

Theoretical Aspects Of Researching Agricultural Geography

Fayzullayev M.A

Islamova D.H

Shahrisabz State Pedagogical Institute

Abstract. The article analyzes the theoretical and methodological foundations of the study of agricultural geography. The "center-periphery" model, economic integration, efficient use of resources, and principles of environmental sustainability are covered. The research results show the importance of an integrated approach of economic, geographical and environmental factors in the development of agriculture.

Keywords: Agricultural geography, center-periphery model, economic integration, efficient use of resources, environmental sustainability, agrarian clusters, regional development.

Introduction. Agricultural geography is a complex scientific field based on the study of the interrelationships between natural resources, economic processes, social factors, and environmental conditions. This field embodies a broad and multifaceted approach that encompasses agricultural activities, rational resource management, and sustainable development. This area encompasses broad and multifaceted approaches that include agricultural activities, rational resource management, and ensuring sustainable development. The main goal of agricultural geography is to analyze the territorial distribution of production processes and thereby develop scientific methods aimed at increasing the efficiency of agricultural activities. To this end, a thorough analysis of the economic, environmental and social factors in the processes of production, processing and delivery of agricultural products to the market is of great importance. This article reviews the main theoretical and methodological approaches of agricultural geography in detail. The importance of economic integration, resource efficiency, environmental sustainability, and cluster systems in agriculture is analyzed. The study also examines regional disparities in agricultural development and new ways of managing resources effectively through economic approaches such as Paul Krugman's "center-periphery" model. The article is based on scientific research aimed at studying ways to sustainably develop agriculture, rationally use resources, and introduce modern technologies. Krugman emphasizes that agriculture is an integral part of the economic system, showing how each sector of the economy is interconnected. He considers agriculture not only as food production, but also as a vital sector for global trade, industrial production, and development. The article is based on scientific research aimed at studying ways to sustainably develop agriculture, rationally use resources, and introduce modern technologies. Krugman emphasizes that agriculture is an integral part of the economic system, showing how each sector of the economy is interconnected. He considers agriculture not only as food production, but also as a vital sector for global trade, industrial production, and development. Krugman emphasizes that agriculture is an integral part of the economic system, showing how each sector of the economy is interconnected. He sees agriculture not only as a source of food production, but also as a vital sector for global trade, industrial production, and development. Krugman criticizes government subsidies and trade tariffs in the agricultural sector. He argues that developed countries often subsidize their own farmers, making it difficult for developing countries' agricultural products to compete. He believes that this practice can slow global economic growth and lead to social injustice.

Krugman also examines the role of high technology in agriculture. Technology, especially innovations in areas such as artificial intelligence, robotics and genome engineering, allow farmers to produce more efficiently. However, he says that these changes can sometimes push small farmers out of business and lead to changes in the labor market. Climate change will have a major impact on agriculture. Krugman emphasizes the need for global cooperation and technological innovation to address this process. Climate change can reduce agricultural yields, reduce natural resources, and lead to land degradation. The future of agriculture: Krugman sees the future of agriculture as: if it is strengthened by modern technologies and progressive agricultural policies, new opportunities can open up for developing countries. At the same time, he emphasizes the need to maintain a balance between the agricultural and industrial sectors and to integrate them with global networks. Krugman also considers the importance of cooperation between public policy and the private sector in this

area to be unchanging. The role of the government should be greater in solving social and economic problems in this area, especially for small farms. Krugman promotes his economic analyses and opinions worldwide, but his views on agriculture also play an important role in the global economy and development processes.

Main part. The "center-periphery" model, developed by Paul Krugman, explains the reasons for the concentration of economic activity in certain regions. According to this model, production processes and the level of economic development are mainly concentrated in central regions with well-developed transport infrastructure, wide market opportunities, and high purchasing power of the population. According to this model, production processes and the level of economic development are concentrated mainly in central regions with well-developed transport infrastructure, broad market opportunities, and high purchasing power of the population. When applying this model to agriculture, it is observed that regions with higher opportunities for fast and cheap delivery of products through advanced transportation networks have an advantage in organizing the production of products more efficiently in areas close to markets. For example, in regions with developed logistics capabilities and close proximity to large cities, it is easier to grow and sell agricultural products, which creates additional economic opportunities for farms. When applying this model to agriculture, it is observed that regions with higher opportunities for fast and cheap delivery of products through advanced transportation networks have an advantage in organizing the production of products more efficiently in areas close to markets. For example, in regions with developed logistics capabilities and close proximity to large cities, it is easier to grow and sell agricultural products, which creates additional economic opportunities for farms. Paul Krugman argues that economic integration can facilitate the development of trade and production sectors between different regions. To increase the efficiency and competitiveness of agriculture, it must operate in harmony with other economic sectors. The process of economic integration will deepen as a result of the transformation of the processes of production, processing and sale of agricultural products into an integrated system, the introduction of innovative technologies, and the strengthening of ties between research institutions and market participants. In particular, the introduction of cluster systems in agriculture and the widespread use of new technologies and automated management methods can increase productivity and improve production efficiency. The successful organization of agricultural activities requires the effective use of the main natural resources - land, water and labor. Modern agricultural production should ensure the rational use of resources, based on the principles of environmental sustainability. For example, water resources can be used more efficiently by modernizing irrigation systems and using water-saving technologies. It is also important to effectively implement soil restoration and agrotechnical measures to maintain the fertility of agricultural lands. The theory of economic clusters, put forward by Paul Krugman, also shows its importance in agriculture. The formation of cluster systems in agriculture allows for close cooperation between farms, research centers, processing enterprises, and logistics networks. Clusters enhance technology exchange through mutual cooperation, reduce production costs, and increase flexibility to market demands, which is an important factor in increasing the competitiveness of the agricultural sector. Natural and ecological resources directly affect the territorial distribution of agriculture. By studying the relationship between natural conditions and agricultural systems, it is possible to identify the most productive agricultural sectors in a given region. For example, in arid regions, due to limited water resources, the introduction of water-saving technologies and the cultivation of drought-resistant crops are of paramount importance. By studying the relationship between natural conditions and agricultural systems, it is possible to identify the most productive agricultural sectors in a given region. For example, in arid regions, due to limited water resources, the introduction of water-saving technologies and the cultivation of drought-resistant crops are of paramount importance.

Conclusion. The study of agricultural geography requires different theoretical and methodological approaches, since this field is directly related to natural resources, economic processes, social factors, and environmental problems. As revealed during the study, Paul Krugman's "center-periphery" model plays an important role in explaining regional differences in agricultural development. Economic integration and clustering are key factors in increasing the efficiency of the agricultural sector. Rational use of resources, strengthening territorial ties, and focusing on environmental sustainability contribute to the sustainable development of agriculture. Also, taking into account natural conditions and scientifically based planning of agricultural systems play an important role in increasing agricultural productivity. Thus, a systematic and comprehensive approach is needed in the study of agricultural geography. In the future, attention should be

paid to modern technologies and scientifically based strategies to increase the efficiency of agriculture and ensure its sustainability. The results of this study are of practical importance for agricultural specialists and scientists.

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