

ANALYSIS OF THE CEREAL MARKET IN ROMANIA, IN THE PERIOD 2020-222

Adelina VENIG^{1#}, Aurora VENIG¹, Tabita ADAMOV²

¹ University of Oradea, Faculty of Environmental Protection, Oradea, Romania

² Banat's University of Agricultural Sciences and Veterinary Medicine „King Michael I of Romania” from Timișoara, Faculty of Agricultural Management, Timișoara, Romania

RESEARCH ARTICLE

Abstract

The aim of this research is to analyze some aspects regarding the cereal market in Romania, in the period 2020-2022. The researched elements were the imports, exports, and the values of the traded products. The analyzed crops were wheat, maize, oat, rye, and barley. It is well known the fact that cereals are of particular importance on the agri-food market, being an important source of food, both for humans and animals but also, they dependent on climatic conditions. From the analyzed data, it is found that exports register significantly higher values than imports. Although Romania annually produces large quantities of cereals, being among the top European producers, the production obtained is not sufficient to ensure the existing demand on the market.

Keywords: cereal production, import, export, market.
#Corresponding author: adelina_venig@yahoo.com

INTRODUCTION

INTRODUCTION

Cereals are the primary source of sustenance for humans and, to a large extent, animals, hence commercialization of these products has long been a prominent activity in Romania. But in recent years, there has been a greater processing of grains, and customers are getting pickier about the finished goods that result from this processing (Jacques, 2006). Food and agricultural markets serve as a hub for interaction and engagement. While every consumer wants to get a product for the lowest feasible price, every producer wants to get the best price for the thing that is being given for consumption (Crețu, 2018). Agricultural market is the meeting point of agricultural holdings, cooperative or merchant collection businesses. This market is focused on all common and perishable goods that must meet certain requirements quickly and efficiently to preserve all their qualities. Following this kind of conditioning, agricultural products are ready to be sold. Agriculture is not an economic sector that should run normally in an environment where the laws of the market alone govern the economy because of its unique nature. As a

result, we can state that the demand for agricultural products will rise soon because this sector is not highly elastic in response to changes in the level of prices. However, over the long run, relative demand is inelastic with respect to both prices and consumer incomes (Andriy, 2021). This effect is considerably more noticeable when considering bread and bakery products. Increases in individual consumer income do not necessarily translate into increases in the demand for agricultural products; the reason for this is the nation's biological consumption limit, as well as its rigidity about changes in population structure and consumption patterns. Agri-food items are subject to both supply and demand, which can lead to various forms of instability such as shifting prices or disparities in consumption patterns.

Therefore, on the ground of the agricultural product markets and the free behavior exhibited by the customer, there is a risk that, following a time of high prices, an exceptionally high quantity offer will be witnessed. Such an outcome is the result of an excess supply or an additional supply, which can lower prices across the supply chain and consequently increase agricultural producers'

income. In turn, a variety of subjective and objective factors that show up as consumer reluctance to purchase certain products or groups of products or as a willingness to give up on others are what lead to the volatility of the market for agri-food products. Grain output is generally connected with the sown area; nonetheless, paradoxes occasionally arise in which a big cultivated surface is accompanied by a small production. Farmers and agricultural experts deal with a variety of issues every year, most of which are too difficult to handle if intervention is necessary. With the greatest global distribution, wheat is the most significant cereal.

The following components highlight wheat's unique significance: consists of well-proportioned nutrients that the human body needs, such as over 67% non-nitrogenous extractives, up to 13.5–14% protein, 2% fat, 1.6% mineral substances, and vitamins B and E; is converted into flour and used to make bread, pasta, cakes, biscuits; wheat grains are used in industry to make starch, dextrin, and glucose (Lazor, 2023). The lands that are left over after grinding wheat are extremely valuable concentrated fodder that is rich in proteins, lipids, salts, and minerals; offers great opportunities for crop mechanization and low-cost production (Tariq, 2023). The grains do not spoil if they are kept in storage for a lengthy period or moved across large distances. About 40% of the calories that people in our nation need to consume come from wheat. 10-15% of the total nutritious units ingested by animals come from bran and other byproducts of industrialized wheat. Wheat is the most widely grown crop in the world due to its unique significance; in our nation, it takes up slightly more than 2 million hectares each year. In general, wheat needs an environment that is moderate in terms of heat and humidity. It is comparatively selective when it comes to soil type; it performs best on medium-to heavy-textured soils with strong water-holding capacity and a reaction between weakly acidic and weakly alkaline (Jenkins, 2016). 92% of the arable land in our nation is suitable for wheat cultivation.

Maize is used extensively in human nutrition, animal feed, and as a premium raw material in various industries. Numerous food items are made from corn animals (all the plant's aerial parts as well as the grains that are not very nutritious are used), starch, glucose, dextrin, oil derived from embryos, alcohol, and

beer. In certain nations, sucrose is produced by an industrial enzymatic starch transformation process (Logsdon, 2013). All continents have maize cultivation, which covers an area of more than 134 million hectares and ranks third in the world behind rice and wheat. From this vantage point, it is the most important crop plant in our nation.

One of the most significant concentrated feeds is oats, which is mostly fed to young and reproducing animals. Oat grains are utilized in human nutrition as flakes, flour, and semolina. Because of their extremely high nutritional value, these forms of oat grain are advised for children and adults following a diet (Briggs, 2007).

Rye is a cereal that feeds people in many parts of the world. It is grown in soil that is glassier, when wheat yields are low (Sneh, 2022).

Despite not being its primary industry, Romania is economically reliant on agriculture. Most of the fertile land in the sizable nation is under cultivation. Because of this, the majority of Romania's workforce works in the agricultural sector, namely in the export industry, and the country's rural population has grown recently. This industry has garnered attention and is expanding steadily; while it is not yet self-sufficient, it is vital to preserve economic stability and is anticipated to have an increasing amount of influence on the nation. In agriculture, risk and uncertainty are prevalent and contribute to instability and large production losses. Regardless of their type, risks will always exist in relation to the sale of agricultural products as well as the production that is achieved over a predetermined period. Here, can exist the so-called "physical risk" that arises when products are destroyed or damaged due to the previously mentioned factors, as well as the widely recognized "market risk" that results from different variations in the "value of the products between the production process and the current one consumption."

There are many different goods on the Romanian cereal market that are like those on the global grain market but have certain unique features. The dynamic ratio between supply and demand is what sets the cereal market apart from other marketing subsystems. Due to its object products that represent a broad economic interest for the entire population, the grain market serves as a means of market balancing. The most significant social and economic effects arise from striking a balance

between supply and demand as close to the level that is deemed satisfactory. The grain market serves as a gauge of the pulse of the market, able to predict shifts and the course of action for the businesses within its sphere of influence as well as for the commercial environment at large; buyers are dispersed, and consumption remains relatively constant despite changes in size, income, or price when consumption has reached a rational level; cereal marketing chains are lengthy, involving an increasing number of specialized intermediaries for whom promotional activity has a low weight, and international trade is dominated by large specialized commercial enterprises. Although cereals are grown all over the world, only few nations export them: the United States is the top exporter by far, followed by Canada, Australia, Argentina, and France. Overall, though, the Common Market exhibits a deficiency in the grain balance, with imports of wheat, corn, and soy outpacing exports of flour and soft wheat. Large amounts of grain are also imported by Japan. The main countries for grain export from Romania are Jordan, Egypt, Israel, Sudan, and Lebanon.

MATERIAL AND METHOD

The data provided by the European Commission were analyzed and processed. Both the quantities of traded cereals and their values were processed, for each cereal crop separately.

RESULTS AND DISCUSSIONS

Even though wheat cultivation covers the greatest area in our nation, it appears that the output is insufficient to meet market demand.

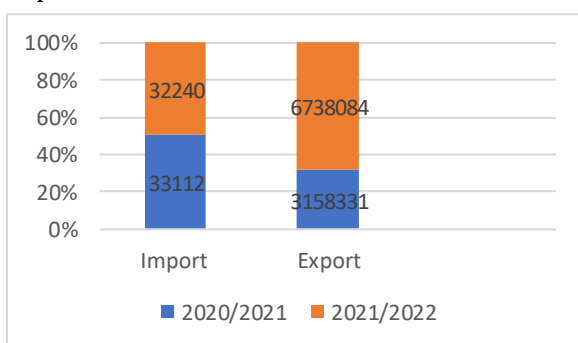


Figure 1. Wheat commercial situation (tons)

The largest amount of wheat was exported in the 2021/2022 agricultural period in the amount of 6.738.084 tons. Regarding the import of wheat, the maximum quota was set in the 2020/2021 agricultural year.

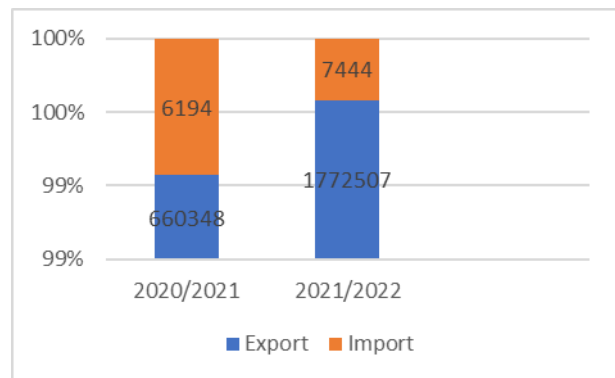


Figure 2. The commercial value of the wheat market (thousands of Euros)

The total value of wheat exports in the period 2021/2022 was 1.772.507 thousand Euros, compared to 660.348, the total value of exports in the period 2020/2021. The values recorded in the case of import are significantly lower, the maximum being 7444 thousand Euros in 2021/2022.



Figure 3. Maize commercial situation (tons)

Maize export reached the maximum level of 4.362.564 tons in the 2021/2022 agricultural period, but Romania imported 277177 tons of corn in the same period.



Figure 4. The commercial value of the maize market (thousand Euros)

Regarding maize, the maximum value of export is observed in the period 2021/2022, of 1.152.378 thousand Euros, and regarding the value of import, the highest value is recorded in the same period.

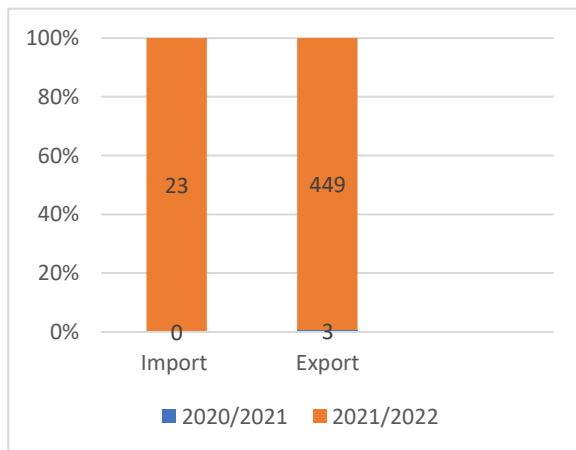


Figure 5. Oat commercial situation (tons)

Regarding the import of oats, very low values are observed. The maximum value was recorded in the period 2021/2022, 23 tons, and in the period 2020/2021 the import of this cereal was not recorded. The export reached the maximum share in the same period, of 449 tons.

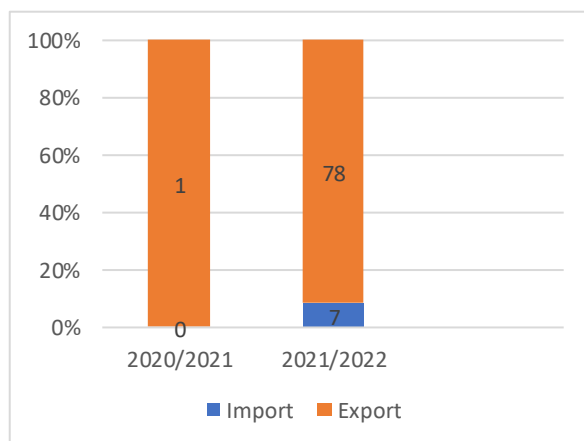


Figure 6. The commercial value of the oat market (thousands of Euros)

The values related to trade in oats are insignificant, of 78 thousand Euros in 2021/2022, resulting from exports and 7 thousand Euros related to imports.



Figure 7. Rye commercial situation (tons)

Rye trade is like that of oats, at a low level. Romania exported the largest amount of dried fruit in the 2021/2022 period, 34 tons. The maximum import of rye is reached in the 2021/2022 agricultural period, when 531 tons of rye were introduced into the country.

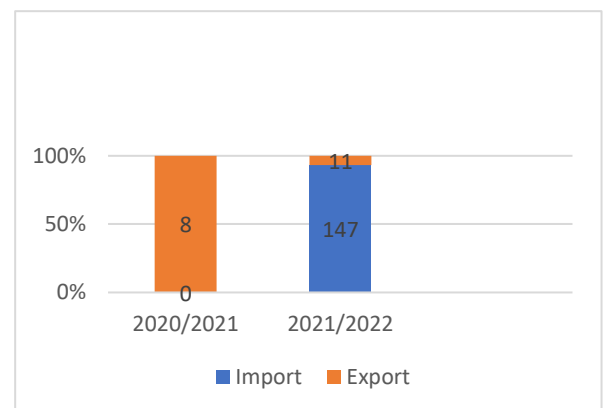
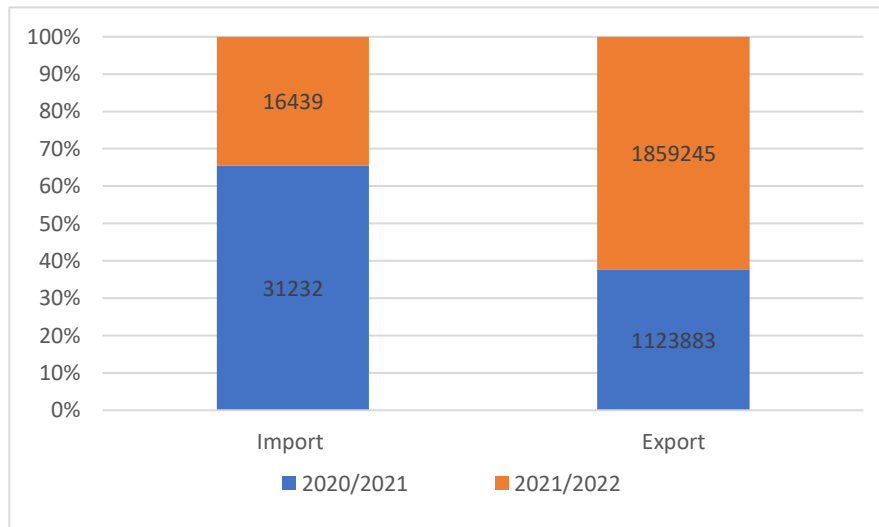


Figure 8. The commercial value of the rye market (thousands of Euros)

As in the case of oats, the trade in rye registers insignificant values, the maximum being 147 thousand euros following the import from the 2021/2022 period.



.Figure 9 Barley commercial situation (tons)

The export of barley reached the maximum share in the period 2021/2022, of

406.761 tons, and the import had the highest share in the period 2020/2021.

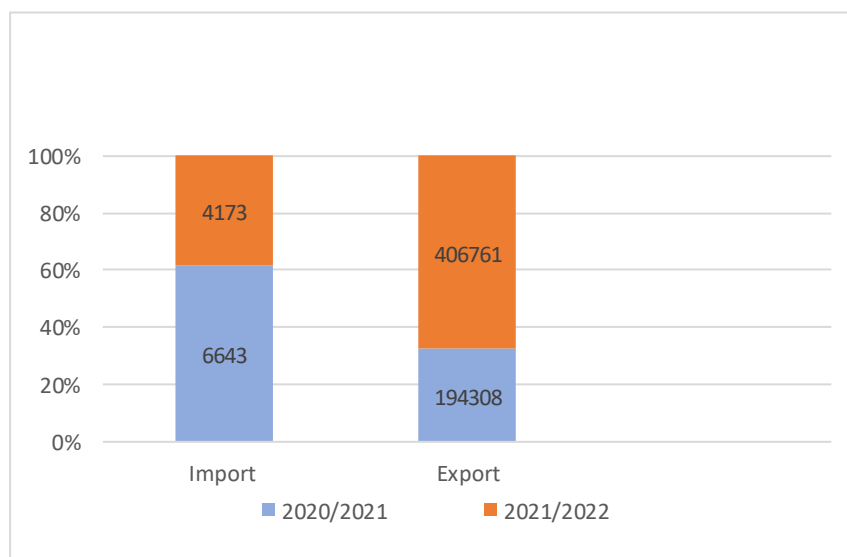


Figure 10. The commercial value of the barley market (thousands of Euros)

CONCLUSIONS

From the research, there can be made following deductions about the import and export of cereals. Even though Romania has a rather high potential for cultivation, the outdated techniques employed by farmers and the lack of effective cultivation technology mean that there must be imported a lot of grain to meet market demand. Consequently, wheat was the most exported crop, with maize coming in second. Compared to corn and wheat, the evolutionary history of rice, oats, and rye is negligible, with oats having the highest percentage. According to a study on cereal

imports conducted, wheat accounts for the biggest portion of imported quantities, followed by rice and maize. Oats and rye have evolved insignificantly, with oats having a higher weight than rye, like export.

REFERENCES

- Crețu R., 2018. Financial analysis in agro-food organizations, ASE Press, 45
 Tariq S., 2023. Cereal crops. CPI Publishing House, 42043
 Jacques R., 2006. The food Encyclopedia, Robert Rose Inc Press, 90-93

Logsdon G., 2013. Small- scale grain raising, Chelsea Green Publishing House, 64
Briggs S., 2007. Organic cereal and pulse production, The Crowood Press, 110-112
Sneh P., 2022. Functionality and application of colored cereals, Academic Pr. Inc. Press, 83-84

Jenkins A., 2016. Agronomy: Food, Crops and Environemnt, Syrawood Publishing House, 24
Lazor J., 2023. The organic grain grower, Chelsea Green Publishing House, 94
Andriy B., 2021. Accelerated breeding of cereal crops, Humana Press. 114.