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Research on the Impact of New Quality Productive Force on High Quality Development of Agricultural Economy

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Abstract: Focusing on the intrinsic relationship between new quality productive force and high-quality development of agricultural economy, this article thoroughly analyzes the advanced forms and core characteristics of new quality productive force, and comprehensively explores its key role in driving innovation of agricultural production methods, leading optimization of agricultural industrial structures, and empowering innovation and upgrading of agricultural science and technology. At the same time, a series of targeted and forward-looking strategies are proposed to accurately identify the high-quality development process of agricultural economy. Intended to provide solid theoretical basis and practical guidance for promoting high-quality development of agricultural economy through the utilization of new quality productive force.

Keywords: New quality productive force; Agricultural economy; High quality development

Introduction

New quality productive force, as an innovative form of productivity driven by technological innovation and deeply integrating cutting-edge concepts such as digitization, intelligence, and greening, is gradually becoming a new engine leading economic development. As a fundamental industry of the national economy, the high-quality development of agriculture is not only of great significance for ensuring national food security, but also an important support for the comprehensive implementation of the rural revitalization strategy and social stability and prosperity. In the context of the vigorous rise of new quality productive force, it is of great theoretical value and profound practical significance to deeply explore its impact mechanism on the high-quality development of agricultural economy, actively explore new paths and innovative models for agricultural economic development.

1. Theoretical foundation of new quality productive force and high-quality development of agricultural economy

The formation of new quality productive force stems from significant breakthroughs in technological innovation, deep adjustments in industrial structure, and strong support provided by institutional innovation. It breaks through the inherent limitations of traditional productivity development and highly emphasizes the efficient combination and optimized allocation of production factors through technological innovation. By utilizing digital and intelligent means, new quality productive force can significantly improve production efficiency and product quality; At the same time, new quality productive force attaches great importance to green and sustainable development, and is committed to minimizing negative impacts on the ecological environment to the greatest extent possible.

The high-quality development of agricultural economy covers multiple key aspects such as improving the quality of agricultural products, enhancing agricultural production efficiency, optimizing agricultural industrial structures, and improving agricultural ecological environment. There is a close interdependence and mutual promotion between new quality productive force and high-quality development of agricultural economy. New quality productive force provides advanced technological means and innovative thinking for the high-quality development of agricultural economy, effectively promoting the transformation and upgrading of agriculture towards modernization, intelligence, and green direction. The inherent demand for high-quality development of agricultural economy creates vast space for the widespread application and sustainable development of new quality productive force in the agricultural field, which in turn promotes continuous innovation and improvement of new quality productive force.

2. Aspects of reshaping the agricultural economic pattern through new quality productive force

2.1 Driving the innovation of agricultural production methods

In agricultural production practice, advanced technologies such as sensors, the Internet of Things, and big data can be used to achieve

real-time and accurate monitoring and regulation of crop growth environments. For example, through soil moisture sensors and meteorological monitoring equipment, precise irrigation and fertilization operations can be implemented based on the water and fertilizer requirements of crops at different growth stages, effectively improving resource utilization efficiency and significantly reducing resource waste. At the same time, the application of agricultural robots in agricultural production is becoming increasingly widespread, gradually replacing manual labor in many aspects such as sowing, weeding, and picking, significantly improving labor productivity, reducing production costs, thus effectively promoting agricultural production towards high efficiency, intelligence, and precision.

2.2 Leading the optimization of agricultural industry structures

The rise of rural e-commerce has completely broken the geographical limitations of traditional agricultural product sales, greatly expanded sales channels, and effectively enhanced the added value of agricultural products. Smart agriculture achieves intelligent management of the entire agricultural production process through the organic integration of information technology and agricultural production processes, significantly improving agricultural production efficiency. Leisure agriculture deeply integrates agriculture with tourism, culture and other industries, fully expanding the multifunctional attributes of agriculture, greatly enriching the agricultural industry structures, and opening up a new path for agricultural economic growth.

2.3 Empowering the innovation and upgrading of agricultural technology

In the field of biotechnology, the continuous development of cutting-edge technologies such as gene editing and biological breeding provides solid technical support for cultivating new crop varieties with high yield, high quality, and strong stress resistance. In the field of information technology, the widespread application of agricultural big data, artificial intelligence, blockchain and other technologies in various aspects of agricultural production, management, sales, etc. significantly improves the accuracy of agricultural production and the scientificity of decision-making.

3. Clever strategies for high quality development of agricultural economy based on new quality productive force

3.1 Building a policy support and funding guarantee system

Firstly, related departments can establish a special fund for agricultural science and technology innovation, which rigorously evaluates the innovation, feasibility, and potential value of projects for high-quality development of the agricultural economy, accurately selects potential projects, and provides strong financial support for enterprises and research institutions engaged in the research and application of new quality productive force related technologies. In terms of tax policies, a certain period of tax reduction and exemption policies will be implemented for enterprises that purchase new agricultural technology equipment and actively participate in green agricultural technology innovation, and the agricultural related taxes and fees can be reduced appropriately for farmers who adopt new quality productive force technologies. Financial subsidies should be targeted towards the agricultural production process, and the government should actively guide financial institutions to innovate financial products and service models. In addition to vigorously promoting agricultural technology credit, agricultural supply chain finance, and other businesses, the establishment of an agricultural new quality productive force industry investment fund can also be explored. With the guidance of the government and the participation of social capital, diversified financing channels can be created for agricultural new quality productive force projects to effectively solve their funding shortage problems.

3.2 Establishing a resource base for agricultural talent cultivation and introduction

Strengthening the construction of the agricultural talent training system is significantly crucial. On the one hand, agricultural colleges and universities should scientifically adjust their professional settings, break down traditional disciplinary barriers, and offer interdisciplinary majors such as agricultural intelligent technology application and agricultural bioinformatics, in order to cultivate compound talents who not only master agricultural knowledge but also possess emerging technological capabilities. At the same time, related colleges and universities should vigorously strengthen the practical teaching process, deepen cooperation with agricultural technology enterprises, and jointly build internship and training bases, allowing students to accumulate rich practical experience in actual projects. On the other hand, vocational skills training for farmers cannot be ignored. We should fully utilize the combination of online and offline methods to build an online learning platform for agricultural new quality productive force, providing massive and rich course resources for farmers to learn anytime and anywhere. Offline expert teams should be organized to conduct on-site teaching and technical guidance in rural areas. In addition, developing attractive preferential policies is essential. For college graduates and scientific and technological talents who engage in entrepreneurship and employment in the agricultural field, related departments can provide housing subsidies, entrepreneurial support funds, etc.; For talents who have achieved outstanding results in the field of agricultural new quality productivity, honors and material rewards will be given to attract various high-quality talents in all aspects, laying a solid talent foundation for the high-quality development of agricultural economy.

3.3 Consolidating the foundation of agricultural infrastructure construction

In terms of network construction, it is not only necessary to achieve widespread coverage of rural 5G networks, but also to ensure network stability and high speed to meet complex needs such as agricultural big data transmission and remote intelligent control. In terms of road transportation construction, it's important to vigorously improve rural road traffic conditions, carefully plan and construct an efficient transportation network connecting farmland, rural areas and markets, and effectively improve the efficiency of agricultural product transportation. At the same time, there is a need to strengthen the construction of rural roads and logistics distribution systems, introduce intelligent logistics management systems, and achieve real-time monitoring and optimized scheduling of agricultural product transportation. In the construction and renovation of agricultural water conservancy facilities, advanced water-saving irrigation technologies are actively adopted, such as intelligent upgrades to drip and sprinkler irrigation systems, enabling them to automatically adjust irrigation amounts based on soil moisture and crop water demand. In addition, strengthening the construction of agricultural information infrastructure, building a fully functional agricultural big data platform, and integrating multi-source information such as meteorology, soil, market, pests and diseases, can achieve the interconnection and efficient sharing of various types of information such as agricultural production, market, and management, and provide scientific and accurate basis for agricultural production decision-making.

4. Conclusion

The new quality productive force brings unprecedented opportunities and severe challenges to the high-quality development of agricultural economy. In the face of new development situation, we must fully recognize the important value and enormous potential of new quality productive force, and actively respond to issues such as technological costs, talent shortages, and weak infrastructure. By implementing a series of effective measures such as policy support, talent cultivation, and infrastructure construction, the key role of new quality productive force can be fully leveraged in promoting the transformation of agricultural production methods, optimizing industrial structure, and upgrading technological innovation. Only in this way can we achieve high-quality development of agricultural economy, promote the comprehensive transformation of China's agriculture from traditional agriculture to modern agriculture, and lay a solid agricultural foundation for the comprehensive implementation of the rural revitalization strategy and the realization of the Chinese Dream of national rejuvenation.

References

- [1] Luo Jianwen. On the Iterative Fission of Empowering Agricultural Economic Development with new quality productive force [J]. Ningxia Social Sciences, 2023, (03): 102-111.
- [2] Chu Jinzhe, Zhou Dan. The Significance, Constraints, and Optimization Path of Empowering Agricultural Economy with new quality productive force for High Quality Development [J]. Contemporary Rural Finance and Economics, 2023, (05): 40-44.
- [3] Qiu Wenjuan. new quality productive force has added "wings" to the development of agricultural modernization. Village committee director, 2023, (07): 91-93.

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