

Chapter 37

Forecasting of Food Security and Sustainable Development of Rural Territories in Russia's North

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ABSTRACT

National security is always directed at ensuring the country's sovereignty, protection of national interests, as well as the provision of sustainable economic development. Food security is a specific dimension of national security. The development of the circumpolar territories in the northern areas of the Asian part of Russia shifts the emphasis of food supply and gives new impetus to the development of agricultural production. In this chapter, the authors argue that the self-sufficiency of northern territories in the Asian part of Russia may be achieved by 2030 by means of development of vegetable production.

INTRODUCTION

The Asian North with its adjacent regions has always been of great importance for the global community. This region accumulates about one-third of the world's reserves of nickel, oil, natural gas, gold, and other minerals, along with 60% of the world's reserves of fresh water and 80% of forests.

In the XX century, the development of the circumpolar territories had a scientific background. However, the prospective development of the Asian North should be determined by not only commercial projects, but also scientific, environmental, and social considerations along with the advanced digital and high-tech solutions applicable in various spheres, especially, in agriculture, which requires careful

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study, research, and solving of everyday problems. The level of development of agricultural production directly affects the level of food security and, as a consequence, the well-being of people and the quality of life of the entire nation. An ability to produce food and accumulate food reserves are the two strategic weapons today. A nation which dominates and controls the food market has a leading position in the world. Therefore, food security is one of the necessary guarantees of human rights, as well as a significant political advantage on the global arena.

Improvement of food security is hardly possible without the development of rural areas. The two issues are closely interrelated. A change to a better rural infrastructure along with a rise in rural tourism and other economic activities in rural areas may lead to the development of not only conventional agricultural production and the increase in the supply agricultural products, but also to the higher employment and, consequently, improvement of the quality of life of local population. The study of this topic in relation to the circumpolar territories may solve the existing problems of food and nutrition security in the region and provide a program of development of agricultural sector and rural areas in the circumpolar territories. Thus, ensuring food security and sustainable development of rural areas will allow resolving current problems and predicting human activities in the circumpolar territories, particularly, in the Asian North and the Arctic zone of Russia.

BACKGROUND

Food security was first defined by the Food and Agriculture Organization of the United Nations (FAO) in 1974 in the midst of a sharp increase in grain price. In the late 1990s, the Rome Declaration of the World Summit on Food Security defined food security as a state of the economy in which the population of the country as a whole and each citizen individually has a guaranteed access to food, drinking water, and other food products in quality, assortment, and volumes, necessary and sufficient for the physical and social development of the individual, ensuring the health and extended reproduction of the population of the country (Valetova, 2007).

The Doctrine of Food Security of the Russian Federation (President of the Russian Federation, 2010) and the Strategy of the National Security of the Russian Federation until 2020 (President of the Russian Federation, 2009) use different approaches to the understanding of food security. Thus, food security is recognized as one of the components of national security, however, no precise concept is proposed. Uskova, Selimenkov, Anischenko, and Chekavinsky (2014) understand food security as a state of food resources, in which food needs are mainly met at the expense of domestic production in the amount sufficient for the normal functioning of the population.

In the circumpolar territories, the emergence of a food security problem is closely related to the development of rural areas. Among the major prerequisites of food and nutrition insecurity in the High North are:

- Harsh natural and agro-climatic conditions;
- Lack of transport infrastructure and small aircraft available for a stable supply of food products;
- Small population;
- Small-scale agricultural production;
- Dependence on the import of knowledge-based and capital-intensive equipment for the agricultural sector;

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