

LAND RESOURCES AS A KEY FACTOR IN ENSURING FOOD SECURITY

Abdurakhmanova Mukaddas Tokhtasinovna

Lecturer at Oriental University

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Abstract. *Land resources are a key factor in ensuring food security in many countries of the world. This is because land is the main resource for the production of crops, which provide people with food and are a source of income for many agricultural producers. However, the use of land resources for food production often faces challenges such as land hunger, inefficient land use, soil degradation and loss of biodiversity. Therefore, it is important to ensure the sustainable use of land resources in order to ensure food security today and in the future.*

Keywords: *land resources, food security, agriculture, sustainable land use, increasing productivity, economic analysis.*

Introduction

Food security is a condition in which a population has access to a sufficient amount of food that meets their dietary and nutritional needs. Land resources are a key factor in ensuring food security, as they provide the main raw material base for food production. [1] However, the use of land resources for food production often faces challenges such as soil degradation, reduced fertility, and loss of biodiversity. These problems can lead to deterioration of soil quality, reduced yields and, ultimately, to a deterioration in food security.

Therefore, it is important to ensure the sustainable use of land resources in order to ensure food security not only today, but also in the future. Sustainable land management involves the use of technologies and techniques that increase the productivity of land resources without compromising the environment.[4]

In this context, States should develop and implement sustainable land management strategies and programmes that will increase productivity and improve the quality of land resources, as well as provide support for small and medium-sized agricultural producers. In addition, the use of environmentally sustainable agricultural practices and other forms of land use should be promoted.[3]

Thus, land resources are a key factor in ensuring food security, and their sustainable use plays an important role in ensuring the availability and quality of food for the population.[2] In order to ensure sustainable land use and increase the productivity of land resources, many States develop and implement strategies and programs that include the following measures:

- **Monitoring and control systems:** establish land quality monitoring and control systems to determine the level of soil and water degradation.
- **Promote the use of environmentally sustainable practices:** States can promote the use of environmentally sustainable farming practices and other forms of land use, such as crop rotation, organic fertilization, the introduction of precision farming technologies, and the application of agroforestry measures.[5]
- **Infrastructure development:** It is important to ensure the availability of quality water resources, energy, technology and capital for small and medium-sized agricultural producers.

- Support for small and medium-sized producers: Governments can provide financial and technical support to small and medium-sized agricultural producers, which will help them improve agricultural productivity and sustainability.
- Training and education: Training and education on sustainable land management helps to raise awareness and knowledge about agricultural technologies and methods, reduce the possibility of mistakes, and improve the skills of agricultural workers.
- Research development: Scientific research plays an important role in the development and application of new agricultural technologies and practices that can improve land productivity and reduce negative environmental impacts.

Literary analysis. According to literature analyses, land resources are a key factor in ensuring food security. Many studies show that increasing the productivity of land resources can lead to increased yields and improved food quality.[7]

For example, a study published in the journal "Agriculture and Agricultural Science Procedia" showed that the use of fertilizers and precision farming technologies can increase yields and improve food quality. [8] Also noted that changing crops and using crop rotations can increase soil fertility and reduce the risk of plant diseases. Other studies, such as those published in the Journal of Soil and Water Conservation and the International Journal of Agricultural Sustainability, have shown that the use of agroforestry measures and biological farming can help preserve soil fertility and increase land productivity. In addition, the literature notes that land resources can become the object of competition between countries and firms, which can lead to undesirable consequences, such as soil degradation, wasteful use of resources and increased food prices. In the study "Land resources and food security in developing countries", Land resources and food security in developing countries published in the journal "Global Environmental Change", the authors analyze the relationship between land resources and food security in developing countries. As a result of the study, it was found that improving the use of land resources, including increasing the area of agricultural land, increasing yields and introducing more efficient farming methods, is a key factor for ensuring food security in these countries. In the study "Land resources and food security in Asia and Land the Pacific", resources and food security in Asia and the Pacific published in the journal "Food Policy", the authors analyze the problems associated with land use and food security in Asia and the Pacific.[10] As a result of the study, it was revealed that it is necessary to improve the use of land resources in this region, including improving the efficiency of agriculture, changing crops and increasing the use of irrigation systems. In the study "Land resources and food security in Latin America", Land resources and food security in Latin America published in the journal "Renewable Agriculture and Food Systems", the authors analyze the relationship between land resources and food security in Latin America. As a result of the study, it was found that improving the use of land resources, including the use of more efficient farming methods and increasing yields, is an important factor for ensuring food security. [9] Literature analysis shows that land resources play an important role in ensuring food security in many countries of the world. Insufficient land for agricultural crops can lead to food shortages and higher prices for them, which can negatively affect the economy and social sphere. [6]

In addition, ensuring food security through increasing land productivity is one of the key factors that requires a systematic approach and the use of various strategies and programs. One of the main challenges facing agriculture is to increase the productivity of land resources without

increasing their area. Modern methods and technologies can achieve this goal, but it is important to take into account the environmental and social aspects of land use.

ICA research method.

There are several methods of increasing land productivity that can be used to improve food security:

- Using sustainable farming methods: Methods such as mulching, applying organic fertilizers, and using crop rotation help to improve soil fertility and increase yields.
- Introduction of modern technologies: the use of technologies such as irrigation and irrigation can increase the productivity of land resources in dry regions. Also, the use of modern agricultural production methods, such as genetically modified organisms and the use of modern machines, can help increase yields.
- Support for small and medium-sized farmers: small and medium-sized farmers are important contributors to food production. Supporting their activities can increase land productivity and improve food security.
- Optimize land use: Using land resources in the most efficient way can help improve land productivity. For example, using land to grow crops that are better adapted to the climate conditions of a given area can improve yields.
- Improving infrastructure: Investing in infrastructure such as roads, food storage and transportation systems can help improve food availability and increase land productivity.
- Promoting sustainable consumption: reducing food consumption, reducing food waste, and promoting sustainable consumption can reduce pressure on land resources and improve food security.

Conclusions and suggestions.

Thus, land resources play a key role in ensuring food security in many countries of the world. Lack of land for agricultural crops can lead to food shortages and higher prices for them, which negatively affects the economy and social sphere.

To solve this problem, it is necessary to use methods aimed at increasing the productivity of land resources, such as the use of modern varieties and hybrids of plants adapted to local conditions, the use of fertilizers, modern technologies, etc. However, it is important to take into account the environmental and social aspects of land use and use sustainable farming methods to achieve food security and preserve natural resources on a long-term basis.

Thus, land resources are a key factor in ensuring food security in many countries of the world. Insufficient land for agricultural crops can lead to food shortages and higher prices for them, which can negatively affect the economy and social sphere.

To ensure food security, it is necessary not only to increase the area of land under agricultural crops, but also to increase the productivity of land resources, using modern methods and technologies, as well as taking into account environmental and social aspects of land use.

The implementation of sustainable land management strategies and programmes, as well as the balanced use of land resources, can help address food security issues and create conditions for sustainable development of agriculture and the economy as a whole.

1. Land resources are a key factor in ensuring food security in many countries of the world.
2. Insufficient land for agricultural crops can lead to food shortages and higher prices for them, which can negatively affect the economy and social sphere.

3. To ensure food security, it is necessary not only to increase the area of land under agricultural crops, but also to increase the productivity of land resources using modern methods and technologies.

4. It is important to take into account the environmental and social aspects of land use when improving land productivity.

5. Sustainable land management programs can help address food security issues and create conditions for sustainable development of agriculture and the economy as a whole.

6. Balanced use of land resources and implementation of sustainable land management strategies are key measures to ensure food security and create conditions for sustainable economic and social development.

As a result, the implementation of strategies and programmes for sustainable land use and the balanced use of land resources is essential for the conservation of natural resources, biodiversity and the well-being of society. Such programs help to reduce the negative impact of human activities on the environment and create conditions for the sustainable development of the economy and social sphere.

It is important to remember that successful implementation of such programs requires broad support from the state, business, local communities and the general public. In addition, systems for monitoring and evaluating land use efficiency should be established to allow for adjustments to programs and strategies depending on the changing situation. [4]

In general, the implementation of strategies and programs for sustainable land use and balanced use of land resources is an important step towards the sustainable development of society and the preservation of the environment for future generations.

REFERENCES

1. A.V., Kochetkov V. A. Food security in the context of globalization. Moscow: Exam Publ., 2019.
2. Federal Law No. 264-FZ of 29.12.2006 (as amended on 31.07.2020) "On the Development of agriculture".
3. Burov V. P., Burova T. V. Regulation of land relations in the Russian Federation: problems and prospects. Bulletin of Tambov University. Series: Humanities. 2017;22(5):1351-1355.
4. Dragan G. V., Yakimenko V. L., Burlachenko Yu. N. Sustainable land use and its role in ensuring food security. Nature management economics. 2018;(4):36-44.
5. Nikonov A. A., Novikov V. A. Efficiency of using land resources in agriculture: problems and prospects. Siberian Environmental Journal. 2019;(3):423-432.
6. Stepanov A. Yu., Maksimov S. V. Food security and sustainable land use: communication and development prospects. Bulletin of Tomsk State Agrarian University. 2018;(2):22-30.
7. Chirikova M. G. Food security of Russia: current state and prospects. Agrarian Bulletin of the Urals. 2018;(5):41-44.
8. Eiboshin A.V. Agricultural development and food security under sanctions. Actual problems of economics and law. 2019;(1):48-53.
9. Food and Agriculture Organization of the United Nations. The State of Food Security and Nutrition in the World 2020. Rome: FAO, 2020.
10. United Nations. Transforming our world: The 2030 Agenda for Sustainable Development. New York: UN, 2015.