

**LEASECON 2020****International Conference «Land Economy and Rural Studies Essentials»****POLICY OF AGRI-FOOD IMPORT SUBSTITUTION IN THE  
CONDITIONS OF GLOBAL PANDEMIC**

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**Abstract**

The article discusses the issues of stressful impact of COVID-19 pandemic on global agricultural economy in 2020. The authors consider the problem of the study of the internal food security of a country or region within the framework of the import substitution policy. The research subject is the relationship between the agricultural policy makers on the problem of the implementation of the processes of import substitution and protection of national food security in the face of economic shocks from global pandemics. The measures to support the agri-food sector in the context of a pandemic at the international level are studied: the implementation of monetary policy measures to release the necessary liquidity and reduce the cost of borrowing for economic entities and households, grants and special lending schemes for enterprises facing liquidity problems due to restrictions and problems in operational capacity maintenance; the use of government guarantee products as instruments for risk redistribution in lending by non-government financial institutions; the use of regulatory, tax and financial incentives. The typical national consequences of a pandemic for certain areas of the agro-industrial complex are considered and classified. The approaches to the national policy of import substitution in the context of a pandemic and its consequences are determined. The measures to support the national agro-industrial complex are proposed.

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*Keywords:* Agricultural markets, agriculture, food security, import substitution policy, pandemic



## **1. Introduction**

The ideal model for domestic food security in a country or region within the framework of the import substitution policy implies the national production of the entire range of food products in full volume. In the context of economic globalization it is difficult to imagine the agro-industrial complex completely independent of imports. Import and export trade in global agricultural markets connect countries not only at the economic level, but also at the policy level. Complex connections in the distribution of food resources with conflicting national interests contribute to the search for ways to bypass the requirements for free trade. Two opposite trends are being formed: liberalism of the consolidated trade in food resources and internal protection of the market from import. Both approaches operate under the standard development scenario, but when global threats to the world order arise, the rules of the game in agricultural markets also change. These global threats include COVID-19 pandemic in 2020. The patterns of these changes in scientific research have not been sufficiently considered, but their need is stimulated by the real state of affairs in the world, which have long-term consequences for many countries (Workie et al., 2020).

## **2. Problem Statement**

The study of the impact of the pandemic on the policy of import substitution in the agro-industrial complex requires special attention as a condition for the sustainability of national food security system. This problem has not been sufficiently studied by scientists for a number of regions of the world, including the conditions of Russia.

## **3. Research Questions**

The research subject is the relationship between the agricultural policy makers on the problem of the implementation of the processes of import substitution of food and the protection of national food security in the context of economic shocks from global pandemics. The objectives of the study include: the study of the proposed measures to support the agri-food sector in a pandemic at the international level; the consideration of the typical national consequences of the pandemic for selected areas of the agro-industrial complex; the determination of scenario approaches to the national policy of import substitution in the context of a pandemic and its consequences.

## **4. Purpose of the Study**

The purpose of the paper is to analyze the results of a theoretical search for the formation of patterns of pandemic influence on national processes of import substitution.

## **5. Research Methods**

The materials included scientific research on the impact of the pandemic on import substitution published in national and international scientific citation databases, statistical materials according to

Russian Statistics Service and the international statistical database of Food and Agricultural Organization of United Nations (FAO UN), the data from information resources of national agricultural and food systems management services.

The main research methods used to obtain the results were monographic, analytical, logic and statistical analysis.

## 6. Findings

One of the most serious consequences of COVID-19 pandemic is the change in food situation in several countries around the world. According to the analysis of actual and planned global indicators for 2021, the representatives of World Food Program and Food and Agricultural Organization of United Nations point out to a high risk of humanitarian disaster and a reduction in conditions for the achievement of the global goal of zero hunger. At the transnational level, Food and Agricultural Organization of United Nations issued the recommendations to reduce the threat to global food security (FAO, 2020a; FAO, 2020b; FAO, 2020c), and also intensified the collection of information on the response of food prices during the pandemic (Hernandez et al., 2020). The World Bank has begun collecting information on trade flows and policies of countries in COVID-19 as an information base (Espitia et al., 2020b).

At the beginning of the pandemic crisis a number of researchers tried to systematize national policy measures to limit the impact of COVID-19 on food markets (Muravyova, 2020; Shurakova, 2020). However a full assessment of their impact was not presented due to the current development of the negative situation in the world. A number of researchers speak out against the implementation of agricultural protectionist measures, arguing that restrictive measures do not stabilize prices, but intensify their surges in food markets within countries (Barrett, 2020). At the national level, scientists are trying to draw parallels between the impact of the pandemic and the impact of global financial crises on rural development and agricultural production.

It is especially actively studied within the framework of changes in the key effects of supply and demand in agricultural markets in the modern global situation (Phillipson et al., 2020).

In order to solve the problem, several measures are proposed:

- Monetary policy to release the necessary liquidity and reduce the cost of borrowing for economic agents and households. However, for developing and economically weakened countries, these measures are insufficient and can serve as an impulse for the development of high financial and economic stress due to increased government expenditures;
- grants and special lending schemes for enterprises facing liquidity problems due to constraints and problems in operational capacity maintenance and the formation of resources for small and medium enterprises in the field of agriculture and food industry. In order to implement this direction a supply of cash resources is required. Loans are most attractive as a returnable resource, in contrast to grant programs;
- the use of government guarantee products as instruments for transferring risks in lending by non-government financial institutions. This measure requires strict state control over the non-state financial sector;

- the use of regulatory, tax and financial incentives (for example, interest rate discounts for part of the loan portfolio of financial institutions for small businesses, tax holidays or discounts for individuals and legal entities, deferred tax payments).
- Taking into account various factors, the pandemic had a strong impact on all parts of the agro-industrial complex. Already at the beginning of 2020 a number of researchers tried to determine all the consequences for agriculture and food production (Elleby et al., 2020; Raúl Siche, 2020). The analysis of the current situation, analytical materials and scientific sources allowed determining the following groups of consequences of the impact of the pandemic on the agricultural and food sectors of world economy:

A) in product segment:

- due to the COVID-19 lockdown in the first half of 2020, the volume of production of capital goods of industrial origin (agricultural machinery, agricultural equipment, fertilizers, agricultural chemicals and biochemistry) was reduced and the volume of agricultural services decreased. The sector of means of production was not fully prepared for such changes. Here, the seasonality factor must be taken into account, since the first wave of the pandemic hit a part of the world in the season of preparation for agricultural work and at the peak of purchases for agricultural activities in 2020;
- the risks spread to specific agricultural markets such as biofuels. Due to the decrease in transport system, the need for biofuels has decreased. Taking into account the specifics of the markets as alternatives to the markets for traditional fuels, there is a threat of loss in the profitability of companies in this sector, as well as agricultural suppliers of raw materials for biofuels.

B) in resource segment:

- the decrease in employment of the rural population due to the reduction in employment for seasonal agricultural work, which decrease the level of income of the rural population and negatively affects the sustainable development of rural areas;

C) in customer segment:

- the change in the food supply chain “from farm to consumer table” (production, packaging, distribution and storage) due to limited mobility of both producers and consumers. Vulnerability to disruptions in the supply chain is associated with the reduction (or termination) of agricultural logistics and cargo transportation worldwide as well as the intensification of border and sanitary control over food imports;
- the increase in world food prices. In the study by the World Bank on the impact of the pandemic and export restrictions on the global food market, it was concluded that the escalation of export restrictions would triple the shock (there will be a multiplier effect), reducing world food exports as a part of a non-cooperative trade policy and increasing world prices by food depending on the scenario of the development of events (Espitia et al., 2020a). A number of researchers point out to stress in local food markets when monitoring food prices (Hernandez et al., 2020). In addition, food inflation may continue up to 2021 as a special case of macroeconomic “price leverage” effect;

- the changes in the system of demand for food, taking into account the conditions of uncertainty and a temporary decrease in the purchasing power of the population. Various shocks of demand occur: from a short-term rush on the formation of long-term storage stocks (cereals, flour, pasta) to the changes in the elasticity of consumption of food products of various categories under the influence of the structure of consumer expenses;
- the aggravation of the food security situation for vulnerable groups of population, including due to a drop in income as a result of restrictions on the conditions of earnings.

The response measure is to change agri-food policy, taking into account a number of import substitution scenarios. The purpose of their implementation is to create an internal reserve for the provision of the population of the country and processing enterprises in agricultural raw materials and food.

The process of import substitution in agriculture is considered in two ways, on the one hand as a measure of state protectionism and an obstacle to free world trade on the other hand. This is influenced by the degree of preparation of the industry of the agro-industrial complex for the national production breakthrough and the increase in production capacity. The termination of traffic flows during a pandemic contributed to the confirmation of the opinion that in countries with a high domestic agricultural potential (for example, Russia), import substitution policy has advantages in the stimulation of the growth of gross agricultural product. The termination of imports of a number of food products allows developing alternative production within the country.

However for the sectors with a low potential for internal development, the process of import substitution in a pandemic is a threat including due to the limitations of land, capital, information, labor resources. The reason is the inability to import the original intellectually and scientifically intensive technologies. The example is the sector of breeding and genetic materials: import substitution of final agricultural products is successful if domestic advanced breeding, seed production and genetics are developing. In this regard, active development and creation of new highly productive technologies is required.

The modern agro-industrial industry is based on the global competition of such technologies, and the measures to obtain them for the refinement and adaptation to national agro-industrial complex present a separate aspect of import substitution. This is the initial and strategic step of the policy of national agri-food production development.

The stability of the agricultural sector largely depends on the use of motivational institutions to support the sectors of the agricultural complex by government and investors (Muravyova, 2020), including investment institutions. In order to implement an effective import substitution policy that reduces the risk of the disruption of national food security in a pandemic, the measures are needed to increase investments in material and technological re-equipment. This is especially relevant for the sectors of production of capital goods and food industry.

It is possible to agree with the opinion of researchers about the urgent need in the current situation and in the post-pandemic period of the intensification of public and private investments in agricultural production and rural development, which prevent future outbreaks of such infectious diseases, recognizing the relationship between people, animals, plants (Rahman et al., 2020).

It is important to actively introduce agricultural machinery into production processes, which minimizes the mass employment of a person in production during a lockdown, including the use of unmanned equipment in agriculture and robotics during intense agricultural work (sowing, harvesting).

## 7. Conclusion

In 2020 the global pandemic has negatively affected food production in the whole world. At the same time, it left the imprint on the agri-food policy of many countries. However the processes of import substitution as an object of agri-food policy during a pandemic are multifaceted. The success in the provision of the population with food from internal reserves is associated not with the termination of imports, but with the formation of incentives for the development of national science-intensive and high-performance technologies of a leading level based on investments from public and private sources.

## Acknowledgments

The research was carried out within the framework of the grant 18-010-00607 of RFBR

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