Exploration of Opportunities and Paths for Agricultural Economic Development under the Background of Rural Revitalization

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Abstract: Under the background of the rural revitalization strategy, agricultural economic development has ushered in unprecedented opportunities and challenges. This paper delves into the multiple opportunities for agricultural economic development within the context of rural revitalization, encompassing policy support, strengthened infrastructure construction, advancement in agricultural mechanization and modernization, optimization of rural industrial structures, and active participation of social forces. Meanwhile, the paper also analyzes the current constraints faced by agricultural economic development, such as inadequate infrastructure construction, ecological and environmental issues, talent shortages, and a monotonous industrial structure. Based on this analysis, the article proposes specific pathways to promote agricultural economic development, including cultivating new types of professional farmers, optimizing rural industrial structures, intensifying infrastructure construction efforts, promoting new agricultural technologies and processes, and innovating rural governance systems. These measures aim to comprehensively enhance the efficiency and quality of agricultural production, achieve sustainable agricultural economic development, and support the full implementation of the rural revitalization strategy.

1. Introduction

The rural revitalization strategy is a significant strategic decision proposed against the backdrop of China's economic and social development entering a new era, aimed at promoting agricultural and rural modernization and achieving comprehensive rural revitalization. As an integral part of rural revitalization, the development of agricultural economy cannot be overlooked. Under the dual impact of globalization and urbanization, the development of agriculture and rural areas faces unprecedented challenges and opportunities. Therefore, a thorough exploration of the multiple opportunities and challenges in agricultural economic development is of great significance for formulating scientific and rational policy measures, advancing the process of agricultural modernization, enhancing the level of rural economic development, and ultimately realizing rural revitalization. In this context, this paper will comprehensively analyze the opportunities and challenges in agricultural economic development from the perspectives of policy support, infrastructure construction, agricultural mechanization and modernization, optimization of rural industrial structures, and active participation of social forces. The purpose is to provide a useful reference for the formulation and implementation of relevant policies, so as to promote the sustainable development of agricultural economy and support the full implementation of the rural revitalization strategy.

2. Opportunities for Agricultural Economic Development in the Context of Rural Revitalization

2.1. Strengthened Policy Support

The support from national policies for agricultural economic development serves as a crucial cornerstone of the rural revitalization strategy. In recent years, the government has introduced a series of policy measures aimed at promoting agricultural development, providing comprehensive

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and multi-faceted guarantees for agricultural economic development through fiscal subsidies, tax incentives, and financial support. These policies have not only reduced the costs of agricultural production, increased farmers' production enthusiasm, but also promoted agricultural technological innovation and industrial upgrading, injecting robust momentum into the sustained growth of the agricultural economy. Specifically, by increasing investment in agricultural technology research and development, and promoting advanced agricultural technologies and equipment, policy support has significantly improved agricultural production efficiency and product quality, enhancing the market competitiveness of the agricultural economy. At the same time, by optimizing the agricultural industrial structure and promoting the integrated development of the primary, secondary, and tertiary industries, policy support has also opened up new paths for the diversified development of the agricultural economy[1].

2.2. Enhanced Infrastructure Construction

Rural infrastructure construction is an essential support for agricultural economic development. In the rural revitalization strategy, strengthening rural infrastructure construction has been placed in a prominent position. On the one hand, the improvement of rural infrastructure is directly related to the convenience and comfort of farmers' production and life, and is a necessary condition for improving farmers' living standards and narrowing the urban-rural gap. On the other hand, the enhancement of infrastructure construction also provides a strong guarantee for the development of the agricultural economy. For example, the improvement of farmland water conservancy facilities can effectively improve farmland irrigation efficiency and drought and disaster reduction capabilities, ensuring the stability of agricultural production. The improvement of rural transportation conditions can help reduce the transportation costs of agricultural products, broaden the sales channels of agricultural products, and enhance the market competitiveness of the agricultural economy. In addition, with the acceleration of rural information network construction, the widespread application of modern information technologies such as the Internet and big data in the agricultural sector has also provided important support for the intelligent and precise development of the agricultural economy. Therefore, strengthening rural infrastructure construction plays an irreplaceable role in promoting agricultural economic development and achieving rural revitalization.

2.3. Advancement of Agricultural Mechanization and Modernization

2.3.1. Current Status and Development Trends of Agricultural Mechanization and Modernization

Currently, China's agricultural mechanization and modernization process is accelerating, demonstrating a vigorous development trend. With technological advancements and policy support, the level of agricultural mechanization has significantly improved, and large-scale, efficient, and intelligent agricultural machinery has gradually become prevalent, covering all aspects from cultivation, sowing, field management to harvesting. Simultaneously, modern agricultural technologies such as precision agriculture and smart agriculture are gradually being promoted. Through the application of big data, the Internet of Things, artificial intelligence, and other technologies, the fine management of agricultural production processes has been realized, improving resource utilization efficiency. In the future, agricultural mechanization and modernization will continue to advance to a higher level, with intelligence and automation becoming the primary development directions, further promoting the transformation and upgrading of agricultural production methods[2].

2.3.2. Enhancement of Agricultural Production Efficiency and Quality

The advancement of agricultural mechanization and modernization significantly improves agricultural production efficiency and quality. Firstly, mechanized operations can significantly reduce human input, lower labor intensity, and enhance labor productivity. At the same time, mechanized operations can achieve precise sowing, fertilization, irrigation, etc., improving

operational precision and uniformity, conducive to crop growth and development. Secondly, the application of modern agricultural technologies, such as precision agriculture, optimizes agricultural production decisions through data analysis, enabling on-demand input and scientific management, thereby enhancing resource utilization efficiency and reducing waste and pollution. Furthermore, the development of smart agriculture promotes the quality improvement of agricultural products by monitoring and controlling the agricultural production environment in real-time, ensuring product quality and safety, and meeting consumers' demands for high-quality agricultural products. Therefore, the advancement of agricultural mechanization and modernization is crucial for enhancing agricultural production efficiency and quality, driving agricultural sustainable development.

2.4. Optimization of Rural Industrial Structure

2.4.1. Current Status and Challenges of a Monolithic Industrial Structure

Currently, China's rural industrial structure generally exhibits a monolithic issue, mainly manifested in a single agricultural planting structure, short agricultural product processing chains with low added value, and lagging rural service industry development. This monolithic industrial structure not only restricts farmers' income growth but also hinders the diversification and sustainable development of the rural economy. Facing the challenges of globalization and marketization, the monolithic industrial structure makes the rural economy vulnerable to market risks and unable to adapt to consumers' increasingly diverse demands. Thus, optimizing the rural industrial structure and promoting the diversified development of the rural economy has become an essential task for current rural revitalization[3].

2.4.2. Construction and Optimization Path of a Diversified Industrial Structure

To construct and optimize a diversified rural industrial structure, a series of measures must be taken. Firstly, it is necessary to adapt to local conditions, develop characteristic agriculture and advantageous industries based on local resource endowments and market demands, forming a development pattern of "one village, one product" or "one township, one industry." Secondly, it is crucial to extend the agricultural industry chain, strengthen agricultural product processing and branding, increase agricultural product added value, and promote the integrated development of agriculture with secondary and tertiary industries. Meanwhile, actively fostering rural service industries such as rural tourism and rural e-commerce, which inject new vitality into the rural economy, is essential. Additionally, strengthening rural innovation and entrepreneurship by encouraging and supporting migrant workers to return home for entrepreneurship and college students to return to their hometowns for entrepreneurship provides a talent guarantee for the optimization of the rural industrial structure. Through implementing these measures, a diversified rural industrial structure can be gradually constructed and optimized, driving the comprehensive development of the rural economy.

2.5. Active Participation of Social Forces

2.5.1. The Flow of Social Capital, Technology, and Talent towards Agriculture

In the process of rural revitalization, the active participation of social forces is indispensable. With the country's emphasis on agricultural development and increased policy support, more and more social capital has begun to pay attention to and invest in the agricultural sector. This social capital not only brings financial support but also advanced technology and management experience, injecting new vitality into agricultural development. Meanwhile, as agricultural modernization advances and the agricultural industrial structure optimizes and upgrades, the demand for technology and talent in the agricultural sector is also growing. Therefore, an increasing number of technical and professional talents are flocking to rural areas, contributing their wisdom and strength to agricultural development. This flow of social capital, technology, and talent towards agriculture provides robust support and guarantees for the development of the agricultural economy[4].

2.5.2. The Contributions of Social Forces to Agricultural Economic Development

The contributions of social forces to agricultural economic development are multifaceted. Firstly, the investment of social capital provides crucial financial support for agricultural infrastructure construction, agricultural scientific and technological research and development, and promotion, promoting the modernization and large-scale development of agricultural production. Secondly, the participation of social forces drives the optimization and upgrading of the agricultural industrial structure, promotes the integrated development of agriculture with secondary and tertiary industries, and provides strong support for the diversified development of the rural economy. Simultaneously, the involvement of social forces fosters agricultural technological innovation and talent cultivation, enhancing the technological content and talent quality of agricultural production. Furthermore, social forces contribute positively to the harmonious stability and sustainable development of rural society by participating in rural social governance and public welfare undertakings. Therefore, actively guiding and encouraging the participation and support of social forces is a vital pathway to promote agricultural economic development and achieve rural revitalization.

3. Current Constraints on Agricultural Economic Development

3.1. Insufficient Infrastructure Development

Inadequate infrastructure development is one of the critical factors restricting agricultural economic development. The transportation, water conservancy, electricity, and communication infrastructures in rural areas lag behind, making it difficult to meet the demands of modern agricultural development. Poor transportation leads to high transportation costs and low efficiency for agricultural products, limiting their market circulation and competitiveness. Aging and disrepaired water conservancy facilities result in inadequate irrigation capacity, affecting farmland's drought resistance, waterlogging drainage, and agricultural production stability. Unstable electricity supply constrains the promotion and application of agricultural mechanization and informatization. Incomplete communication network coverage and information isolation hinder farmers' access to timely market information and technical support. These shortcomings in infrastructure not only increase the costs and risks of agricultural production but also restrict the sustainable development of the agricultural economy[5].

3.2. Ecological and Environmental Issues

Ecological and environmental issues pose another significant challenge to agricultural economic development. With the intensification and large-scale development of agricultural production, the use of agricultural inputs such as fertilizers and pesticides has increased, leading to increasingly prominent ecological and environmental problems like soil pollution and water eutrophication. These issues not only compromise the quality and safety of agricultural products but also threaten the balance and stability of rural ecosystems. Additionally, improper disposal of agricultural waste exacerbates environmental pollution. Thus, safeguarding rural ecological environments while ensuring agricultural production and achieving coordinated development between the agricultural economy and the ecological environment is an urgent issue that needs to be addressed.

3.3. Talent Shortage

Talent shortage is one of the crucial factors constraining agricultural economic development. As urbanization accelerates and the urban-rural gap widens, a massive outflow of young rural labor forces leads to an increasingly severe talent shortage in rural areas. The agricultural sector lacks high-quality management, technical, and marketing talents, making it difficult to adapt to the demands of modern agricultural development. Moreover, due to the arduous nature of agricultural production and relatively low income, it is challenging to attract and retain talented individuals. This talent shortage restricts agricultural technological research and promotion, as well as the optimization and upgrading of the agricultural industrial structure and the enhancement of market competitiveness.

3.4. Single Industrial Structure

A single industrial structure is a common issue faced by rural economic development. Many rural areas still rely heavily on traditional crop farming, with short processing chains and low added value for agricultural products, lacking diversified industrial support. This monolithic structure not only limits farmers' income growth and the diversified development of the rural economy but also reduces its resilience to market risks. In the context of globalization and marketization, a single industrial structure makes the rural economy ill-equipped to adapt to changes in market demand and the diversification of consumer preferences. Therefore, optimizing the rural industrial structure and promoting diversified rural economic development have become vital tasks in current rural revitalization efforts.

4. Specific Paths to Promote Agricultural Economic Development

4.1. Cultivating New-type Professional Farmers

Definition and Importance of New-type Professional Farmers: New-type professional farmers refer to modern agricultural practitioners who possess high scientific and cultural qualities, master modern agricultural production skills, have strong management capabilities and market awareness, and primarily engage in agricultural production, operation, or services, with their primary income derived from agriculture. They are not only the mainstay of agricultural production but also vital forces in advancing agricultural modernization and realizing rural revitalization. Cultivating new-type professional farmers is of great significance in enhancing agricultural production efficiency, ensuring the quality and safety of agricultural products, and promoting sustainable agricultural development.

Measures and Methods for Cultivating New-type Professional Farmers: Firstly, efforts should be intensified in education and training by establishing farmer education and training institutions and launching agricultural technology demonstration projects to improve farmers' scientific and cultural qualities and professional skills. Secondly, a professional farmer certification system should be established to certify eligible farmers and provide policy support and incentives to encourage more farmers to devote themselves to modern agriculture. Meanwhile, university students, ex-servicemen, and other social talents should be encouraged to join the agricultural sector, injecting fresh blood into the ranks of new-type professional farmers. Additionally, rural infrastructure construction should be strengthened to improve agricultural production conditions, making agriculture more attractive and competitive, thereby creating a favorable environment for the development of new-type professional farmers.

4.2. Optimizing Rural Industrial Structure

Strategies for Building a Diversified Industrial Structure: To optimize the rural industrial structure, it is imperative to promote diversified rural industrial development. On the one hand, local conditions should be taken into account, leveraging local resource endowments and market demands to develop diversified industrial forms such as specialty agriculture, eco-agriculture, and leisure agriculture, thereby enriching the rural industrial structure. On the other hand, emphasis should be placed on extending and expanding industrial chains through agricultural product processing, rural e-commerce, rural tourism, and other means to increase the added value and market competitiveness of agricultural products. Furthermore, the integrated development of rural primary, secondary, and tertiary industries should be strengthened to promote the deep integration of agriculture with industry and services, forming a diversified and multi-level rural industrial system.

Paths for Promoting Industrial Integration and Upgrading: Industrial integration and upgrading are crucial avenues for optimizing the rural industrial structure. Firstly, agricultural enterprises should be encouraged and supported to collaborate with sectors such as technology, education, and culture through technological and modal innovations to drive the transformation and upgrading of the agricultural industry. Secondly, rural informatization should be strengthened by leveraging

modern information technologies like the Internet and big data to enhance the intelligence and precision of agricultural production, propelling the agricultural industry towards digitization, networking, and intelligence. Additionally, emphasis should be placed on brand building and marketing to create agricultural product brands with local characteristics and market competitiveness, enhancing their popularity and reputation. Furthermore, the rural financial service system should be strengthened to provide robust financial support for rural industrial integration and upgrading.

4.3. Strengthening Infrastructure Construction

Infrastructure construction serves as the cornerstone of rural economic and social development. In key areas and directions, priority should be given to infrastructure construction in transportation, water conservancy, energy, communications, and information networks. In transportation, efforts should be accelerated to build rural highway networks, enhancing rural transportation accessibility and convenience. In water conservancy, farmland water conservancy facilities should be strengthened to improve irrigation and drainage capabilities, ensuring the safety of agricultural water use. In energy, the utilization of clean energy sources like solar and wind should be promoted to improve the rural energy mix. In communications and information networks, rural broadband and mobile communication infrastructure should be strengthened to narrow the digital divide between urban and rural areas. To strengthen infrastructure construction, government investment should be increased, social capital should be attracted to participate, a diversified investment mechanism should be formed, and project management and supervision should be strengthened to ensure construction quality and benefits.

4.4. Promoting Agricultural New Technologies and Processes

Agricultural technological innovation is the key to advancing agricultural modernization and improving agricultural production efficiency. Its importance lies in optimizing agricultural resource allocation, increasing agricultural product yields and quality, enhancing agricultural resilience to disasters, and promoting sustainable agricultural development. To promote new technologies and processes, a sound agricultural technology promotion system should be established to strengthen agricultural technology research and development and accelerate the transformation of research results, thereby increasing the popularity and application rates of agricultural technologies. Additionally, farmer technology training should be strengthened to enhance farmers' technological literacy and their ability to apply new technologies and processes. Furthermore, agricultural enterprises, farmer cooperatives, and other new agricultural business entities should be encouraged and supported to participate in agricultural technological innovation and promotion, fostering a closely integrated agricultural technology innovation system that combines industry, academia, research, and application[6].

5. Conclusion

In summary, against the backdrop of rural revitalization, agricultural economic development has not only ushered in unprecedented opportunities, such as policy support, technological innovation, and industrial upgrading, but also faces challenges like inadequate infrastructure, ecological and environmental pressures, and talent shortages. The proposed paths, including fostering new types of professional farmers, optimizing rural industrial structures, strengthening infrastructure construction, promoting new agricultural technologies and processes, and innovating rural governance systems, are of great significance for achieving sustainable agricultural economic development and rural revitalization. The implementation of these paths can not only promote agricultural transformation and upgrading, enhance the overall development level of rural areas, but also strengthen their self-development capabilities, laying a solid foundation for realizing comprehensive rural revitalization.

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