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ECONOMIC ASPECTS OF THE RESOLUTION OF THE ISSUE OF FOOD SECURITY: A CASE STUDY

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Received 15 March 2019; accepted 5 August 2019; published 30 September 2019

Abstract. This paper examines some of the key issues related to ensuring Russia's food security. The focus on meeting people's needs by providing them with food produced domestically predetermines the objective need to develop further the nation's food market and create additional jobs, which should help improve people's standard of living and quality of life. The food market in a megalopolis is one of the largest in the country, which predetermines the complexity of its formation, with some of the key problem areas including the social and economic imbalance between low- and high-income citizens, issues with the development of trade infrastructure, the excessive number of intermediaries, etc.

Keywords: food security; dependence on imports; government policy; balance of trade, trade infrastructure; food quality; system for monitoring; Russia

Reference to this paper should be made as follows: Melnikov, A.B.; Mikhailushkin, P.V.; Poltarykhin, A.L.; Dibrova Z.N. 2019. Economic aspects of the resolution of the issue of food security: a case study, *Entrepreneurship and Sustainability Issues* 7(1): 595-602. [http://doi.org/10.9770/jesi.2019.7.1\(41\)](http://doi.org/10.9770/jesi.2019.7.1(41))

JEL Classifications: Q17

1. Introduction

Officially, the issue of food security was first brought up at the 1974 World Food Conference in Rome, where the term was introduced and the concept was discussed extensively.

Today, food security is construed as a nation's ability to meet, through sources and resources of its own, the need of its population for food in compliance with medical and scientifically substantiated consumption standards. Every nation establishes its own level of food security. Russia's current level, across key food products, is 85% (Barasheva, 2016; Poltarykhin, 2015).

Food security was not a major issue in the USSR, except when it comes to certain products of tropical origin. Following the Union's collapse, Russia was inundated with imported food products, many of which were a lot cheaper than their domestic counterparts due to considerable overproduction in many of the developed countries. Imported products came in beautiful packaging that had vibrant colors and foreign letters printed on it, which was a major factor in attracting potential consumers in Russia (Akhmetshin, 2018; Barcho, 2018).

However, for the most part, imported food was not always high-quality, which, for instance, was the case with frozen meat and canned food. Nevertheless, imported food started to offer serious competition to domestic manufacturers of food raw materials and finished products. As a consequence, a great many domestic food manufacturers ended up bankrupt, which resulted in a considerable decline in the production and sale of food products. By the late 1990s, on many of the strategic food products, Russian production totaled 20–35%, i.e. within a space of just a couple of years the nation experienced a significant decline in provision of domestic food to the population. In an attempt to resolve these issues, Russia started to increase its food imports – and, thus, depend, to a certain degree, on imports, with prices for goods, including food, increasingly dictated by importers. In other words, there was an “expansion”, i.e. Russia's food market (and some of its other markets) had been invaded, with its dependence on imports on certain food products reaching 60–70% (Kundius & Poltarykhin, 2010; Poltarykhin, Ganieva, Churin, Melnikov, & Mikhaylushkin, 2017).

2. Methods

The state's current policy aimed at resolving the nation's food security issues has provided a positive vector for development, bringing into being a trend of economic growth among entities within the food market. For instance, in 2010 the government signed into law the Doctrine on Food Security, which would set out the key objectives and areas for the development of Russia's agro-industrial complex (Decree of the President of the Russian Federation No. 120, 2010). However, starting in 2014, the Russian economy has been subjected to considerable pressure on the part of foreign countries, which have imposed a set of economic sanctions on Russia, and that has led to a decline in economic growth across a plethora of sectors (e.g. Vorotnikov et al., 2019). Russia's countermeasures, aimed at limiting a certain portion of food imports, have facilitated a drop in competition in the food market, which has resulted in an increase in production volumes, helping take some of the heat out of the issue of food security. Based on expert estimates, the import of food products from countries that have introduced sanctions against Russia totaled in 2017 just 12% (\$43.1 billion) (Barasheva, 2016; Kundius & Poltarykhin, 2010; Poltarykhin et al., 2017; Krivko et al., 2019).

It may be concluded from reports by the Ministry of Agriculture of the Russian Federation that currently the nation is pretty much self-sufficient on most of the key types of food: by 85–89% on flour, sugar, macaroni, and poultry and by 90–95% on vegetable oil, confectionery, and canned meat. On milk and dairy products, Russia is self-sufficient by 78–80%, with the rest supplied from Belarus, which is ready to ramp up sales further. In 2015, for the first time since 1992, domestic producers were able to almost close off the nation's need for meat and meat products – by 86%, and that is against the minimum level of 50%. The nation is still vulnerable when it comes to fish and fish products, with nearly 40% bought by domestic retail chains from Norway (Barasheva, 2016; Poltarykhin, 2015; Rosstat, 2017).

Each year, nearly \$11 billion is spent on the import of food which cannot be produced in Russian conditions, like tea, coffee, bananas, citrus fruits, etc. Having said that, despite the latest political and economic tensions around the world and, as a consequence, an overall natural decline in economic growth across a variety of sectors, the domestic food market is displaying stable development, which, in large part, is the result of Russia's countermeasures aimed at banning most food imports (Voronkova & Sorokina, 2019; Voronkova & Akhmetshin, 2018; Ziuzya & 2019).

The nation, surely, should never be complacent about its food security, as only acting in an articulate, purposeful, and consistent manner in implementing relevant plans and programs for development can facilitate the resolution of the issue of food security and boosts in import substitution. Indicative (state) planning should, of course, be reflected in its regional component, Moscow, as a constituent region of the Russian Federation, being the most capacious of the nation's food markets and, thus, providing a vector for national development as a whole (Sycheva, 2018; Gamidullaeva, 2018).

3. Results

Food security in the city of Moscow is construed as a set of organizational, economic, and social conditions that govern the city's development through the prism of the physical availability of high-quality and safe food, required to sustain an active and healthy lifestyle, and the ability to provide it in a rational manner to each and every resident.

In 2006, at the legislative level Moscow saw the passage of Law of the City of Moscow No. 39 'On Food Security in the City of Moscow' of July 12, 2006, designed to regulate one's managerial and conceptual understanding of the objectives and subject matter of government regulation in the area of food security in Moscow, as a constituent region of the Russian Federation. The law entrenched some of the key mechanisms for ensuring food security for the city's executive authorities (Moscow Mayor official website, 2006). However, the global financial crisis which began in 2008 brought into being a set of new objectives for resolving the above issues. Presently, the city's food policy is also predicated on the Doctrine on Food Security in the Russian Federation and the State Program for the Development of Agriculture and Regulation of Markets for Agricultural Produce, Raw Materials, and Food for the Period through to 2013–2020, having in consideration the characteristics of the city of Moscow (Glotko, 2018; Polyakova, 2018).

A key characteristic of the city of Moscow, as a constituent region of the Russian Federation, is that the megalopolis's food market is one of the largest in the country, with nearly 35 tons of food consumed daily. Based on expert estimates, starting in 2018 its food consumption will exceed 13.5 million tons per year. In this regard, resolving the issue of food security is of special significance for Moscow, its development directly dependent on the existing goods distribution system and, consequently, balance of trade (Deren, 2017; Kundius & Poltarykhin, 2010).

Of no less significance is the socio-economic imbalance between low- and high-income citizens, which currently is estimated at 28 times, whereas in developed European countries this gap is 8 times (Deren, 2017). Admittedly, this comparison must be adjusted based on the fact that the city of Moscow ranks first globally in the number of dollar billionaires. Note that against a backdrop of this considerable differentiation in income among residents there are also considerable differences in the structure and level of food consumption across different income groups. For instance, those within the high-income segment of Moscow's population consume 2.2 times more meat and meat products per person, 1.9 times more milk and dairy products, 2.1 times more fish and fish products, and 2.5 times more berries and fruits. Note that those within the population's low-income segment whose income is below the subsistence minimum account for 12.3% of the megalopolis's total population. This, in turn, is giving rise to a risk of food inflation, as the greater is the relative share of a person's expenditure on food within the overall spending, the greater is the risk of negative inflationary consequences arising (Deren, 2017; Kundius & Poltarykhin, 2010; Rosstat, 2017).

To meet the needs of Moscow's population, food is supplied to its market from over 100 different countries and 50 domestic regions. In 2016, Moscow's food retail turnover totaled 20.7% of Russia's total turnover, with its public catering turnover nearing 15%. Note that in the same year Moscow residents' average level of consumption of key food products exceeded the rational consumption norms that are currently recommended – e.g., meat and

meat products – by 32%, cereals – by 19.4%, macaroni products – by 6.5%, and tomatoes and cucumbers – by 12.8%, with their consumption of fish and fish products remaining at the level of recommended norms (21.6 kg per person per year). Below the recommended norms of consumption were the figures on milk and milk products – by 22.6%, potatoes – by 47.7%, fruits and berries – by 23.4%, and vegetables and cucurbits – by 24.3%. Also lower was the actual food intake of certain items in relation to recommended norms of consumption in Russia, more specifically on vegetable oil – by 26%, cucurbits and vegetables – by 23%, milk and milk products – by 21%, and berries and fruits – by 9%, with greater figures posted against those in developed foreign countries. The subsequent increase in the level of consumption of food products is directly associated with boosts in real household income in Moscow (Rosstat, 2017; Moscow Mayor official website, n.d.).

A significant issue in ensuring Moscow's food security is that there are too many intermediaries around, which largely makes the goods distribution system unstable in relation to the changing state of affairs in the Russian and global markets for food. A major portion of food brought into Moscow is subsequently transited to other regions of Russia (some of it getting processed additionally). This kind of logistics places considerable strains on the city's warehouse and transportation infrastructure and affects its environment. In addition, the city's use of its warehouse spaces is a lot less efficient today than what is prescribed by international standards. More specifically, the current ratio of storage/warehouse area to showroom/retail area is 1:1 in Moscow, 3.5:1 in Moscow Oblast, 8:1 in the US, and 10:1 in most developed European countries. Without question, it is pretty hard to have a large number of warehouse spaces in a megalopolis like Moscow, but that is what governs infrastructural risks, which may affect the economic and physical availability of food products to Moscow residents (Shevkunova, 2014; Food security issues discussed in Moscow, 2012).

The effects of the global financial crisis and the economic sanctions imposed on Russia by the West have largely triggered an increase in volatility in Russia's food market, which is an essential factor for the risk of emergence of a temporary imbalance between demand and supply, i.e. a shortage of certain food products and an increased risk of food inflation in Moscow. For instance, Moscow Oblast, which, by tradition, is a major supplier of milk and dairy products, meat and meat products, and vegetables, including potatoes, to the megalopolis, has demonstrated over time a steady trend of decline in food production. In the period 2000–2016, milk production was down by 30%, meat production – by 38%, and vegetable production – by 11% (Rosstat, 2017; Food security issues discussed in Moscow, 2012).

Discussion

For this and many other reasons, there is currently an objective need to develop a system for the city's food security that will help gain access to a sufficient, well-assorted group of safe food products. According to Moscow Department of Trade and Services, "the key components of food security include the analysis of the food market by reference to socio-economic indicators of people's standard of living, development of agro-logistics, development of goods distribution infrastructure, and organization of interregional and international cooperation in the food sector" (Moscow Mayor official website, n.d.). Given the issues stated above, it will hardly be possible to resolve this issue only by way of creating food reserves and storing them in available warehouses. In this regard, the Moscow Government is currently engaged in developing a new system for distribution of food resources, putting in place a more efficient agro-logistics infrastructure, putting together an integrated system for monitoring the market, laying a foundation for a set of activities on minimizing food security risks, and carrying out a set of activities aimed at providing targeted assistance to senior citizens and people with disabilities. Since 2014, there has been in successful operation an agri-food cluster named 'Food City' (Moscow Mayor official website, 2014).

Another key issue related to Moscow's food security is the need to regulate the requirements for the quality of food that is brought into the city and develop further the social and state quality control system. Regulating the

requirements for the quality and safety of food products, especially within the social catering sector, ought to envisage the obligation to administer regular in-process monitoring of all stages in the technological process, which will be done by accredited labs (Poltarykhin & Suray, 2018; Voronkova & Iakimova, 2019; Bogoviz, 2018).

Food quality is a key criterion of food security. Therefore, there is a need to enhance standardization and the system of regulations aimed at providing Moscow residents with high-quality products and eliminating low-quality counterfeits. There is a need to introduce a regional standard for the quality and safety of food that is purchased via government contracts, including for the purpose of providing the population with targeted food assistance (Mikhailushkin & Novoselova, 2018; Nagimov, 2018; Korableva, 2018; Dibrova, 2018).

There are issues with the development of trade infrastructure, within the context of creating a state-of-the-art wholesale link that would help ensure guaranteed sales of and access to high-quality domestic products in Moscow's food market. Currently, the issue is minimal due to an enlargement of the retail and fair-based trade network. However, the priority is to dismiss the elements of monopolization and implement a system of social food assistance. Today, there is an objective need to work out a set of criteria and standards that would govern the development of trade infrastructure. Also, it is crucial to have in place varied-format infrastructural links of wholesale and retail trade. The government is expected to provide the city's existing clusters with varied-format sales outlets, like fairs, vending machines, mobile commerce, petty retail, convenience stores, minimarkets, supermarkets, hypermarkets, and large shopping malls. Today, Moscow has a retail floor-space capacity of 740 m² per 1,000 people (Food security issues discussed in Moscow, 2012).

It stands to reason that, in developing government programs and investment projects in the city of Moscow, it may help to factor in activities on the development of trade infrastructure, the public catering sector, the procedure for arranging trade fairs, requirements for the planning and development of retail markets, buildings, and premises, requirements for nonstationary retail outlets, etc.

Of no less significance to resolving the issue of food security is analysis of the market for food products by reference to criteria such as people's standard of living and quality of life. The government of the city of Moscow is currently conducting work on putting together a calculation system for assessing and determining minimum allowed levels for the availability of key types of food within the city's distribution network. This integrated system for monitoring the state of food security in Moscow employs nearly 200 indicators (Asante, 2018; Mikhailushkin & Lubkova, 2018; Nechaev, Mikhailushkin & Alieva, 2018).

Conclusion

Thus, considering Moscow's existing conditions and current objectives on ensuring food security, a key parameter for resolving the issue is creating the conditions for meeting the needs of the city's residents by providing them with high-quality, safe, and affordable food products (Nechaev, Mikhailushkin & Presnyakov, 2018). The government is expected to focus on developing further the city's food distribution infrastructure and social catering sector, monitoring the state of the market and preparing projected balances on food reserves, creating the conditions for the entry of manufacturers of raw materials and finished products into the Moscow market and fostering competition, implementing large-scale projects and programs, and developing further the market information system. At present, the highest priority for future development is grounded in the pursuit of policy of import substitution on a broad range of food products required to sustain life. Meeting people's needs by providing them with domestically manufactured products objectively requires developing further the food market and creating additional jobs, with a focus on boosting the standard of living and quality of life of Moscow residents.

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