



Elements of Food Security in the Current Geopolitical Context

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Abstract: *Given the current context - the health pandemic, the armed aggression of a state - the food security of the entire population of the globe is an essential element. Therefore, in this paper, and considering the most relevant and newest articles on food security in Romania and Europe, the authors will try to analyze the effects listed above, following which the problem of providing food to a growing population could be a problem with relentless considerations in the current environment, but also in the sustainability of this situation. Therefore, in the following, the authors will make an analytical approach to the studied ones and they will try to conclude what should happen in crises so that food security represents a landmark on the work agenda of the governors.*

1. INTRODUCTION

In the second half of century XX, the world economy experienced rapid development. Statistical and economic indicators reflect this economic progress. Development and economic policies have led to the gradual degradation of environmental factors, with the slow but sure destruction of ecological systems. If global management continues to be geared towards excessive production and consumption without complying with environmental protection regulations, climate change and disruption will be exacerbated.

The 21st century is an explosive one in terms of global population growth. In February 2022 it was 7.930.443.166 inhabitants. The population of the European Union in 2021 was 447,3 million citizens. For Governments, the challenge is to apply sustainable technologies that combine productivity with sustainable development. The EU advocates for food, social security and the health of its citizens. Its policy aims to promote protection measures against threats in various fields. Member States' policies need to be complemented and harmonized with EU policies, adapting their legislation in this regard, including in terms of food security. Food security policies are a security challenge in this area. It is a key component that must respond to social change in society, climate change and the growing needs of populations. Ensuring “sustainable development” and “sustainable consumption”, which emerged as a concept at the 1992 Rio de Janeiro Environment Conference, are defining elements today. Man transforms renewable resources into non-renewable resources through the aggressive exploitation of the soil, water, flora and fauna.

Interventions made in nature through the use of inappropriate technologies can lead to irreversible effects. Soil and water are very important environmental resources of a country, which

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aggressively exploited can have an impact on the quality of the environment, but also on human health. According to data from the National Institute of Statistics, Romania has an agricultural area of 14,6 million ha, with 8,7 million ha of arable land and a dense hydrographic system, with 4.864 watercourses.

It is the 6th largest agricultural area among EU member states. Agricultural land is a national resource that must be protected and rationally exploited. Globally, in 2022 on 1.956.359 ha there were desertification and on 1.141.410 ha there were soil erosion phenomena. Agricultural over-exploitation and pollutant emissions lead to a decrease in organic matter content and loss of biodiversity. Desertification is also gaining ground due to climate change. The principle of food sovereignty, sustainability and the ability to react in extreme cases were verified during the years 2020-2022 when the health crisis COVID-19 was a “test” that overlapped with the resulting economic crisis. Green agriculture and SMART agriculture are elements of sustainable development. In Romania, in 2020, only 470,000 ha were cultivated in an ecological agricultural system.

2. STRATEGIC AUTONOMY IN FOOD - AN OPPORTUNITY FOR THE EU

According to the European Commission, strategic autonomy is the EU’s ability to make its own choices and shape the world around it through leadership and involvement, reflecting its interests and strategic values. This allows the EU to be stronger, both economically and geopolitically, by the following:

- is sustainable and responsible, taking the lead in the international arena in shaping a greener and fairer world, strengthening existing alliances and working with many partners;
- is open to trade and investment, which helps the EU economy recover from the crisis and remain globally competitive and connected;
- is able to take a stand against unfair and coercive practices and is ready to exercise its rights, while promoting international cooperation to address global issues.

Strategic food autonomy needs to be better defined with regard to food systems. We believe that the EU should be better prepared for future crises. Therefore, we believe that this should be part of the EU’s recovery plan, for example through the use of “Next Generation EU” funds. To this end, strategic autonomy should be based on food production, labor and fair trade, with the general objective of ensuring food security and sustainability for EU citizens through fair, sustainable and resilient food supply chains. Amid the global crisis caused by the COVID-19 crisis, there is a glimpse of the economic crisis - the effect of this pandemic, as well as the global crisis that occurred as a result of the invasion of Ukraine by Russia. In this sense, the agri-food sector must ensure food stability and security as a strategic sector of Romania. The EU needs a system to prevent situations where, due to interdependencies, events such as power outages and network outages or cyber-attacks become uncontrollable. Examples include a city that has to be isolated for several weeks, a power outage that lasts for several days, a food company, or a retailer that is the target of a cyber-attack.

In order to improve adaptation mechanisms, it is necessary to develop existing food systems, while diversifying them, including business models for farm shops, urban agriculture, vertical agriculture and the approach based on local production for local needs in general, which means wider implementation of research and innovation results by farmers and cultivators, thus helping to minimize the risk of ‘food waste’ and specialization of production. At the same time, the benefits of an

efficient distribution system from farms to processing points and markets need to be strengthened. The population working in agriculture must be supported because the food of a nation is a priority, an indispensable good, and the agri-food sector is essential. The three types of crisis that have manifested themselves in the last 3 years have brought agriculture back to the forefront.

The Great Union (1918) brought to Romania an agricultural area of 6,5 million ha of agricultural land. After the First World War, “agriculture remained the most important branch of the economy. Although production per hectare for both, corn and wheat, was well below the European average, Romania, due to its large arable area, ranked first in Europe and 5th in the world in the production of corn and on the 4th and respectively 10th place in the production of wheat. Romania was in first place in the world in sunflower production (Gros, 2016). Globally, at present, “food demand has exceeded supply. First, supply is very low in Africa and other poor areas; second, climate change has shocking influences in Australia, Europe and other growing areas; third, part of food production was diverted to organic fuels; fourthly, the grain supply was not very large, the surplus was small, so prices exploded; fifthly, trade barriers for prices to rise in importing countries” (Sachs, 2018; Fox, 2011).

At present, some of these phenomena have emerged and there is a sharpening trend with the prospect of fighting for a new world order. According to specialized studies, climate change with possible temperature increases of 3^o-6^o C by the end of the 21st century will lead to intensification of natural disasters, drought, sea and ocean level rises and conflicts over natural resources.

3. DIVERSIFICATION OF EU FOOD SYSTEMS

In the current geopolitical context, “Romania has a duty to convince the other EU partners that without solidarity and innovation, we cannot move forward. The European Union must pursue a policy designed to support farmers in providing goods and services to citizens” (I.E.R., 2019). The Common Agricultural Policy (PAC) plays a vital economic, social and ecological role. It should stabilize markets during crises while providing a safety net for farmers and processors and protecting the environment, labor, climate and animal welfare. The PAC plays a role in maintaining strategic production capacity, food security and sufficiency. The PAC needs reform. Green agriculture is a priority; in the wake of the armed conflict in Ukraine, an important goal is to increase agricultural production to supplement grain imports from Russia and Ukraine.

Romania entered the European Union with a large deficit in terms of productivity in agriculture; Romania’s strengths were the resources that led to economic growth and stability.

Farms, fertile land and water are strategic assets and must be protected to some degree throughout the EU: they are the basis of our strategic food autonomy. By its geographical location and size, “Romania is a small state [...] that can benefit from its elites a favorable context. Geopolitics is a science practiced by the great powers” (Dungaciu, 2014). Global food flows have been disrupted by the invasion of Ukraine, a country with huge agricultural potential and an important role in world grain production.

In some European countries, agricultural land is protected by law. Agricultural land is a resource that does not reproduce, is rare and represents the food security of a country. The restrictions imposed by their own legislation refer to the limitation of land concentration, the avoidance of speculation and the maintenance of such land for agricultural use. The phenomenon of

“seizure” of agricultural land has been studied by the European Union institutions as an alarm signal for the Union’s agricultural productions (Szöcs-Boruss, 2015). Rising energy prices have a direct impact on all goods, including food. According to the Farmers’ Training House (AFR), Romania had record wheat production in the agricultural year 2021. World wheat production is 775 million tons compared to the estimated 786 million tons needed for consumption. The demand is very high and the prices are constantly rising.

After the COVID-19 crisis, an economic crisis broke out, which was overcome by the drought of 2020. The political factor also led to rising prices: many countries imposed tariff barriers on the export of raw materials. Russia’s attack on Ukraine has blocked grain exports from Ukraine. About 20 million tons of wheat and corn are blocked due to this conflict. Among the countries that buy wheat from Ukraine and Russia are (Table 1):

Table 1. Cereals purchased from Ukraine and Russia

Country	Cereals percentage, %
Turkey	75
Egypt	70
Tunisia	52
Kenya	34
Nigeria	31

Source: Gallup, 2022.

The war is leading to global food security risks. The consequences of the war in Ukraine are increasing hunger and also make products more expensive (Nițu, 2021). For example, as for wheat, its price reached 386 Euros/ton, with an advance of 44% compared to four weeks ago and, going backwards, it is double compared to three years ago, according to EuroNext data. The price of maize also rose by almost 40% in just one month and stood at 346 Euros/ton, but the highest level since the outbreak of the conflict was 368,5 Euros/ton. Also, the reason should certainly tell us that even in cases where an increase in prices is imminent, for various reasons we cannot buy enough of any product, so the benefits of an overstock are limited. For certain social categories, however, any saving of money, given that purchasing power continues to erode visibly, cannot be ignored. In our opinion, these situations are an alarm signal that indicates a significant risk of declining consumption. AFR claims that in Romania there are fewer and fewer farmers doing high-performance agriculture. “In 2020 in Romania there were 2,887,000 agricultural holdings that used 12.8 million agricultural lands. The provisional results of the General Agricultural Census 2020 show that the agricultural area decreased by 543.000 ha, i.e. 4,1%. The average area increased / agricultural holding with a legal personality from 190,78 ha to 194,8 ha. In the current geopolitical context, a food crisis is possible, not because of its lack of food, but because it will be too expensive for too many people” (Nemes, 2022). The events in Ukraine cause new difficulties in the activity of Romanian farmers: the increase in the price of diesel, unstable markets, and the lack of fertilizers on the market. According to the current President of France, Emmanuel Macron, “Community agriculture must be transformed to continue producing, pursuing agricultural independence.” Many countries are facing large increases in food prices. It is necessary to reduce dependence on the food system, to eliminate excessive dependence on energy imports, fertilizers, animal feed, and supply chains.

In the context of the armed conflict in the vicinity of Romania, a possible food crisis is to be feared by the citizens of Romania. Romania is the largest producer of sunflower without the EU with 3 million tons in the agricultural year 2021. The production of corn was 16 million tons, with Romania being also in 1st place and the production of wheat with 11 million RON ranked 4th (figure 1).

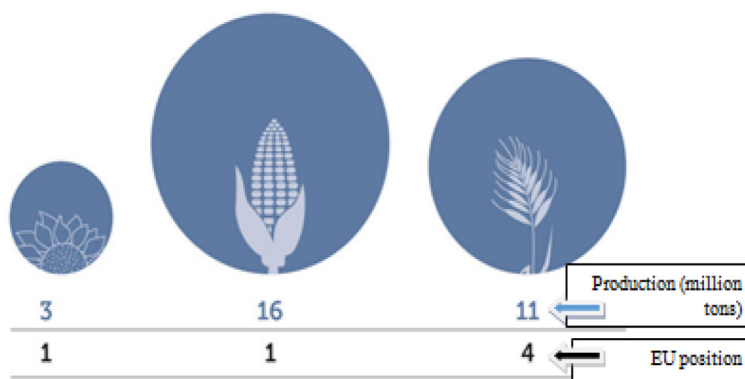


Figure 1. Romania’s position in the EU on the main cereal crops /2021

Source: European Commission; Hostiu, 2022.

Romania is among the top 10 sunflower producers in the world. These are: Ukraine, Russia, Argentina, Turkey, Hungary, Romania, France, Bulgaria, Spain, Kazakhstan (figure 2).

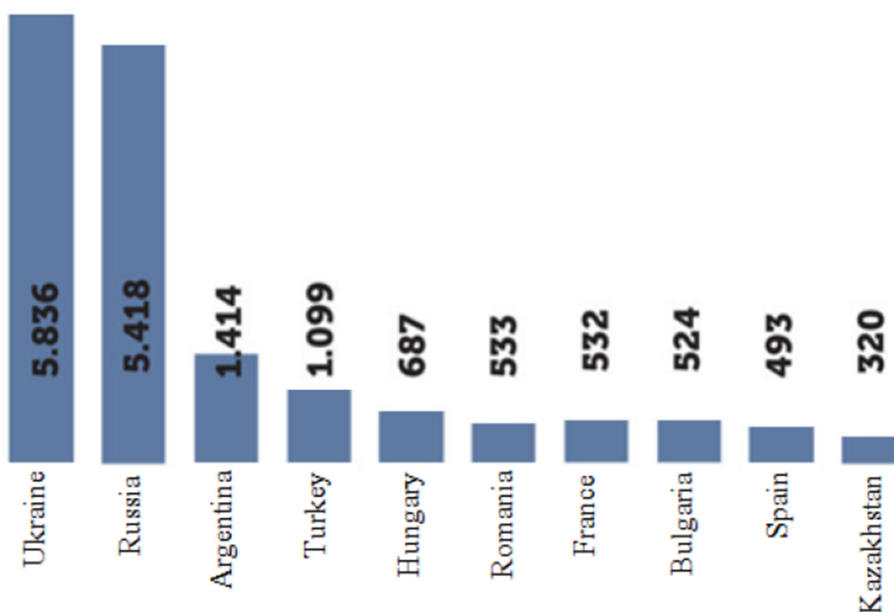


Figure 2. Top 10 sunflower producers in the world (thousand tons) / 2019

Source: FAOSTAT; Hostiu, 2022.

The agri-food sector is the area in which farmers and producers face great difficulties and increasing pressure. Romanian farmers have demanded that the Ministry of Agriculture be included in the Supreme Council of National Defense (CSAT), because food security is very important in the current international context.

4. RESILIENCE AND SUSTAINABILITY OF FOOD SYSTEMS

Recent events caused by the COVID-19 pandemic, extreme weather conditions due to climate disruption and cyber-attacks demonstrate the need to improve the resilience and sustainability of food systems. Under the ‘Farm to Consumer’ (F2F) strategy, the European Commission is drawing up an EU Food Supply and Food Security Emergency Plan and a related mechanism for responding to the food crisis. This would contribute to raising awareness of risks and include identifying, assessing, mapping and monitoring key risks by testing the strengths of critical systems

at both EU and Member State level, leading to the introduction of measures to address the problems encountered. In order to ensure long-term production of sufficient and healthy food and viable livelihoods, natural resources must be used sustainably, conserving soil and water resources, combating climate change and declining biodiversity, and protecting animal welfare. The EU should also strengthen local and regional production in order to combine well-balanced food production and processing with a low carbon footprint. According to the FAO, our humanity and food security are facing many new and unprecedented threats, such as extreme weather events caused by climate change, disease and pandemics. Agriculture faces many risks that, in a hyper-connected world, interact with each other. The FAO notes in its report that, over the period 2020/21, food prices have risen to their highest level since 2011. A common finding is that price volatility is partly driven by speculation. The UN and the OECD note that by 2020, between 720 and 811 million people will be starving. Nearly one in three people in the world (2,37 billion) did not have access to adequate food by 2020, an increase of 320 million people in one year.

The COVID-19 pandemic demonstrates that food security should not be taken for granted, not even in Europe. All the actors and all the activities along the food chain are hyperconnected. During the pandemic, countries introduced trade restrictions. Even within the EU, Member States have taken unilateral measures to close borders, which have made it difficult to transport food and seasonal workers. Due to the ability of farmers and food chain partners to adapt quickly, production, processing and distribution continued to work. The Commission has also taken steps to maintain the functioning of the internal market. However, many entrepreneurs have been economically affected by the crisis as travel, tourism and food services have been shut down.

5. CONCLUSION

Romania is the largest producer of sunflower seeds in Europe. Therefore, Romania, as it produces more than it consumes, provides the raw material for the European Union through exports. The crisis in the region must increase the processing capacity of products in the country so as not to be affected by disruptions in supply chains. Romania has agri-food resources to turn into a finished product to ensure the food security of its citizens. The energy crisis has influenced the results of Romanian farmers with a major impact on production costs. It is necessary to establish long-term strategies with the integration of European policies in their own activities. It was found that it is necessary to increase the efficiency of production factors, the availability of alternative practices, in case of crisis, sustainability, but also the fight against food waste, as well as reducing the dependence on chemical fertilizers. The European Union is preparing a detailed action plan to ensure food security within the Union, eliminating deficiencies resulting from excessive dependence on imports of energy, fertilizers, and feed from one supplier or too few suppliers. There is a need to apply consolidated measures and incentives for the development of agriculture and the use of all agricultural land. The European Commission is invited by the European Parliament to suspend all Green Pact initiatives that have a negative impact on food production. The EU must ensure that borders remain open and that the manpower and logistics needed for food production and distribution (“green corridors”) are maintained, both within the EU and to third countries. This requires a strong coordination mechanism between Member States, the EC and third countries. It is emphasized that the current crisis has shown that there are weaknesses; disruption of agricultural activities and trade flows with worsening financial difficulties for many European families. Strategic autonomy must be seen as an opportunity for the EU to ensure its security of food supply and to set high standards of food sustainability, especially in the context of the European Green Pact and the UN Sustainable Development Goals. The European food sustainability challenge needs to be

addressed both internally and externally, and the opinion will also examine possible ways to protect and improve the availability of sustainable food for all European citizens, especially in times of crisis. Food security should be approached from an international, national and local perspective. As is already known, 55% of the world's population lives in cities where few fresh foods are produced - the so-called "food deserts". The UN predicts that this percentage will increase to 68% by 2050. Forecasts show that urbanization, combined with the global growth of the world's population, could add another 2.5 billion people to the urban population by 2050. The level of urbanization in Europe will increase to about 83.7% in 2050. In the EU's internal market, food is transported daily in most rural areas and from processing points to supermarkets in urban areas. However, local farms and online stores have enjoyed increasing popularity among consumers during the 2020/21 isolation measures. The development of short supply chains contributes to Europe's resilience. Local channels should correspond to the needs of the population and the specific characteristics of the territories and climatic conditions. Processing capacity should be further developed at the local level.

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