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ENSURING FOOD SECURITY OF THE REGION IN THE CONDITIONS OF ECONOMIC SANCTIONS

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Abstract

The purpose of the study is to consider the issue of ensuring food security in the conditions of sanctions pressure and the main causes contributing to the food crisis. In this study, we will consider two problems: to consider the process of formation and development of the region food potential in modern conditions, and to investigate the main causes of the food crisis in the context of economic sanctions. In the course of the study, statistical analysis and comparative analysis were applied. In the process of the study, the following issues were considered: the development of logistics infrastructure to ensure food security in the region; the formation and development of food potential under economic sanctions; identification of the main goals of the "Strategy for the development of agro-industrial and fisheries complexes until 2030"; production of import-substituting food products; the introduction of artificial intelligence in agriculture; the introduction of the Russian food embargo; the reasons for the global food crisis; changes in the policy of import substitution of food products; a factor of state policy in ensuring food security in the era of economic sanctions.

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1. Introduction

In modern conditions, the economy is developing unevenly and faces a number of problems that affect the economic development of different states. Economic sanctions directed against Russia have a direct impact on the country's food security (Bunina & Solntseva, 2021). As you know, Russia is a major exporter of grain in the world. In the current economic conditions, despite the high volume of grain production, there is a decrease in grain exports. By September 8, the wheat harvest in Russia amounted to 92.7 million tons. According to forecasts, the total gross grain harvest will be 146-147 million tons. Despite the high grain harvest, producers face the problem of exporting products due to economic sanctions that do not directly affect agricultural products, however, hinder their export: the closure of European ports for Russian ships, the exclusion of Russian banks from SWIFT and the inability to make payments through the Russian payment system. In the context of the tightening of anti-Russian sanctions, one of the urgent tasks of the economy is to preserve the competitiveness of agricultural products.

2. Problem Statement

In modern conditions, the issue of ensuring food security is particularly acute all over the world (Sukhanov & Sukhanov, 2021). The drought in Spain, which has become one of the most severe droughts in the last decade, may cause an increase in food prices – there is a decrease in grain harvest by 70% and the sale at a loss.

Today, there is a food crisis in the world, which has worsened the economic situation in the world, against the background of the spread of coronavirus infection and the introduction of economic sanctions.

In this study, we will consider two problems:

- i. To consider the process of formation and development of the food potential of the region in modern conditions.
- ii. To investigate the main causes of the food crisis in the context of economic sanctions.

3. Research Questions

In the course of the study, the following issues were considered:

- i. Development of logistics infrastructure in ensuring food security of the region.
- ii. Formation and development of food potential in the conditions of economic sanctions.
- iii. Identification of the main objectives of the "Strategy for the development of agro-industrial and fisheries complexes until 2030".
- iv. Production of import-substituting food products.
- v. Introduction of artificial intelligence in agriculture.
- vi. Introduction of the Russian food embargo.
- vii. The main causes of the global food crisis are highlighted.

4. Purpose of the Study

The purpose of the study is to consider the issue of ensuring food security in the conditions of sanctions pressure and the main causes contributing to the food crisis (Tarasova et al., 2022). Ensuring the food security of the region is a priority task of socio-economic development, characterizes the level of purchasing power and well-being of the population (Shevkunenko & Shevchenko, 2020). Food security is an indicator of the level of economic development of the region and the level of development of agricultural products of domestic production.

5. Research Methods

In the course of the study, statistical analysis and comparative analysis were applied.

5.1. Formation and development of the food potential of the region in modern conditions

The effectiveness of the region's food potential is determined by the level of development of domestic agricultural products, the availability of agricultural equipment and infrastructure facilities. Modern economic conditions require increasing the volume of own production by regions without dependence on imported supplies (Smelik, 2019). Therefore, the issue of providing state support to small and medium-sized businesses, farming and peasant farms, the use of artificial intelligence technologies in agriculture, and attracting investments, the creation of logistics infrastructure facilities for the development of their own agricultural economy remains relevant (Sannikova, 2020). It is worth noting that in the conditions of global turbulence, logistics infrastructure facilities play an important role in ensuring food security. The effectiveness of providing the population with food is directly related to the development of the logistics infrastructure, which solves the issues of delivering products at a certain time and place with minimal costs. Along with this, a huge role in the provision of food is assigned to small businesses, which solves the tasks of improving the welfare of the population, including reducing unemployment and creating jobs, as well as the production of domestic agricultural products of high quality.

The modern world requires the adoption of measures aimed at the formation and development of the food potential of the region. The problem of the formation and development of the food potential of the region was actualized in the conditions of economic sanctions, which raised the question of the effectiveness of the import substitution policy (Aliyev & Chernyavskaya, 2019). Russia has a huge potential for an operational solution to the problem of food security, including geographical location and natural conditions. Therefore, it is safe to say that the regions of Russia have the necessary food potential, which is able not only to meet the needs of the local population in agricultural products, but also to establish exports of products at the world level.

The Government of the Russian Federation has approved the "Strategy for the development of agro-industrial and fisheries complexes until 2030", which is focused on supporting farmers, developing rural tourism, training qualified personnel in the agro-industrial complex, and introducing new

technologies to reduce import dependence (Official Internet Portal of Lighting Information, 2022, September 8).

Despite the economic sanctions, the import substitution policy in Russia shows some success. In 2017, the production of cattle meat is 205 thousand tons, in 2021 – 305 thousand tons, frozen vegetables – 62.6 thousand tons in 2017 against 135 thousand tons in 2021, along with this, the production of fish (fresh or chilled) decreased from 855 thousand tons in 2017. up to 761 thousand tons in 2021, frozen fish – from 3057 thousand tons in 2017 to 3003 thousand tons in 2021 (Federal State Statistics Service, 2022, March 29).

At the moment, the formation and development of the food potential of the region includes the solution of certain tasks. One of these tasks is not only training of specialists in agriculture, but also introduction of artificial intelligence. Thus, the Watson Decision Platform for Agriculture platform provides data on the state of crops, namely possible diseases, and with the help of meteorological data provides information on the timing of processing areas. Or a Scouting application that sends notifications about emerging weeds. For watering plants or spraying with pesticides, the RAPID robotic system, the Weed Seeker point spraying system is used (Rakhimova & Aslakhanova, 2021a).

Food potential plays a priority role in ensuring the national security of the country and is an integral part of ensuring the welfare of the population, socio-economic development of the region, creating favorable living conditions for the population and business, attracting investment capital, etc.

5.2. The main causes of the food crisis in the context of economic sanctions

The issue of ensuring food security was actualized in the conditions of global turbulence. Economic sanctions have had an impact on the level of economic development of the region, which requires the establishment of a partnership between the state, business and the population. In the context of economic sanctions, it is necessary to take prompt measures at the state level to maintain national security.

As measures to ensure food security and socio-economic development of the region, the Russian food embargo was introduced in 2014 and had a significant impact on agri-food imports. Thus, the import of frozen fish in 2014 amounted to 438 thousand tons, and in 2015 – 299 thousand tons. The import of butter decreased from 150 thousand tons in 2014 to 94 thousand tons in 2015 (Analytical Center under the Government of the Russian Federation, 2016). First of all, the countries of the European Union fell under the food embargo. In response, the European Union allocated 125 million. euro to farmers engaged in the production of vegetables and fruits affected by the Russian embargo. The Russian food embargo has updated the policy of import substitution for the production of domestic agricultural products, the use of scientific, innovative and production potential of the region, the creation of competitive agricultural products. Since the agro-industrial sector is given a priority role in ensuring food security, the implementation of the import substitution policy is determined by the level of economic development of the region and the availability of the necessary infrastructure. Along with this, import substitution should not become the main goal of Russia's economic development. Using the example of Iran, it can be noted that international isolation for Russia can result in economic stagnation, inflation, a weak ruble, and a reduction in foreign exchange earnings.

The food embargo was extended in accordance with the decree of the President of Russia "On the extension of certain special economic measures to ensure the security of the Russian Federation" until the end of 2022. Meat, fish and dairy products, vegetable products and fruits fell under the food embargo. Later, breeding animals and animal oil were included in this list (Interfax, 2021, September 20).

Modern economic conditions have led to a global food crisis. Let's highlight the main causes of the global food crisis.

Firstly, one of the main causes of the global food crisis can be called an increase in food prices. The COVID-19 pandemic, economic sanctions, and the destruction of global chains have had a significant impact on price growth. This has led to an increase in the number of people below the poverty line by 70 million people. In other words, food prices are rising, demand is rising, but there are more people on the verge of starvation. This problem may worsen if European countries decide to abandon the purchase of Russian oil, which will increase grain prices if it is considered as an alternative to biofuels (Gazeta, 2022, September 20). Despite forecasts of an impending global food crisis, according to FAO, international wheat prices fell by 5.1% in August 2022. Despite such a decline in prices, they continue to remain high relative to August 2021 (10.6%) (Food and Agriculture Organization of the United Nations, 2022, April 7).

Secondly, the decline in Russian wheat exports. In July and August 2022, wheat exports amounted to 6.3 million tons, which is 22% less than in the same period last year. Economic sanctions have led to the fact that banks, insurers and shipping companies are afraid to continue to cooperate with Russian counterparties.

Thirdly, the global energy crisis, which began in the autumn of 2021. The transition to green energy and proposals to abandon nuclear and gas energy have become the main factors in the emergence of the energy crisis. According to some experts, the transition to alternative energy sources in modern conditions seems unlikely due to their low efficiency. Carbon emissions are projected to be zero by 2050. In 2020, nuclear power plants generated 30% of the European Union's electricity.

6. Findings

Economic sanctions had a significant impact on ensuring food security and led to the global food crisis, which forced a review of state policy in the field of agriculture. In such conditions, it is necessary to pay attention to such factors as:

- i. rural development;
- ii. creation of domestic agricultural machinery to replace imported equipment;
- iii. provision of agricultural land to Russian producers of import-substituting products on preferential terms;
- iv. the use of artificial intelligence in agriculture (Rakhimova & Aslakhanova, 2021b);
- v. provision of benefits and tax holidays to small and medium-sized businesses engaged in the production of agricultural products;
- vi. increasing the socio-economic level of the country's development and improving the welfare of the population.

7. Conclusion

Ensuring food security is a strategic goal of the country's development, for which it is necessary, first of all, to effectively manage the available resources, increase the competitiveness of products and the level of well-being of the population.

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