

# The model of governance of food security and agro-industrial complex of Russia in conditions of globalization

L Filobokova<sup>1\*</sup>

<sup>1</sup> Bauman Moscow State Technical University, 5, building 1 Baumanskaya 2-ya str., Moscow 105005 Russia

E-mail: filobokova@list.ru

**Abstract.** A feature of the current stage of development of national economy is the overcoming of national borders and the formation of the world economic system, which is accompanied not only by positive effects but also identified the problem of food security. The author believes that food security should be considered as a global problem requiring management approaches adapted to the existing challenges. The effectiveness of control measures is achieved primarily by scientific understanding and understanding of the processes taking place with the development of basic management models, as an alternative of which the author proposes to consider the model of investment and innovation balanced interaction. This article is devoted to the substantiation of the essence, interrelations of the category “food security”, approaches to the strategic management of food supply in connection with the quality of life of the population.

## 1. Introduction

At the present stage of development of the national economy of Russia is characterized by globalization, which predetermined the erasure of national borders, the formation of a world economic system, a sharp aggravation of the struggle on the sales markets, for the buyer and in such a situation only a high level of competitiveness will allow equal participation in the external system of the world economy. External challenges are presented, above all are threats to the national security of the country, including dependence on the state of international energy markets, prices for gas, oil, defense products.

Internal challenges are predetermined by the need to reposition the Russian Federation in the world economy, reduce its dependence on imports, including the export resource component, the presence of serious social problems that require resolution.

As the experience of management shows, the raw material specialization of the national economy of Russia did not ensure the stability of the state and the proper level of development in the interests of realizing (achieving) the global goal of socio-economic development – a high level and quality of life of the population.

Russia is strong for its 85 regions, which are characterized by a high degree of diversity of conditions (geographic, climatic, natural resource), results and state of socio-economic development. Along with the regions implementing pioneering projects (such as in the conditions of the functioning of the territories of advanced socio-economic development) and providing significant tax flows to the



budgets of all levels, there are also territorially localized areas that receive subsidies from the federal budget or are identified as depressed.

The key condition (factor) for sustainable growth and development of the Russian regions and the national economy as a whole is to solve the problem of food security, which in modern conditions has transformed into the problem of food security, under which experts of the National Consumer Protection Fund suggest that you understand the state's ability to meet the needs of the population drinking water and other food products in quantities, quality, and assortment sufficient for physical and social development of the individual and expanded reproduction of the population [1].

The author believes that food supply (food security) is not only an urgent task of an applied nature, but also a complex scientific category, which is expedient to consider through a set of economic and legal, social, environmental, biological, and physiological components, as well as from the point of view of management relationship system.

The problems of food supply (food security) are most relevant for those Russian regions (due to the characteristics of their geographical or territorial location, climatic, and other regional characteristics) that cannot be self-sufficient only due to endogenous factors, but at the same time it can fulfill the tasks of geopolitical, military-strategic, and economic values. Such regions include the northern territories of the Russian Federation, the territories of the Russian Far East. These regions have significant natural resource potential, the effective (innovative) use of which through an adequate management system generates substantial tax revenues to budgets of all levels.

Russian scientists from Yakutsk (A. A. Popov, A. S. Matveev, N. V. Rodnina) assess the effectiveness of food supply management in the region suggest using a number of indicators, the main ones of which include the adequacy ratio of food consumption and the availability ratio [2]. The author shares the position of scientists who have proposed methodological approaches to evaluation (calculation and measurement) in food safety management but believes that the complexity of the category under study in the scientific aspect, the likelihood of negative consequences of its applied manifestation (livelihood of people with food) imperatively predetermine the need not only of developing tools management but also, above all, substantiation at the conceptual level in conjunction with the global target setting of the social and economic strategy development of the Russian Federation in the medium-term strategic perspective, i.e. improving the quality of life of the population. Food security (safety) directly or indirectly affects the local components that form the quality of life of the population – the quality of health, income, services, safety of life (Figure 1).

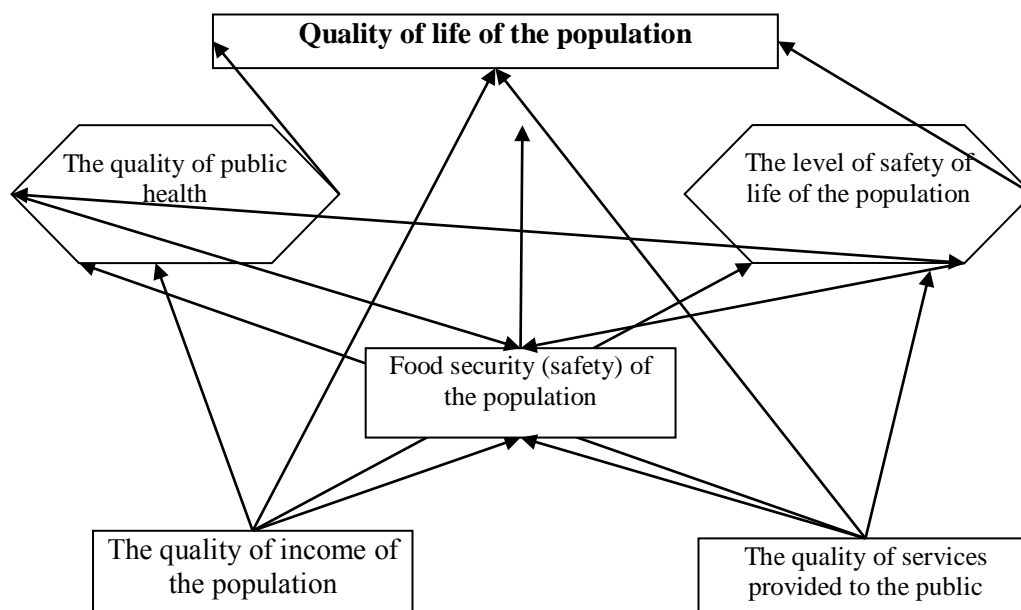
The higher the income level of the population, the more opportunities it has, if the population spends significant funds on food, then this is at the expense of other components and, accordingly, the quality of life.

The lower the level of food security, which negatively affects the quality of food, including due to the emergence of substitutes for natural products, the lower the quality of health and, as a result, the shortened life expectancy.

Such an understanding of the essence and development of a model of cognitive interrelation of food security and quality of life of the population allow to conclude that the existing problem is global in nature, the solution of which requires systematic measures from scientific substantiation to the adoption of certain legal acts of federal status, including “Agrarian Economy of Russia and its Food Security”, “Strategy of Innovative Development of the Agro-Industrial Complex, Agricultural Production of the Russian Federation and Ensure its Food Security”.

Solving the problem of food security is possible in an adequate system of strategic management, within the framework of which stage, at the “strategic analysis” stage, factors are identified and indicators are developed that allow them to be measured quantitatively (Table 1).

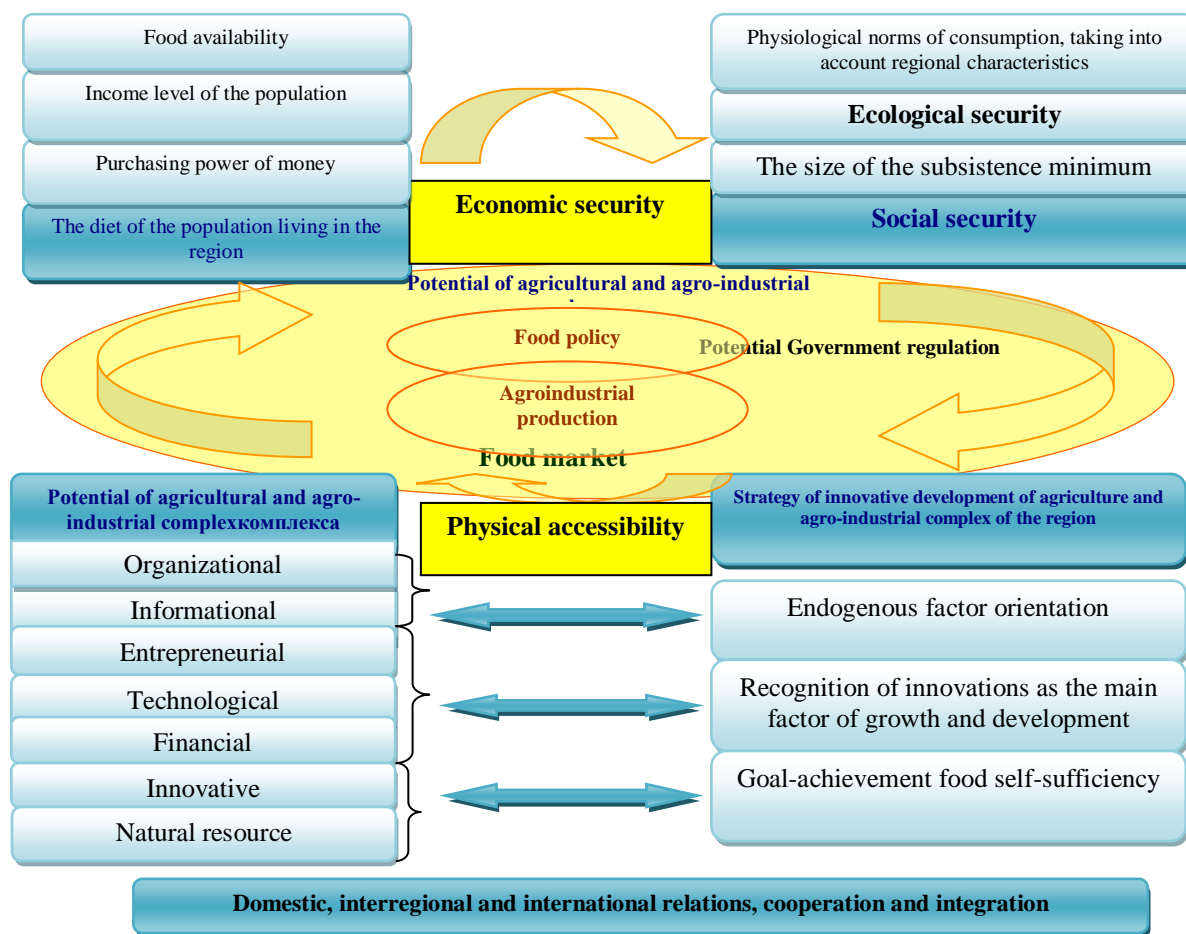
The global economic challenges that predetermined the problems of food supply (security) of the population of the Russian Federation set for agriculture, the agro-industrial complex of the country and the agrarian economy the tasks of ensuring development on the basis of mainly endogenous, innovative factors under conditions of state regulation (Figure 2).



**Figure 1.** Cognitive model of the relationship of food security with the quality of life.

**Table 1.** Factors and indicators for their quantification for the purpose of strategic management of food security.

<b>Factors</b>	<b>Evaluation indicators (calculation and measurement)</b>
Economic	The volume of food production due to endogenous factors. The conjuncture of the domestic market. The ratio of prices for imported and domestic food. Food reserves and stocks (food availability).
Social	The level of food consumption. Conformity of food supply with the social structure of the population. Correspondence of the diet to confessional traditions and preferences.
Ecological	Ecological safety of the region. Impact of the environmental component on food quality.
Entrepreneurial	The level of development of small and medium enterprises. The degree of social responsibility of entrepreneurship. The employment rate of small and medium enterprises in agriculture and agro-industrial complex of the region.
Regional policy	Approaches to solving problems at the regional level. The degree of innovation of implemented strategies and programs. The degree of readiness of the region to self-sufficiency.
Federal policy	The content of the federal policy on food safety and food security . Support measures for domestic socially active agricultural producers. The degree of readiness for import substitution of food
The level of medicine	The degree of justification of the developed norms and standards of food supply, taking into account regional, gender, and other factors. The results of research in the study of the relationship of quality of food with the quality of life.



**Figure 2.** Management of the development of the agro-industrial complex and agricultural production in the format of solving problems of food security.

An authoritative scientist in the field of agricultural management B. I. Shaitan believes that the vector of innovation processes in this area of the economy is the creation of new technologies and equipment, work on the creation of new plant varieties and animal breeds, the development and justification of effective methods for the prevention and treatment of animals, the use of new and progressive forms of organization of production and economics (management innovations), a new approach to training, retraining and advanced training of personnel [3, 13].

It is difficult not to divide the position of B. I. Shaitan, but the author believes that the starting point of innovative transformations should be considered research of both fundamental and applied nature. As one of the alternative models of strategic management of agricultural development and agro-industrial complex in the direction of a given vector to ensure the country's food security and high quality of life of the population, the author proposes to consider as a basic model a model of investment and innovation balanced interaction.

The essence of this model lies in the fact that only innovation processes can give impetus to the development of the industry and this predetermines the search for financial resources recognized as long-term payback investments, since at the initial stage they are associated with large volumes of R & D. The possibility of finding the required amount of funding is ensured by government regulation, the toolkit of which is the balanced interaction of all participants involved in the process.

The guiding principle of ensuring food security of the Russian Federation, the development of the domestic agro-industrial and fisheries complexes, prompt response to internal and external threats to

the stability of the food market, effective participation in international cooperation in the field of food security are fixed by Decree of the President of the Russian Federation No. 120 of January 30, 2010 “On approval of the Doctrine of Food Security of the Russian Federation” [5].

The doctrine provides for an increase by 2020 of the share of Russian grain in the domestic market to at least 95%, sugar – up to 80%, the share of domestic meat and edible salt by – at least 85%, vegetable oil and fish – by 80%, potatoes – by 95%, dairy products – not less than 90%, and in the whole of the Russian Federation by 2020 should be produced at least 80% of all main types of food consumed in the country. The adopted document is at the legislative level the tasks assigned to ensure the food security of the country. Fundamental economic science should also say its weighty word, having tested its theoretical and methodological positions in the field of managerial innovations through applied and field research.

A. Smith in his monograph “The Wealth of Nations”, published in 1776, wrote that the organizational mechanism of capitalism is not only the market system (supply-demand ratio), but also competition, which forces not only to satisfy ever-increasing needs by lower prices and quality improvements but also to do it in the most efficient way through the transition to new technologies, i.e. through innovation [6].

Innovation and innovation processes acquire a special status in the context of globalization, when it is necessary to strain the intellect again and again in order to invent new ways to meet these needs and, above all, in food supply.

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