

Present Situation of Rural Regional Development and Agricultural Extension Policy

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Abstract The formulation of agricultural extension policy and the development of rural regional economy present the relationship of mutual existence, mutual influence and mutual promotion. Therefore, it is necessary to study the agricultural extension policy according to the current situation of rural regional development. Agricultural technology extension system is an organization set up at county and township levels to provide farmers with scientific research achievements and practical technical services on planting, animal husbandry, fishery, forestry, agricultural machinery and water conservancy, and it is an important carrier for implementing the strategy of developing agriculture through science and technology. On the basis of expounding the value and significance of rural regional economic development, this paper analyzes the problems existing in China's rural regional development from the aspects of rural infrastructure and public services, rural labor force's cultural and scientific level, rural grass-roots extension system, *etc.*, and puts forward corresponding measures against the problems. This study has certain theoretical reference value for promoting the all-round development of China's rural economy and realizing the great strategy of rural revitalization in China.

Key words Rural regional development, Rural public services, Rural infrastructure, Agricultural technology extension system, Agricultural extension policy

1 Introduction

The 20th National Congress of the Communist Party of China drew a grand blueprint for comprehensively promoting the great rejuvenation of the Chinese nation with Chinese modernization. To build a modern socialist country in an all-round way, the most arduous and difficult task still lies in the countryside. The unprecedented changes in the world in the past century have accelerated the evolution, and China's development has entered a period of co-existence of strategic opportunities, risks and challenges, and increasing uncertainties and unpredictable factors. It is very important to keep close attention to "agriculture, rural areas and farmers". The CPC Central Committee believes that we must unremittingly take solving the "issues concerning agriculture, rural areas and farmers" as the top priority of the whole party's work, and give full play to the efforts of the whole party and society to comprehensively promote rural revitalization and accelerate the modernization of agriculture and rural areas^[1]. Agricultural technology extension system is an organization set up at county and township levels to provide farmers with scientific research achievements and practical technical services on planting, animal husbandry, fishery, forestry, agricultural machinery and water conservancy, and it is an important carrier for implementing the strategy of developing agriculture through science and technology^[2]. For a long time, the grass-roots agricultural technology extension system has played an important role in popularizing new agricultural technologies and varieties, controlling animal and plant diseases and

pests, constructing farmland and water conservancy and improving farmers' quality. The formulation of agricultural extension policy and the development of rural regional economy present the relationship of mutual influence and mutual promotion. Therefore, it is necessary to study the agricultural extension policy according to the current situation of rural regional development in this region. Relevant scholars have done a lot of research on the current situation of rural regional development and agricultural extension policies. For example, Li Fan, Zhou Yanhong and Xie Bingdong all studied rural extension policies from the perspective of agricultural regional development. The results of literature review show that the previous studies are not deep enough. Therefore, it is necessary to study the agricultural extension policy in depth in view of the problems existing in the present stage of rural regional development in China. This study has certain theoretical reference value for promoting the all-round development of rural economy in China and realizing the great strategy of rural revitalization in China.

2 The value and significance of rural regional economic development

2.1 Conducive to promoting the coordinated development of rural areas In recent years, our government attaches great importance to the coordinated development of regional economy. In particular, the implementation of poverty alleviation and difficulties tackling strategy and rural revitalization strategy has effectively promoted the coordinated development of rural areas and improved the overall rural economic level. Backward areas have promoted the rapid development of regional economy through the introduction of relevant policies, and the state has increased capital investment in agricultural infrastructure through transfer payments. For

example, the development of the western region relies on important transportation routes such as the Yangtze River Waterway, the Eurasian Continental Bridge, and the Southwest Sea Route, giving full play to the leading role of the central cities in the western region, driving the central cities in the region with the western region as the center, and linking with the city points through the main roads, thus realizing the rapid development of the western region. From the construction of large airports in western cities to the comprehensive construction of railways and highways in western China, from the large-scale construction of urban public infrastructure to the large-scale pilot project of transforming rural cultivated land into forests and grasslands, the large-scale development of the western region, a great project with cross-century significance, is steadily advancing in the vast western region of China^[3].

2.2 Conducive to the overall improvement of rural economic strength First of all, the development of rural regional economy is conducive to comprehensively enhancing the comprehensive strength of regional economy. China's rural revitalization strategy makes overall plans for rural economic, social, cultural and political factors, and puts forward the goal of comprehensive revitalization of talents, industry, ecology, culture and organization. Rural comprehensive revitalization plays a promoting role and positive significance in consolidating the foundation of comprehensively improving the comprehensive strength of county economy^[4]. Secondly, the development of county economy is conducive to allocating resources in a larger market space and giving full play to regional competitive advantages. Rural economy involves production, consumption, circulation, distribution and other links. Rural regional economy has regional characteristics in the development process, and can give full play to the comparative advantages of location, resources and humanities and break through the constraints of administrative divisions.

3 Analysis of the problems existing in rural regional development

Since the reform and opening up, due to the implementation of a series of national policies to benefit farmers, China's rural economy has developed rapidly. Especially with the successful completion of poverty alleviation strategy and the implementation of rural revitalization strategy, the phenomenon of insufficient and unbalanced economic development in rural areas of China has been greatly improved. However, there are still some problems in rural regional economic development^[5].

3.1 Relatively inadequate rural infrastructure and public services

3.1.1 Lagging infrastructure construction. First of all, the infrastructure construction in rural areas is relatively insufficient. Narrow rural roads and low quality affect the transportation and market circulation of agricultural products; secondly, rural water conservancy facilities need to be improved; thirdly, the coverage and speed of communication network in rural areas are relatively low, and the logistics system is not smooth. In the era of rapid development of Internet economy, information transmission and production and sales of agricultural products are seriously limited.

3.1.2 Inadequate public services. Although the government attaches great importance to the equalization and standardization of rural public services in China, and many typical cases of rural public services have emerged in recent years, there are still some problems in rural public services in China, such as unbalanced allocation of quality education resources, mismatch between supply and demand of public service facilities in some rural areas, and insufficient development of rural medical care and service for the aged. There is an obvious lack of high-quality public service facilities on education, medical care and service for the aged in rural areas. Medical resources are insufficient, medical facilities and medical personnel are unbalanced, and it is difficult for farmers to enjoy timely and high-quality medical services. The service for the aged is not perfect, and there is a lack of nursing institution for the aged and community service for the aged in rural areas, which brings troubles to the lives of the rural elderly.

3.2 Low quality of culture, science and technology in rural labor force With the overall improvement of living standards of rural residents and the comprehensive popularization of compulsory education in China, the education popularization rate of rural children in China has greatly increased, but the education level in rural areas is relatively backward compared with that in cities. Especially, the relatively older rural laborers generally have low education level, and their acceptance of some advanced agricultural production technologies and agricultural production machinery is poor. Some places still adopt relatively old production methods for agricultural production, resulting in backward agricultural production level and low agricultural production efficiency.

3.3 Failure of the agricultural technology extension system to keep up with the development requirements of the times

The level of agricultural technology extension is affected by local social environment, economic environment, policy factors and personnel quality. At present, China's agricultural technology extension system can't keep up with the requirements of the development of the times. First of all, in some places, the operation mechanism of agricultural technology extension is outdated, the agricultural technology extension method is disconnected with the actual production, and there is a phenomenon that the construction of agricultural extension system is out of sync with the development of agricultural industrial structure. Secondly, the form of agricultural technology extension is monotonous. Most farmers conduct decentralized operation by family, the agricultural science and technology extension center is short of manpower, and the agricultural technology extension is mainly through agricultural technology training courses or technical brochures. What needs special attention is that the lack of extension funds of grass-roots agricultural technology extension institutions and the poor professional quality of agricultural technology extension personnel also restrict the dissemination of advanced agricultural technology.

4 Corresponding measures

4.1 Strengthening the construction of rural infrastructure and public services It is necessary to improve the industrial development in rural areas, make express delivery available in the

countryside and enable farmers to see a doctor in hometown. With the effective implementation of various policies to strengthen agriculture and benefit farmers, rural infrastructure and public services have been continuously improved, and great changes have taken place in rural areas. However, compared with the growing needs of farmers for a better life, there are still weak links in rural infrastructure and public services in covering villages and extending to households.

4.1.1 Intensifying efforts to build and improve infrastructure such as roads, water conservancy and networks in rural areas. First of all, it is necessary to provide a smooth road for the external sales of agricultural products and strengthen the exchanges between rural areas and towns; secondly, it is necessary to strengthen the construction of agricultural water conservancy projects, improve agricultural production conditions, and enhance the ability to resist disasters and reduce disasters; thirdly, it is necessary to increase the coverage rate of communication network, improve the network speed, and improve the logistics distribution system at county, township and village levels, so as to make village-level express delivery smooth.

4.1.2 Strengthening the construction of public services. It is necessary to promote the distribution of resource elements and let farmers enjoy more high-quality public services. First of all, it is necessary to strengthen the distribution of basic public health service resources, so that rural residents can see a doctor conveniently. By the end of 2022, 23 000 county-level medical and health institutions, 35 000 township hospitals and 599 000 village clinics had been built nationwide, achieving full coverage of counties and villages.

Secondly, we should constantly promote the balanced development of urban and rural quality education resources. According to the national plan, by 2035, most counties in China will achieve high-quality and balanced development of compulsory education. It is necessary to implement compulsory education standardization construction project, and make compulsory education school buildings, teaching instruments, class size and other conditions meet the corresponding standards. It is necessary to rationally distribute urban and rural schools with the change of population in China. According to the needs, we should run small-scale rural schools well, and improve the quality of rural education with cities and townships leading villages. It is necessary to promote the balanced allocation of teachers in urban and rural areas, carry out the rotation of principals and teachers, and constantly improve the guarantee and incentive mechanism for school exchange and rotation. Digital empowerment is needed to promote the sharing of high-quality educational resources.

Thirdly, it is necessary to promote rural old-age care. Rural elderly population is large with low income, and the rural old-age care started late, so the task of rural old-age care is heavy and difficult. It is necessary to take the needs of the rural elderly as the guide and improve the four-level service network for the aged at county, township, village and family levels.

4.2 Improving the cultural and scientific quality of rural labor force in an all-round way It is necessary to improve the

education level of rural labor force, cultivate new professional farmers, cultivate rural industrial elites and improve the comprehensive ability of rural talents, which is the inherent needs to meet the needs of rural industrial development and form a situation in which rural talents lead the development of rural industries. It is necessary to improve the education level of rural people, change the production and life style of rural people by relying on the shaping function of education, and disseminate the development concept of "clear waters and green mountains are as good as mountains of gold and silver". It is necessary to comprehensively improve the level of rural basic education and improve the overall rural cultural literacy. It is necessary to further promote rural vocational education, optimize the structure of disciplines and majors, and support the running of agriculture-related colleges and vocational education. Vocational education is most closely related to the development of rural industries. To implement the classified education and training plan of rural labor force, rural revitalization needs a large number of new professional farmers such as production and management-oriented farmers, professional skill-oriented farmers and social service-oriented farmers. According to farmers' learning wishes, the relevant state departments should give support from the perspectives of financial support, educational resources supply and guiding social assistance, so that farmers can afford to learn and learn to meet practical needs.

4.3 Reforming the grass-roots agricultural technology extension system It is necessary to build a high-level agricultural technology extension system at the grass-roots level, which is a major event related to the fact that China's rice bowl is firmly held in the hands of the Chinese themselves. The construction of grass-roots agricultural technology extension system should keep pace with the times, meet the requirements of the development of the times, and contribute to the realization of rural revitalization goals. The development and reform of grass-roots agricultural technology extension system should aim at improving extension efficiency, meet the requirements of the information age, and let more advanced technologies be applied to agricultural production and planting. It is necessary to attract young talents to return home to start businesses and find jobs, and provide more talent support for the construction and improvement of the promotion system. It is necessary to thoroughly implement the spirit of the important speech pointed out by General Secretary Xi Jinping at the Central Rural Work Conference, such as "the grass-roots agricultural technology extension system should stabilize the team, improve the quality, return to the main business, and strengthen the public welfare service function", to organize and guide the grass-roots agricultural technology extension system to perform public welfare functions such as promoting transformation, promoting technology and demonstrating around ensuring the stable and safe supply of food and important agricultural products. It is necessary to guide and support the standardized development of agricultural science and technology socialized service organizations, innovate the ways and means of technology extension service, integrate and assemble advanced technology models, promote high-yield and high-quality

the characteristics of improved seeds, standardization and scale. In addition, it is recommended to enhance the level of scientific and technological innovation of Chaidamu wolfberry industry as a whole, extend the industrial development chain, create an organic wolfberry industrial cluster, and comprehensively enhance the popularity and influence of Chaidamu organic wolfberry both home and abroad.

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varieties and advanced applicable technology models from point to line, improve the efficiency of agricultural technology extension services, provide comprehensive technical solutions, and provide strong scientific and technological support and talent guarantee for comprehensively promoting rural revitalization and accelerating the construction of an agricultural power.

4.4 Attaching importance to the construction of agricultural network platform In the era of Internet and information, the establishment of agricultural network platform can release agricultural technology and information in time to promote the popularization of agricultural technology. It is beneficial for technicians and farmers to release and understand agricultural information and technology in time through the network, so as to better apply it to agricultural production and promote rural economic development. At present, agriculture has entered the digital age, which is the third green revolution of agriculture. Smart agriculture integrates modern agricultural biotechnology, information technology, intelligent equipment and other productivity technologies, showing the characteristics of high quality, high efficiency, convenience and humanization, which plays an important role in promoting the high-quality development of agriculture. To speed up the construction of a powerful agricultural

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country, the key is how to realize the organic connection between small farmers and modern agricultural development. Developing various forms of agricultural socialization services is of great significance to solving this problem. It is necessary to give full play to the role of "Internet plus agriculture" in promoting the allocation of agricultural production factors, and at the same time narrow the digital divide between groups and regions.

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