

Strategic food management as the basis of state security

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Abstract: The article discusses the strategic direction of the planning process development for the promotion of food products that meet the requirements for environmentally friendly products. The focus of the study is on training and retraining of personnel in the field of activity involved in the sequence of commodity circulation from agricultural production to retail trade. The matter of adapting the digital support in strategic management of ecologically clean food products has been revealed, which makes it possible at this stage of technological development to accelerate processes in both production and sales activities. Moreover, the provision of food for inhabitants is globally considered at the world levels, and it cannot be limited to a single country. The computation of personnel training and retraining to ensure the process allows to expand the domain of research and making management decisions, which improves the specialists training in educational institutions in the country.

Keywords: food, labor resources, regional economy, management levels, digital accompaniment, information technology, ecology, social level of the population, plastic cards.

1. Introduction.

Food security is one of the general security system elements of the state, which not only guarantees public security but also concretizes and individualized it. The main document governing the agricultural policy of the Russian Federation, in the domain of supplying the country with food, is the Presidential Decree of December 31, 2015 No. 683 "About the National Security Strategy of the Russian Federation" [1]. According to this decree, the food independence of the country is determined, where the focus attention is the availability of food to the end-consumer. The main goal of the state agrarian policy in Russia in the long term is to provide inhabitants with Eco-friendly food products.

Based on the implementation of food security Doctrine of the Russian Federation [2], the control over food quality and safety is provided in accordance with the mandatory requirements of the technical regulations of the Eurasian Economic Union, which simplifies the export of food products. In addition, the doctrine regulates the improvement of incentive mechanisms for manufacturers to



produce food products that meet the principle of healthy. Here we are talking about a combination of agricultural products, raw materials, and foodstuffs, which must acquiesce with the established environmental, sanitary-epidemiological, veterinary, and other requirements, along the entire technological chain of movement of goods to the consume [2].

We point out; the article 54 of the Presidential Decree "About the National Security Strategy of the Russian Federation" regulates a similar association. The implementation of the decree aims to accelerate the development and modernization of agro-industries, fishery complexes the food industry, and the infrastructure of the domestic market as a whole package [2]. At the same time, particular attention is devoted to preventing the uncontrolled circulation of genetically modified organisms, which intended for release into the environment and products derived from or containing such organisms. Additionally, it indicates the improvement of the technical regulation system, sanitary and phytosanitary supervision, the control over ensuring food safety of the human health. Certainly, all of that can be achieved based on parallel training of the scientific workers and highly qualified specialists in the field of agriculture, the food industry, and trading.

2. Methods.

The methodology of this study is based on the definition of the purpose and subject of the research, the justification of the theoretical aspects, provisions, approaches and guidelines that argue for the close relationship and interdependence of the development of digital technologies. The development of digital technologies has gained a new momentum and their theoretical and methodical foundations are required to develop and test their application in the field of food security. Our research depends on formal-logical and dialectical methods of comparison and analysis; therefore, identifying and formulating the existing organizational and institutional relations becomes possible.

3. Results.

It should be noted that the logical sequence of commodity circulation from the manufacturer to the end consumer would form the basis of the strategic goal, which is training the highly qualified specialists not only for agriculture but also for other spheres of commodity circulation. We suggest a program for the territorial training and retraining of the qualified personnel, which is schematically shown in Figure 1.

The fact is that at present, the "foundation" of training personnel has been laid, and the professional level of workers in the sphere of food products turnover already occurs. There are many examples in the Russian Federation, the same all-Russian classifiers that provide codes of various products, bar codes on products, etc. All of that has not only tested, but also was practically applied successfully [10, 11]. A good question to ask is how to combine these processes not only into one digital field but also into a full cycle of digital food security management. In the diagram in Figure 1, we display the levels of federal, territorial, and local stages, but it is significant that these specialists must professionally master the range of promoting food products. That leads to the fact, that there is a need for a specialist in the agricultural and food products field, who owes a technological knowledge and has the quality of a trade worker. Currently, determining the amount of such staffing is a matter of priority. It is necessary to identify the federal level of those highly qualified specialists training. Another problem is the coordination of the issues of interaction of all structures in the area of food security.

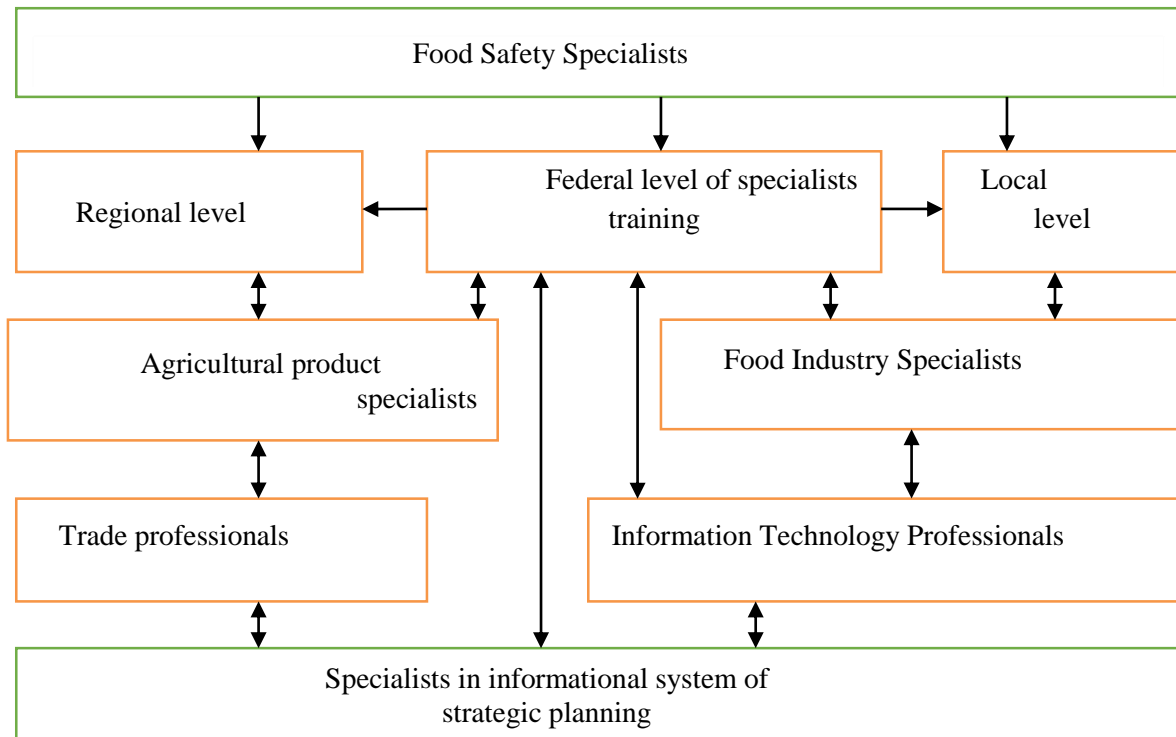


Figure 1. Scheme of the relationship in territorial training of qualified workers in the food security field of the state

The strategic management of a system such as food security includes many “ingredients”. The core of the relationship should be the national priorities, taking into account the actual adopted national projects [3, 4].

The information platform that implements the strategy mentioned above is the federal strategic planning information system, which includes the information resources of state and local authorities, as well as distributed situational centers and state scientific and educational institutions.

In this regard, we have done preliminary accounts to ensure employment by the levels: the federal significance 120 people, the regional level - 100 people, the local level 62 thousand people. These accounts are based on the number of employees who already work in government structures that involved in food security.

Concurrently with the implementation of the presidential decree in the Russian Federation on 31.12.2015 №683 "About the National Security Strategy of the Russian Federation", the concentration is devoted to ensuring information security, considering the strategic national priorities. This process is really being improved, for example, digital codes of food products all over Russia are classified [5].

We pay attention that the digital process foundation that has been created in the movement of food products from producer to buyer, requires modernization in terms of developing the mechanism that helps to determine the category of food and ecological products of the total strategically. In order to achieve that, we suggest using the barcode (is a symbol designed for automated identification and accounting for product information encoded as figures and strokes). Moreover, Russian Federation has already adopted a regulation legal act, the point is that doesn't only regulate the process of providing consumers with the information about the ingredients derived from genetically modified

organisms in the food products. The core of this speech is about the modifications and additions that have been done in the law of the Russian Federation "About the consumer protection", as well as SanPiN 2.3.2.1078-01 "Hygienic safety requirements and nutritional value of food products". Based on the must of providing this information about the presence of food component derived from genetically modified organisms in case their content exceeds 0.9%. Thus, it determines the extra requirements for getting information about the quality, not only components position but also the presence of GMOs, which is the most important thing.

We suggest adding the ingredient composition designation in food products barcode, which not only might display the compositions of the product on the monitor by means of a touch trigger, but also confirm the safety characteristic of each of them. This applying will make it possible to monitor all food products quickly in addition to promote domestic and local products. Of course, similar work has been conducted in the Russian Federation, but the whole process only concerned alcohol and tobacco products. On the other hand, the consumer is not familiar enough with the components of these goods

Since then, the research uses the definition of food security that approved at the 1996 World Food Summit (The 1996 World Food Summit): food security is a situation where all people in a country have physical, social, and economic access to quantitatively nutritious food that meets their needs and necessary for a healthy active life at any given time. In this regard, Russian Federation should make its own adjustments to the availability of healthy food mechanisms for the entire inhabitants. Thus, within the framework of strategic management, it is necessary to develop a social card that allows people to purchase food and ecological products within the established volumes of the consumer basket. At the same time, it is necessary to make a discount for such domestic products volumes for 10% (within the limits of VAT).

According to statistics, there are 406 million hectares of agricultural land in the Russian Federation [8], and the Russian resources are represented by large-contour areas. The specialists in the agricultural production field have a point of view, where ecologically clean product cultivation in large-scale, large areas is more rational and cost-effective, while small-scale agriculture requires coordination with a large number of owners, the use of certain technological methods [3]. In the terms of sectoral employment of labor resources in agriculture, Russia is the pioneer among countries such as Germany and the United States [12, 13, 14], which is shown in the diagram in Figure 2.

The labor resources and unemployment is observed in Russia, as long as friendly products production requires significant costs of manual labor, so the additional employments are visible within the personnel training and retraining (as discussed before).

There are certainly prospects for Russia to occupy its own niche in the ecological friendly products supply. We can primarily explain this conclusion by the fact that there is a ban on the cultivation of certain crops, such as hemp, some crops are poorly cultivated or not cultivated at all (millet, buckwheat, etc.) in EU countries. For example, some domestic cultivation such as wild-growing berries, pine nuts, medicinal plants simply do not have analogs in the world.

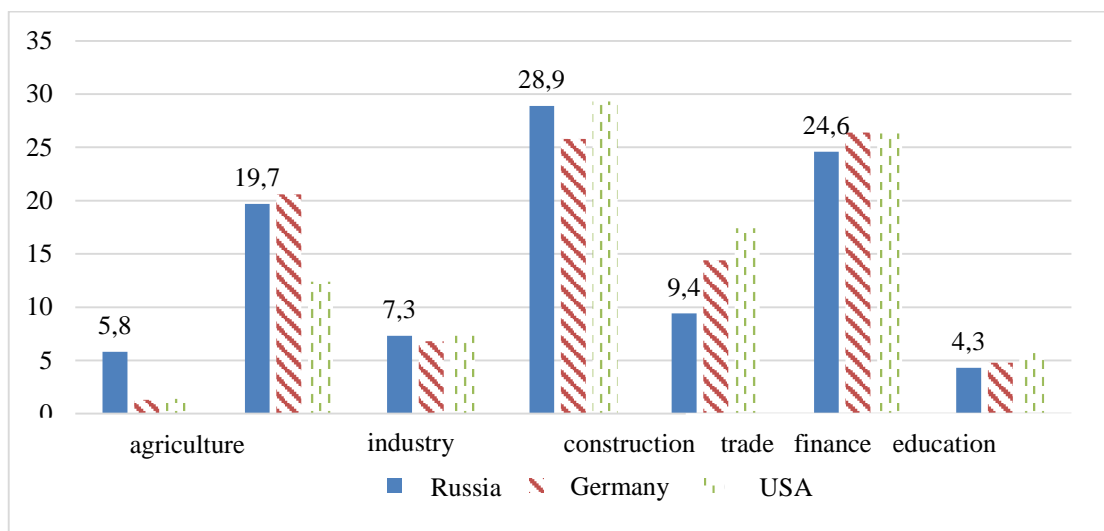


Figure 2. Employment of the population by branch of industry activity in 2019, % [6]

In respect of that, the development of ecological friendly Russian products in agriculture is promising in the field of industries and other spheres as plant and seed growing, industrial crop production, and collection and processing of wild plants. Let us note, that Russia lags slightly behind the cost parameter of the inhabitant subsistence basket of comparing to European countries [7, 14]. This is shown in Table 1.

Table 1. Comparison of subsistence basket indicators of European countries [6]

Countries	Subsistence basket, euro
Luxembourg	2000
Germany	1 254
Finland	1170
Great Britain	1087
Netherlands	1080
Belgium	1030
Austria	1010
Italy	855
Spain	645
Russia	155

There are immediately questions about price parameters, but the data of the analytical division of the British Economist magazine, which has been publishing information on the availability of food in the world since 2012, is quite well-reasoned. Russia is in 42nd place in the world community in terms of the level of food availability in 2019, according to the rating of the countries of the world

that is published on the database by the British research company The Economist Intelligence Unit (analytical department of the British journal Economist).

4. Conclusion.

The study showed that the development of the planning the food promotion that meets the requirements of environmentally friendly products should be based on the training of qualified specialists not only for agriculture, but also for other areas of commodity movement from the manufacturer to the end user. Besides, it is necessary to find solutions for equalizing the availability problems of the food for all segments of the inhabitants, by developing and putting social cards for products are produced at the territorial-local level into circulation. According to Rosstat data, there are 195 million inhabitants below the consumer minimum in terms of income in the Russian Federation; therefore, the introduction of social cards for this group of inhabitants is something necessary. Considering the regional market capabilities of food production, by introducing a separate register of ecologically friendly products. At the same time, removing taxation from this type of product, and providing food for the sale within the consumer basket in social cards, thereby limiting the volume of sales. This option would solve the problem of inhabitants' food coverage, take into account the ecological friendly product and promote a stimulating production system of this type of food. This strategic direction at the state level should be reflected in each administrative unit's constituent entities. This suggestion can also be applied to humanitarian aid in countries with a lack of food since the distribution of products can be carried out with more updated information, the only difference is that is inhabitant does not pay for goods.

Obviously, that the strategic management of food security would not only solve the general security problem but also the social balance, through raising inhabitants' living standards to some extent and economic problems. The smoothing food availability benchmark is possible only if all the main issues related to the product passage of from producer to consumer are interconnected. The guaranteed effectiveness of this strategic direction can be ensured, through tactics development for each proposed element, whether directly within the state and outside it. If there is, a reliable analysis of the state affairs in providing food for inhabitants because of formulated accounts, solving the problem is possible the use of digital technologies, to develop the tactical methods for implementing in practice the food products availability of to the population.

References:

- [1] Decree of the President of the Russian Federation No. 683 of 31.12.2015 " On the National Security Strategy of the Russian Federation»
- [2] Decree of the President of the Russian Federation of 21.01.21. No. 20 " On the Approval of the Food Security Doctrine of the Russian Federation <https://login.consultant.ru/link/?req=doc&base=LAW&n=343386&demo=1>
- [3] Background information: "List of national and federal projects, priority programs and projects in the Russian Federation" (Material prepared by Consultant Plus specialists)
- [4] Passport of the national project "National Program" Digital Economy of the Russian Federation "(approved by the Presidium of the Presidential Council for Strategic Development and National Projects, Protocol No. 7 of 04.06.2019) <http://www.consultant.ru/document/cons>
- [5] Resolution of the Government of the Russian Federation of 31.12.2004 No. 908 (ed. of 09.03.2020) " On Approval of Lists of Codes of Types of Food Products and Goods for Children Subject to Value Added Tax at the tax rate of 10 Percent» http://www.consultant.ru/document/cons_doc_LAW_310251
- [6] Russia and the countries of the world. 2018: stat. sat. Rosstat 75. M., 2018. 375 p.
- [7] Methodological recommendations for determining the consumer basket for the main socio-demographic groups of the population as a whole in the Russian Federation and in its subjects [as amended by the decree of the Government of the Russian Federation No. 192 of February 17, 1999] SPS "Consultant Plus". 2019.

- [8] Statistical data of Rosstat [Electronic resource]. Access mode: <http://cbsd.gks.ru>
- [9] United Nations food and Agriculture statistics <http://www.fao.org/statistics/ru/>

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