

Strategic Approaches to Cultivating Agricultural Innovators for Sustainable Rural Revitalization

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Abstract: *With the deepening of the national strategy for rural revitalization, the cultivation of agricultural entrepreneurs has become the key to promoting rural economic development. Agricultural entrepreneurs, as the loyal practitioners of rural talent revitalization, play a pivotal role in connecting the past and the future. They represent progressiveness and play a significant role in introducing new thinking, methods, technologies, and business formats. This research explores the cultivation strategies for agricultural innovators within the framework of rural revitalization. By examining the current status, challenges, and effective methodologies, this study proposes a multidimensional approach to training agricultural entrepreneurs. The suggested strategies emphasize the importance of education, technological innovation, policy support, and platform construction. This research aims to provide a comprehensive blueprint for empowering rural talent and advancing sustainable economic development.*

Keywords: rural revitalization; talent; agri-entrepreneurs; cultivation strategies; agricultural entrepreneurship; sustainable agriculture, Rural Innovation, sustainable agriculture, agricultural entrepreneurship

1. Introduction

As the rural revitalization strategy progresses, the rural economy faces both unprecedented opportunities and challenges. This strategy not only demands notable achievements in rural infrastructure construction and ecological environment governance, but also calls for a new wave of innovative and entrepreneurial talents to engage in rural development. Agri-entrepreneurs, as an emerging force in this era, inject fresh blood and robust momentum into the transformation and upgrading of the rural economy with their keen insights, unique creativity, unwavering spirit of innovation, and relentless entrepreneurial enthusiasm.

Not only do agri-entrepreneurs focus on the transformation and upgrading of traditional agriculture, but they also strive to integrate modern agricultural technology, internet thinking, cultural creativity, and other elements into rural industries, creating a series of new products, formats, and models with market competitiveness. Their efforts not only enrich the connotation of the rural economy but also broaden farmers' income channels, bringing tangible results to rural revitalization. Studying how to effectively cultivate agri-entrepreneurs is not only essential for the long-term development of the rural economy but also closely related to the well-being and dreams of hundreds of millions of farmers. This study is significant as it addresses the critical need for innovative talent in agriculture, which is essential for the sustainable development of rural areas and the success of the rural revitalization strategy.

2. Definition and Characteristics of Agri-Entrepreneurs

Currently, there is no universally accepted definition of agri-entrepreneurs. In China, the term was first publicly promoted and defined in 2015 by the Zhejiang Provincial Department of Agriculture and Rural Affairs, gaining relatively wide acceptance within the industry and academia. Agri-entrepreneurs refer to individuals under 45 years old with a college degree or above who are engaged in agricultural

entrepreneurship and innovation, serving as leaders or shareholders in agricultural cooperatives, enterprises, family farms, or other agricultural production and management entities. As an emerging group of agricultural entrepreneurs, agri-entrepreneurs exhibit significant characteristics in the following aspects.

2.1 Educational Background and Knowledge Skills

Agri-entrepreneurs typically possess higher educational backgrounds, many of whom are university graduates or current students. They have systematic knowledge of modern agriculture, management skills, and information technology application capabilities. They understand traditional agricultural production methods and master modern agricultural technology, marketing, brand management, and other aspects, enabling them to solve agricultural problems with new knowledge and technology.

2.2 Innovation Consciousness and Entrepreneurial Spirit

Agri-entrepreneurs exhibit a strong sense of innovation and entrepreneurial spirit, daring to challenge traditional agricultural models and actively explore and practice new agricultural production methods, business models, and commercial modes. They focus on product and service innovation, aiming to increase the added value and market competitiveness of agricultural products.

2.3 Market Insight and Brand Awareness

Agri-entrepreneurs possess sharp market insights, accurately grasping changes in market demand and consumer preferences, adjusting production strategies and product structures accordingly. They also emphasize brand building and management, enhancing the popularity and reputation of agricultural products through distinctive and competitive branding.

2.4 Resource Integration and Cross-industry Cooperation

Agri-entrepreneurs excel at integrating various resources, including capital, technology, talent, and markets, to jointly drive the development of agricultural entrepreneurial projects. They not only focus on agricultural production but also establish close partnerships with upstream and downstream partners in the industry chain, realizing resource sharing and complementary advantages. Furthermore, they actively engage in cross-industry cooperation, combining agriculture with other sectors to expand its multifunctionality and value chain.

2.5 In terms of social responsibility and sustainable development

agricultural entrepreneurs pay attention to fulfilling social responsibilities and achieving sustainable development while pursuing economic benefits. They are concerned about the protection of agricultural ecological environment and rural social development, and actively promote sustainable

development models such as green agriculture and ecological agriculture. Through technological and modal innovations, agricultural entrepreneurs strive to promote the transformation, upgrading, and sustainable development of the agricultural industry.

2.6 In terms of Internet thinking and digital application

agricultural entrepreneurs possess strong Internet thinking and digital application capabilities, enabling them to fully utilize the Internet and information technology to improve agricultural production efficiency and management levels. They expand sales channels and build brand images through e-commerce platforms, social media, and other channels, achieving precise marketing and personalized customization of agricultural products. At the same time, agricultural entrepreneurs also focus on data analysis and intelligent management, utilizing advanced technologies such as big data and cloud computing to optimize agricultural production decisions and resource allocation.

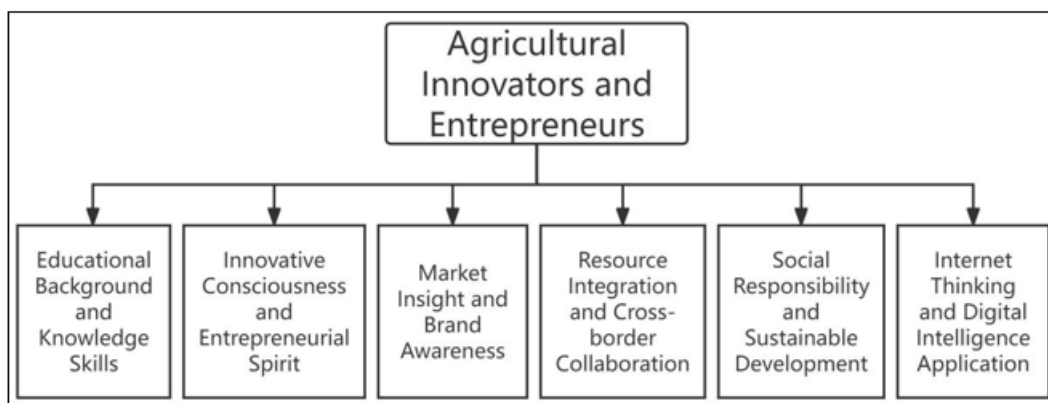


Figure 1: The six notable characteristics of agricultural innovators

3. Current Status of Agricultural Innovator Cultivation

3.1 Policy Support and Guidance

In recent years, the national and local governments have attached great importance to the construction of rural talent teams, especially the cultivation of agricultural innovators. The No. 1 Document of the State Council has repeatedly emphasized strengthening the construction of rural talent teams and encouraged and supported college students, returning youth, and others to become agricultural innovators, injecting new vitality into rural revitalization. Specific measures include: governments providing financial subsidies, tax incentives, startup loans, technical training, and other forms of support for the development of agricultural innovators. Additionally, they establish agricultural innovator entrepreneurship parks, incubators, and other platforms to provide entrepreneurial space and resource support. Taking Zhejiang Province as an example, the "Cultivation Project of 100,000 Agricultural Innovators" implemented by Zhejiang Province attracts a large number of young talents to engage in agricultural entrepreneurship through support in capital, land use, technology, and talent. This project not only provides necessary support for

agricultural innovators but also promotes the transformation and upgrading of the agricultural industry.

3.2 Cultivation Scale and Number

As the Rural Revitalization Strategy continues to deepen, the number of agricultural innovators continues to increase. Regions have established agricultural innovator development federations, associations, and other organizations to attract and cultivate a large number of young talents interested in agricultural entrepreneurship. From a regional distribution perspective, the cultivation and distribution of agricultural innovators exhibit certain geographical characteristics, with relatively larger numbers and more mature development in major agricultural provinces or regions with distinctive agricultural features, such as Jiaxing and Wenzhou. According to public data from the Zhejiang Provincial People's Government Portal in 2023, Zhejiang Province has cultivated over 52,000 agricultural innovators, with 45 agricultural innovator organizations, driving over 600,000 farmers to increase their income and become prosperous. This indicates that the government has invested significant resources in cultivating agricultural innovators and achieved remarkable results. The Hangzhou Municipal Government plans to cultivate 2,000 agricultural innovators in 2024 and establish 3 provincial-level modern agricultural innovation

parcs and 15 agricultural innovator common prosperity bases. In the first quarter, 925 new agricultural innovators were cultivated, with a cumulative total of 8,656, demonstrating the high efficiency of policy implementation. The Chongfu Agricultural Innovation Park in Tongxiang, Jiaying, has attracted more than 50 agricultural innovators, built over 500 mu (around 33 hectares) of greenhouse facilities, and introduced 44 agricultural specialty projects, driving the employment of over 130 local laborers, fully demonstrating the positive role of agricultural innovators in promoting local agricultural industry development and employment.

3.3 Cultivation Content and Methods

The training content for agricultural innovators covers multiple aspects, including agricultural technology, marketing, brand building, financial management, and more. Through systematic training, agricultural innovators are equipped with modern agricultural knowledge and skills to enhance their entrepreneurial capabilities. Training methods are diversified, including online training, offline practical training, expert lectures, on-site observations, and other forms. Some regions have also established a mentoring system, inviting agricultural experts and successful agricultural innovators to serve as mentors, providing one-on-one guidance and assistance to agricultural innovators. Taking the Emerging Agricultural Innovator Cultivation Plan launched by the Zhejiang Provincial Department of Agriculture in 2024 as an example, this plan provides agricultural innovators with rich learning and practical opportunities through expert lectures, special seminars, sandbox simulations, and field teaching. During the training process, agricultural innovation markets, competition experiences, and other activities are organized, enabling agricultural innovators to showcase their achievements and exchange experiences with other trainees.

3.4 Cultivation Effectiveness and Challenges

Agricultural entrepreneurs, as pioneering innovators in modern agriculture, have played a crucial role in promoting rural economic development. However, their cultivation and development have not been without obstacles, and the challenges and issues they confront cannot be overlooked. One major challenge is the mismatch between professional knowledge and entrepreneurial content. Statistics show that the vast majority of agricultural entrepreneurs engaged in innovation and entrepreneurship in China's agricultural sector are cross-industry entrants, with a low degree of alignment between their academic backgrounds and entrepreneurial endeavors. A sample survey of 341 agricultural entrepreneurs in Zhejiang Province found that fewer than 30% possess a comprehensive understanding of technology, business management, and administration. This mismatch significantly weakens their ability to withstand risks such as natural disasters and market fluctuations, limiting their strategies for developing new business formats and achieving suboptimal results.

Moreover, agricultural entrepreneurs often have a weak entrepreneurial foundation and lack professional guidance and support. Despite their relatively high educational levels,

they still lack sufficient professional knowledge and entrepreneurial skills specific to the agricultural industry. The absence of professional guidance and technical support during the entrepreneurial journey constitutes a bottleneck that hinders their growth. Many agricultural entrepreneurs must rely solely on self-exploration during the initial stages, and the abundance of superficial, quick-fix training programs has failed to significantly enhance their development.

Furthermore, financing difficulties and high capital risks pose significant challenges. Agricultural entrepreneurs frequently face funding shortages, limited financing channels, and relatively weak financing capabilities in their early stages. In the face of market risks, they remain inadequately equipped with strong market insights and risk resistance capabilities, exhibiting shortcomings in resource integration and project operation. While the government has introduced a series of supportive policies, the limited avenues for policy dissemination and communication have resulted in agricultural entrepreneurs' insufficient understanding and grasp of these policies.

4. Cultivation and Development Strategies for Rural Innovation and Entrepreneurship Talents Centered on Agricultural Entrepreneurs

Amidst the tide of the rural revitalization strategy, agricultural entrepreneurs have emerged as a formidable force, gradually becoming pivotal players in driving rural industrial upgrading and economic transformation. Their growth and development are not only about realizing individual dreams but also serve as a crucial cornerstone for the successful implementation of the rural revitalization strategy. It is therefore imperative and significant to establish a comprehensive cultivation strategy for rural innovation and entrepreneurship talents centered on agricultural entrepreneurs, integrating multiple dimensions such as education and training, technological innovation, policy support, platform construction, and talent introduction.

4.1 Education and Training for Capability Enhancement: Building a Comprehensive Knowledge System

1) Multidimensional Curriculum Design

Education and training serve as the starting point for the growth of agricultural entrepreneurs, emphasizing the comprehensiveness and relevance of curriculum design. The curriculum should encompass various fields such as agricultural technology, modern management, marketing, laws and regulations, financial management, and others, forming an interdisciplinary knowledge system. By integrating long-term and short-term courses, online and offline learning, as well as general and specialized in-depth courses, we aim to cater to the diverse learning stages and individual needs of agricultural entrepreneurs.

2) Practical Teaching Model

Theoretical instruction forms the foundation, but enhancing practical capabilities is paramount. Case studies and hands-on practice should constitute a vital component of educational training. By introducing successful

entrepreneurship cases, engaging in interactive teaching and scenario simulations, agricultural entrepreneurs can hone their problem-solving skills in simulated real-world environments. Additionally, encouraging participation in field trips and project practices facilitates the application of learned knowledge to real-life issues, fostering a deep integration of knowledge and skills.

3) Stepped Training System

Tailored to the various development stages of agricultural entrepreneurs, a stepped training system is designed, offering hierarchical and graduated courses. From foundational knowledge dissemination to professional skill upgrading and culminating in advanced management strategies, a comprehensive training system is gradually established. Through phased learning, agricultural entrepreneurs accumulate experience and enhance their capabilities, laying a solid foundation for their future entrepreneurial journey.

4.2 Technological Innovation and Financial Support: Sparking Entrepreneurial Vitality

1) Encouraging Agricultural Technological Research and Development

Technological innovation is the driving force behind agricultural development. Increased investment in agricultural technological research and development is necessary, encouraging agricultural entrepreneurs to actively engage in the research and promotion of new technologies and crop varieties. Through the establishment of innovation funds, technical consultation, and technological cooperation platforms, comprehensive technological support is provided to agricultural entrepreneurs, facilitating the application of novel technologies and ideas in the agricultural sector.

2) Diversified Financial Support

Capital is an indispensable resource in the entrepreneurial process of agricultural entrepreneurs. Diverse financial support mechanisms should be offered, including low-interest loans, startup funds, venture capital, etc., to reduce the financing difficulties and costs for agricultural entrepreneurs. Additionally, exploring the establishment of an integrated financing and insurance service model, "Government-Bank-Agricultural Entrepreneurship Insurance," provides agricultural entrepreneurs with more convenient and secure financial services. Furthermore, introducing social capital into agricultural venture investments broadens financing channels and stimulates the entrepreneurial vitality of agricultural entrepreneurs.

4.3 Policy Support and Market Expansion: Optimizing the Entrepreneurial Environment

1) Formulating Favorable Policies

Policy support is a crucial guarantee for agricultural entrepreneurs. A series of policy measures conducive to agricultural entrepreneurship should be formulated, encompassing tax incentives, land policies, market access, and other forms of support. By lowering entry barriers and alleviating entrepreneurial burdens, a favorable entrepreneurial environment is created for agricultural entrepreneurs. Additionally, strengthening policy promotion and interpretation efforts ensures that agricultural

entrepreneurs can fully understand and benefit from these policies.

2) Expanding Market Channels

Market expansion is vital to the success of agricultural entrepreneurship. Assistance should be provided to help agricultural entrepreneurs comprehend market demands, grasp market trends, and access market information and sales channels. By organizing agricultural product exhibitions, e-commerce matchmaking events, and other activities, agricultural entrepreneurs can introduce their products to broader markets. Furthermore, encouraging agricultural entrepreneurs to leverage the Internet+, Ecology+, Creativity+, and other innovative marketing strategies enhances product value-added and market competitiveness.

4.4 Platform Construction and Resource Integration: Constructing an Entrepreneurial Ecosystem

1) Establishing Agricultural Entrepreneurship Demonstration Parks

Agricultural Entrepreneurship Demonstration Parks serve as essential platforms for learning and practice for agricultural entrepreneurs. A series of demonstration parks integrating modern agricultural production, processing, and sales should be constructed, offering agricultural entrepreneurs exemplary experiences and models. Through on-site teaching and hands-on practice within the parks, agricultural entrepreneurs can master advanced agricultural production technologies and management experiences.

2) Facilitating Resource Sharing and Cooperation

Agricultural entrepreneurs should be encouraged to form cooperatives, industry associations, and other organizations to promote resource sharing, experience exchange, and market cooperation. Regular exchange meetings, seminars, and other activities should be organized to strengthen communication and connections among agricultural entrepreneurs, fostering a collaborative effort to drive rural innovation and entrepreneurship. Furthermore, a public service organization integrating administrative approval, financial support, skills training, project incubation, and policy guarantees should be established to provide comprehensive services and support for agricultural entrepreneurs.

4.5 Talent Introduction and Incentive Mechanism: Gathering Intellectual Power

1) Actively Introducing Talent

Talent is the primary resource for rural revitalization. Experienced agricultural professionals and innovative entrepreneurs should be actively recruited to inject new vitality and ideas into rural innovation and entrepreneurship. By formulating preferential policies and providing excellent work and living environments, we can attract talent to return to rural areas for entrepreneurship. Simultaneously, strengthening cooperation and exchanges with universities, research institutes, and other institutions, and establishing industry-university-research-application cooperation mechanisms, can facilitate the transformation of scientific and technological achievements into real productive forces.

2) Establishing and Improving Incentive Mechanisms

Incentive mechanisms are crucial for stimulating the enthusiasm and creativity of agricultural entrepreneurs in innovation and entrepreneurship. A comprehensive commendation and reward system should be established to recognize and reward outstanding agricultural entrepreneurs during their innovative endeavors. Discovering, nurturing, and motivating talent can be achieved through organizing innovation and entrepreneurship competitions, evaluating and selecting excellent entrepreneurial projects, and other means. Additionally, enhancing care and support for agricultural entrepreneurs, promptly addressing difficulties and issues they encounter during their entrepreneurial journey, can enhance their sense of belonging and happiness.

5. Conclusion

On the vast stage of rural revitalization, agricultural innovators, as a new force driving rural development in the new era, play a pivotal role in the prosperity of rural economies and the improvement of farmers' lives, with the effectiveness of their cultivation and development strategies directly influencing these aspects. Therefore, deepening the cultivation strategies for agricultural innovators is not only a robust response to the current rural revitalization strategy but also an active exploration of sustainable rural development paths for the future. Cultivating and developing agricultural innovators necessitates the construction of a comprehensive ecosystem that encompasses education and training, technological innovation, policy support, market expansion, platform construction, and resource integration. These elements mutually support and promote each other, forming a concerted effort. Through continuous education and training, agricultural innovators can continuously upgrade their capabilities and qualities, laying a solid foundation for their entrepreneurial journey. Technological innovation provides powerful technical support and a driving force for agricultural innovators, promoting continuous upgrading of the agricultural industry. Policy support and market expansion offer agricultural innovators a favorable external environment and vast development space. Platform construction and resource integration further optimize the entrepreneurial ecosystem, promoting optimal allocation and efficient utilization of resources.

Emphasis should be placed on accumulating practical experience and fostering an entrepreneurial spirit among agricultural innovators. While theoretical knowledge serves as a foundation, practical experience is equally important. Through field trips, project practices, and other activities, agricultural innovators can apply their knowledge to solving practical problems, amassing invaluable practical experience. Simultaneously, cultivating an entrepreneurial spirit is indispensable. Agricultural innovators should possess the qualities of daring to challenge and innovate, bravely facing difficulties and challenges in the entrepreneurial process, and constantly striving for excellence and success.

Governments should continue to increase policy support, providing agricultural innovators with more favorable policy environments and more convenient financing channels. All sectors of society should also actively pay attention to and support the growth and development of agricultural innovators, offering them more assistance and support.

Meanwhile, agricultural innovators themselves should continually learn and enhance their capabilities to better adapt to market changes and meet consumer demands.

Cultivating and developing agricultural innovators is a long-term and arduous task. By constructing a comprehensive ecosystem, emphasizing the accumulation of practical experience and the cultivation of an entrepreneurial spirit, and leveraging the concerted efforts and support of the entire society, we can propel the rapid growth of agricultural innovators and the in-depth implementation of the rural revitalization strategy, contributing to the prosperity of rural economies and the improvement of farmers' lives.

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