Production EOOD
7. Kostadinov, A., Mollov D., Competitiveness of grain producers in Bulgaria, 2015, JEL: F23, L23, M11, Q18 / Kostadinov A., Mollov D., Competitiveness of grain producers in Bulgaria, 2015, JEL: F23, L23, M11, Q18
8. Ministry of Agriculture and Land Reclamation - <http://www.agri.gov.eg/>
9. Ministry of Trade and Industry – General Organization for Export and Import Control - <https://www.goeic.gov.eg/en>
10. Misr Information Services and Trading, 2021 – <https://mist-net.com/>
11. Miss Commodities , 2021 - <https://www.miscommodities.com/product-wheat.php>
12. National Statistical Institute (NSI), 2021- - <https://nsi.bg/bg>
13. The Egyptian Ministry of Transportation – Maritime Transport Sector “MTS” - <https://www.mts.gov.eg/en>
14. The Food and Agricultural Organization of the United Nations, 2021 - <http://www.fao.org/home/en/>
15. The Ministry of Supply, 2021 - <http://www.msit.gov.eg>
16. United Nations, 2021 - <https://www.un.org/en/>