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Exploration on the Path of Training Agricultural Talents

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Abstract: *The cultivation of agricultural talents requires agricultural colleges and relevant departments to update the concept of talent training, innovate talent education methods, optimize the talent education environment, and reform the employment security of talents to meet the needs of economic and social development for agricultural talents. The thesis seeks the training path from the educational philosophy, the basic requirements of the cultivation of agricultural talents, and the requirements of the times for the cultivation of agricultural talents.*

Keywords: *Agricultural talent training; Training path; "Innovative and entrepreneurial" talent*

Introduction

The training model of talents must meet the needs of the country and society, and follow the laws of education and the growth of talents. The cultivation of talents in agricultural colleges and universities should also be based on social economic development and the needs of students to grow and become talents. It is necessary to reform the teaching content, curriculum system, practice links and other aspects of the talent training model, and promote the innovation of all aspects of the teaching concept, mechanism and system. Agricultural colleges and universities should reform their talent training thinking in accordance with the overall requirements of "integration of learning and thinking, unity of knowledge and action, and teaching in accordance with their aptitude", and strive to cultivate compound talents with a solid theoretical foundation and strong practical skills.

The Educational Orientation of the Five Development Concepts

Innovation: The First Driving Force Leading Development

In order to meet the needs of innovative development in the "agriculture, rural areas, and farmers", innovative ideas should be used to promote the reform of the selection and training system for agricultural talents. Under the guidance of innovative concepts, we must first insist on theoretical innovation, use advanced theories to guide the training and practice of agricultural talents, and cultivate agricultural talents who can master and explore advanced agricultural and rural development theories. Second, we must persist in system innovation, optimize the allocation of educational resources, and cultivate agricultural talents who promote the reform of agricultural and rural management systems. Then, we must persist in scientific and technological innovation, lead discipline construction and personnel training with scientific and technological innovation, and cultivate

innovative talents who promote the continuous advancement of agricultural science and technology. Finally, we must persist in cultural innovation and cultivate agricultural talents who have a sense of responsibility, mission, and urgency to engage in "agriculture, rural areas, and farmers", and can promote the harmonious coexistence of modern civilization and traditional farming civilization.

Coordination: The Inherent Requirement of Healthy Development

At present, China's reforms in the "agriculture, rural areas and farmers" areas need to coordinate urban and rural development, adhere to industry to feed agriculture, cities support the countryside, and improve the system and mechanism of urban-rural development integration. Therefore, in the development goal of the talent training system, we need to coordinate the current overall structure of the talent team and improve the weak position of agricultural talent training in the education system. In terms of ability goals, we must train specific agricultural talents for the key links in the overall planning of urban and rural development. In terms of specific methods, we need to focus on the coordinated development of agricultural talents, the cultivation of comprehensive qualities, and the ability of agricultural students to solve complex agricultural and rural problems in practice.

Green: A Necessary Condition for Sustainable Development

Put environmentally friendly science and technology in the key position of discipline construction and teaching reform. Agriculture, as a basic industry and ecological industry, not only has economic and social benefits, but also has natural ecological benefits, so it must be guided by green development. In order to promote the cultivation of ecological and harmonious agricultural talents, we should take "concept setting – habit forming – ability having" as the evolutionary route, embed the scientific development concept into the construction of personnel training system, and put the concept of ecological civilization through the whole practice of agricultural personnel training.

Opening up: The Only Way for the Country to Prosper and Develop

The future "agriculture, rural areas and farmers" issues are international problems. In the process of globalization, the cultivation of agricultural talents must reflect an international perspective. We must place the learning, creation, and dissemination of agricultural knowledge under the background of global agricultural resource allocation, and place the cultivation of agricultural talents in the process of world agricultural development and rural transformation. On this basis, we should have a broad understanding of domestic and foreign agricultural and rural development experience, integrate domestic and foreign agricultural teaching resources, increase cooperation and intelligence introduction, and reserve talents to deal with the "agriculture, rural areas and farmers" issues.

Sharing:The Essential Requirements of Socialism with Chinese Characteristics

In the reform of the agricultural personnel training system, we also need to adhere to the concept of sharing, remove institutional and habitual barriers, innovate resource allocation methods, and support the training of

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agricultural personnel in all aspects, so that agricultural education can benefit a wider range of groups and fields. In addition, we should also guide and encourage agricultural students to return to "agriculture, rural areas and farmers" to realize higher values in life.

In general, cultivating innovative and diversified agricultural talents, such as innovation-leading, coordinated progress, ecological harmony, outward interaction, and shared win-win type, is important for the development of agricultural science and technology innovation itself and the entire "agriculture, rural areas and farmers" undertakings.

Basic Requirements for the Cultivation of Agricultural Talents

Fully Participate in the "Synchronization of the Four Modernizations" Process

In the new century, China has entered a new stage of development with the simultaneous development of industrialization, informatization, urbanization, and agricultural modernization, and its coordination has been continuously enhanced. However, in accordance with the higher requirements of simultaneous development, there are still obvious shortcomings: first, insufficient integration of informatization and industrialization; second, insufficient interaction between industrialization and urbanization; third, poor coordination between urbanization, industrialization and agricultural modernization, and agricultural modernization is obviously lagging behind. The rapid and continuous advancement of agricultural modernization and the simultaneous and coordinated development of the "four modernizations" have become an important part of China's current economic development.

The "synchronization of the four modernizations" has created a new development path for agricultural modernization, increased external resources and power, and also put forward higher requirements for talents. As an important base for cultivating agricultural scientific and technological talents, colleges and universities have delivered a large number of practical talents for the development of agriculture and rural areas, and created an extremely favorable environment for the cultivation of agricultural scientific and technological talents. However, with the rapid development of urbanization and industrialization in China, a large number of rural labor forces have been transferred, and agricultural producers with farmers as the mainstay are generally older on average and have low educational levels. The younger generation of agricultural practitioners generally lack the awareness of professional farmers, and are unwilling to take agriculture as their long-term career. Therefore, it is an indisputable fact that the stock of high-quality agricultural producers who can adapt to agricultural development under the new situation is insufficient. At the same time, with the development of agricultural modernization, even if a large amount of idle agricultural productivity is surplus, it cannot meet the extensive demand for emerging, compound, and top-notch technical talents in the development of agricultural modernization. In other words, even if there is a large surplus of labor in the agricultural field, there will still be a structural shortage of agricultural talents in new fields. Innovative and compound agricultural science and technology talents will become a catalyst for future agricultural economic development. Education, as a carrier for training talents, is the direct driving force of social development, and it is also the hope of agricultural modernization.

Continue to Support the Construction of A Well-off Society in An All-round Way

To develop rural economy and society, talents are fundamental. Strengthening the construction of the talent team and providing strong intellectual support and talent guarantee are the keys to promoting the construction of a well-off society in rural areas. Only by building a new rural talent team with sufficient numbers, high quality, complete categories and reasonable structure can we lead farmers to change their thinking, lead the masses to build their homes, promote rural industrial development and economic development, and change the rural poverty and backwardness. Increasing farmers' income and becoming rich is also the goal task of building a well-off society in rural areas.

However, the reality is not optimistic. At present, the supply and demand of grassroots agricultural talents in our country are seriously unequal, and the distribution of rural talents among educational backgrounds, ages, industries, industries and regions is unreasonable. Rural human resources are rich but lack of human resources is the fundamental contradiction restricting the construction of a well-off society in rural areas.
In the long run, the knowledge update of existing agricultural personnel will face greater problems. Although the junior and senior high school graduates who return to the countryside each year have learned and mastered certain basic cultural knowledge, they lack systematic training in agricultural production and management, and are relatively unfamiliar with new scientific and technological agriculture and green agriculture. Most of them are a new generation of farmers with knowledge and no skills, and few rural laborers have received primary agricultural vocational education or rural science and technology training. Therefore, there is a shortage of technological, entrepreneurial and comprehensive talents urgently needed for the construction of a well-off society in the vast rural areas. As professional talents, agricultural talents continue to play a role in the promotion of agricultural technology, the promotion of industrial poverty alleviation and upgrading, and the reform of rural collective property rights. At present, the Chinese government has formulated some effective measures for the development, introduction and training of agricultural talents, such as increasing the introduction of talents, implementing talent reward funds, and selecting outstanding university graduates to work in villages, but they still travel far away. It is far from meeting the needs of new rural construction and development. China's rural talent construction and human resource development have not formed a reasonable and long-term training mechanism. Government departments also lack in-depth research on the characteristics and growth laws of rural talents, and the selection, incentives and development of rural talents lack motivation.

The Requirements of the Times for the Cultivation of Agricultural Talents

Fully Serve the Construction of "Beautiful China"

Ecological civilization and the construction of a "beautiful China" are mutually dependent and promoted together. Ecological civilization provides basic conditions for the construction of "Beautiful China", and the advancement of the construction of "Beautiful China" is conducive to promoting the construction of ecological civilization. In-depth promotion of ecological civilization and the construction of a "beautiful China" is China's actual need for effective management of current ecological and environmental problems,

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and it is also China's actual need for achieving comprehensive social development and enhancing international competitiveness. Today, the social vitality in rural China is seriously lacking. To achieve the prosperity of China's rural areas, the key is to make a large number of rural people willing to stay and build beautiful villages, and the most basic point of retaining talents is to allow them to obtain higher returns from the development of the agricultural industry. Whether it is the government's "building a nest to attract phoenix" or the "active integration" of agricultural talents, the construction of beautiful villages is a new challenge and opportunity for the training and development of agricultural talents.

Actively Participate in the "Belt and Road" Initiative

The Belt and Road Initiative has brought opportunities for the development of China's agricultural industry and challenges for the development of the agricultural economy, but it has also brought challenges of the times to the cultivation of agricultural talents. With the advancement of the Belt and Road Initiative, regional integrated markets have gradually formed, cross-border and cross-regional allocation of agricultural production resources has become possible, and the leapfrog development of agriculture is expected to become a reality. Among the countries and regions along the route, there are still a large number of countries with backward agricultural technology and low agricultural modernization. Integrating high-quality resources at home and abroad, exporting agricultural science and technology, and jointly promoting the process of agricultural modernization is conducive to the promotion of the overall strategy of the Belt and Road. However, the development of agricultural production is greatly affected by environmental factors, and there are great differences in the agricultural environment and agricultural markets of countries and regions along the route. The training of Chinese traditional agricultural talents has long focused on solving domestic and local problems, while international cooperation in the agricultural field has long focused on Western developed economies, and lacks in-depth understanding of the agricultural development of countries and regions along the route.

Whether it is resource allocation or market integration, the promotion of the "Belt and Road" strategy requires the active participation of agricultural talents. Agricultural talents are necessary carriers for business cooperation and technology transfer. On the one hand, we need an effective platform to promote talents to play their roles. While actively exploring in talent training, the platform plays the function of "collecting intelligence". Facing opportunities and challenges, agricultural colleges and universities must integrate resources with other colleges and universities across regions and industries to make up for the shortcomings in talent training over the years, and enhance the international vision and international competitiveness of agricultural talents. On the other hand, agricultural colleges and universities need to take the initiative to go out and establish cooperative relationships with overseas universities and scientific research institutions to further enhance the international level of agricultural talent training. The improvement of the internationalization level of agricultural talents needs to comply with the multi-dimensional training goals of individualization and socialization, internationalization and social responsibility. Colleges and universities should establish a development and training model of flexible curriculum system, individualized teaching system, and open practice system to create a new situation of open and inclusive humanities exchanges.

Historical Opportunities for the Cultivation of Agricultural Talents

Consolidate the Foundation for Training Agricultural Talents

In terms of the innovative organization system, consolidating the foundation for training agricultural talents requires "implementing an innovation-driven development strategy." We need to clarify the functional positioning of various innovation subjects, build an innovation network integrating government, industry, university, research and application, and promote the integrated development of science and education. Secondly, encourage higher education institutions, vocational colleges and scientific research institutes to fully participate in the construction of the national innovation system, and support a group of high-level universities and scientific research institutes to form interdisciplinary and comprehensive scientific research teams. Then, it will give play to the advantages of the new nationwide system under the market economy in major key projects. We must implement national technological innovation projects, build industrial technological innovation alliances, develop new market-oriented research and development institutions, and promote cross-field and cross-industry collaborative innovation.

Innovating the Training Mechanism of Talents in Agricultural Universities

Focus on the innovation-driven development strategy and consolidate the foundation for the cultivation of agricultural talents. We need to break down the barriers between teaching and research, teachers and students, theory and practice. We should also straighten out the relationship between general education and professional education, theoretical teaching and practical teaching, thinking ability and practical ability, overall requirements and regional docking. It is also necessary to strengthen the construction of agricultural personnel training and practice bases, and strengthen the construction of agricultural personnel education resources, teams and systems. We need to effectively consolidate the foundation of agricultural talent training and comprehensively improve the quality of talent training.

First, higher agricultural education should be more actively integrated into the agricultural science and technology innovation system, give full play to the comprehensive advantages of multiple disciplines, concentrate resources and strength, and accelerate the establishment of a collaborative innovation mechanism for industry, academia, and scientific research institutions. The second is to innovate talent training mechanisms in higher agricultural education. It is necessary to cultivate a group of high-level, high-level top-notch innovative talents, as well as a group of innovative and entrepreneurial compound application-oriented talents, and more importantly, a group of practical talents for the frontline of agricultural production. At the same time, higher agricultural education must build a new professional farmer training platform that combines specialization and diversification to vigorously cultivate new professional farmers. The third is that higher agricultural education should face the grassroots, vigorously develop agricultural science and technology services, break the boundaries of departments, regions, and disciplines, effectively integrate scientific and technological resources, and establish a collaborative innovation mechanism.

It is necessary to innovate service methods and build a new service model of “agriculture, rural areas, and farmers” that relies on universities, combines agriculture, scientific research and education, and collaborates

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with schools and enterprises. We must encourage scientific research and teaching personnel to go to the grass-roots level to engage in agricultural technology extension services, support colleges and universities to undertake agricultural technology extension projects, incorporate agricultural technology extension service performance into professional and technical job evaluation and job evaluation, and implement a system of extension professors and extension researchers.

Focus on Cultivating Agricultural "Innovative and Entrepreneurial" Talents

Higher agricultural education has a strong industrial nature and particularity. It bears the dual mission of providing talent support and knowledge contribution for the development of agriculture and rural modernization. In order to respond to the demand for innovative and entrepreneurial talents in agricultural sciences, colleges and universities should make efforts in educational concepts and training models, and actively explore effective ways to cultivate "innovative and entrepreneurial" talents. Innovation is a process from the generation of new ideas to the discovery, invention and design of new knowledge, new technology, new products or services. Entrepreneurship is a process of discovering and capturing opportunities to create new products or services and realize their potential value. Innovation focuses on value discovery, entrepreneurship focuses on value realization. Innovation and entrepreneurship are related, but innovation does not mean entrepreneurship.

The cultivation of "innovative and entrepreneurial" talents in agricultural sciences requires colleges and universities to establish correct educational concepts for innovation and entrepreneurship. The cultivation of "innovative and entrepreneurial" talents in agricultural sciences requires a talent quality concept that keeps pace with the times, and at the same time, it also needs to be guided by multi-dimensional goals of "innovative consciousness, innovative thinking, innovative spirit, and innovative ability". In addition, colleges and universities need to restructure and innovate the training model of "innovative and entrepreneurial" talents in agriculture. Externally, colleges and universities should seek corresponding policy support from relevant departments in order to improve the policy and institutional environment for the cultivation of "innovative and entrepreneurial" talents. At the same time, we must also strive for the support of outreach activities such as practice bases, faculty, and entrepreneurial consulting; internally, colleges and universities must innovate, reform, and improve teaching processes, teaching output, teaching research, and teaching evaluation. The coordinated adjustment of internal and external operating mechanisms can ensure the effective training of "innovative and entrepreneurial" talents.

The cultivation of agricultural talents is an arduous task with a long way to go. It is necessary for agricultural institutions of higher learning and relevant departments to update the concept of talent cultivation, innovate the methods of talent education, optimize the environment of talent education and reform the employment security of talents, so as to meet the demand of economic and social development for agricultural talents.

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