Science and Technology Will Help Promote Rural Revitalization
——Neijiang National Agricultural Science and Technology Park Practice Report

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ABSTRACT
The construction and development of the national agricultural science and technology park is an important stage to show the science and technology to help the rural revitalization, and is an effective carrier to promote the scientific and technological innovation and the transformation of achievements. Based on the empirical research of Neijiang National Agricultural Science and Technology Park, the results show that the current Neijiang national agricultural science and technology park farmers development quantity, park leading enterprises is weak, lack of agricultural high-tech talents and landmark agricultural products innovation research and development consciousness is not strong, geographical indication of agricultural products operators enthusiasm is not high disadvantage and threat. For these problems, corresponding countermeasures are proposed.

Keywords: Science and technology, agricultural science and technology parks, Rural revitalization.

1. DEVELOPMENT STATUS OF SICHUAN NATIONAL AGRICULTURAL SCIENCE AND TECHNOLOGY PARK

1.1. Development Course of the Park

In 2000, the Ministry of Agriculture and Rural Affairs of the CPC Central Committee put forward the first opinions on the construction of national agricultural science and technology parks in implementing the spirit of the relevant meetings of the State Council. As one of the key types of agricultural parks supported by the state; it has experienced three stages of development.

1.1.1. Pilot Construction Phase

From 2001 to 2007, the Outline of Agricultural Science and Technology Development was formally established at the National Agricultural Science and Technology Conference in 2001, which announced the construction of a national agricultural science and technology park soon, and was also included as an important agricultural science and technology action. In July of the same year, led by the Ministry of Science and Technology, the joint offices of all national parks were formally established, supporting the management measures and guidelines on agricultural science and technology parks. In September 2001, in the first batch of 21 approved pilot construction of national agricultural science and technology parks, Leshan, as one of the pilot construction projects, marked the prelude to the continuous construction and development of Sichuan national agricultural science and technology park.

1.1.2. Comprehensive Promotion Stage

From 2008 to 2011, the Ministry of Science and Technology carried out acceptance of the first two batches of 36 national agricultural science and technology parks in 2008, and those qualified were awarded the license. From 2010 to 2011, a total of 35 national agricultural science and technology parks in the third and fourth batches were approved, including Guang’an and Ya’an in Sichuan Province, marking the transformation of the park construction from pilot construction to comprehensive promotion.
1.1.3. Innovation and Development Stage

Since 2012 until today, according to the national "twelfth five-year" agricultural science and technology park development plan, a city two park "121 project" by the Ministry of Science and Technology, namely in Beijing area construction national modern agricultural science and technology city, in the Yellow River delta and Yangling area construction national modern agricultural science and technology demonstration area and high and tech demonstration area, also including about 120 national agricultural science and technology park". Relying on the continuous development and expansion of the parks and their alliances, they are more closely connected in science and technology, industry, information, finance, innovation and other aspects, and the construction and development of national agricultural science and technology parks have officially entered the stage of innovation and development.

At present, state-level agricultural science and technology parks have been awarded and approved for construction all over the country, with a total of 271, initially forming a new pattern of agricultural science and technology development with typical models, distinctive characteristics and remarkable demonstration and driving effect.

1.2. General Overview of the Park

As of 2018, the total number of national agricultural science and technology parks (pilot) in Sichuan has increased to 10.Its core area has a total area of more than 240,000 mu, The total area of the demonstration area has reached more than 5.73 million mu, Nearly more than 530 enterprises have settled in it, Completed 254 agricultural science and technology demonstration bases of various types and nearly 1,300 new business entities; besides, It has also established 111 agricultural science and technology innovation research and development platforms and 35 agricultural technology innovation and entrepreneurship service institutions; More than 700 new technologies, new products and new varieties were introduced and promoted; Innovation and entrepreneurship teams of more than 60,000 people and new professional farmers have become the backbone of the construction and development of the park; Driven by the radiation of each park, More than 1.4 million local farmers have found employment, The total output value of agriculture exceeded 60 billion yuan, Export of foreign exchange has achieved nearly 100 million yuan of harvest, Nearly 10,000 people found new jobs.

2.3. Construction of the Park

In cooperation with various government documents concerning the construction and development of parks issued in Sichuan, under the current policy framework, the modern agricultural science and technology venture fund is being guided by the local government and social capital; In the annual plan of land resource use, priority is given to agricultural high-tech service industry and enterprise own development land . Under the support of a variety of policies and measures, in 2001 in eight batches, national agricultural science and technology park, Leshan, Ya'an, Guang'an, Yibin, Neijiang, Nanchong, Suining, Bazhong, Mianyang and Deyang national agricultural science and technology park, each park in regional planning, park positioning, industrial development and spatial layout.

2. EMPIRICAL RESEARCH ON NEIJJIANG NATIONAL AGRICULTURAL SCIENCE AND TECHNOLOGY PARK

Neijiang is located in the southeast of Sichuan Province, located on the shore of the Tuojiang River. It is the hub of central Sichuan and the throat of southern Sichuan.As the 8 megacities planned and constructed in Sichuan Province and one of the 10 national agricultural science and technology parks in Sichuan province, it is also an important joint point of Chengdu-Chongqing development Zone in Chengdu-Chongqing Economic Circle. It is representative in the development strategy and spatial layout of Sichuan agricultural science and Technology Park.

2.1. Driven by Scientific and Technological Innovation, We Will Boost the High-Quality Development of Characteristic Agricultural Products and Fishery

Neijiang national agricultural science and technology park with its agricultural science and technology achievements cultivation and transformation and industrial advantages, multiple measures, has launched local characteristic agricultural products brand cultivation plan and fishery development planning, under the guidance of agricultural science and technology, the national geographical indication of agricultural products, accounted for large, a batch of green, ecological, efficient fishery breeding technology is widely used, its core agricultural science and technology progress contribution rate to 72.6%.

In addition, the park location (city) has established information e-commerce platform and innovative research and development platform; has 3 key laboratories, 1 doctoral workstation and 1 master's workstation and 2 academicians (experts) workstations; under the e-commerce development
support measures introduced in Neijiang, the e-commerce platform construction into scientific, high speed, information stage, to be built into the second city of e-commerce and southern Sichuan e-commerce development center.

2.2. Insufficient Talent Attraction, the Lack of Exclusive Joint Organizations and Leading Enterprises

To enhance the core competitiveness of agricultural industry through scientific and technological innovation and stimulate innovation vitality through talent training is an important starting point for the development of agricultural science and technology and rural revitalization in the new era, and also a problem urgent to be solved in the construction and development of Neijiang National Agricultural Science and Technology Park. At present, there are problems such as small development number of farmers' specialized organizations, limited innovation and entrepreneurship planning layout, leading enterprises with weak driving ability, insufficient scale of innovative leading enterprises; lack of agricultural high-tech talents, weak local development and training awareness of professional farmers.

2.3. Policy Support is in Place, and We Will Seek New Development Opportunities by Relying on the Chengdu-Chongqing Economic Circle

In 2011, under the guidance of the regional planning opinions of Chengdu-Chongqing Economic Zone, the overall layout of "dual-core" five zones " was followed Neijiang National Agricultural Science and Technology Park, located at an important node of Chengdu-Chongqing Development Zone, and its high-quality development is the due meaning of the development theme of Chengdu-Chongqing Development Zone. It is also the fourth economic growth pole after the Yangtze River Delta, the Pearl River Delta region and the Bohai Rim, but also an important national strategic goal and a new development opportunity.

2.4. Landmark innovation and research and development of agricultural products are blocked, and the enthusiasm of operators is not high

The sales model of Neijiang geographical indication agricultural products is mainly retail operators, the number of leading enterprises and professional cooperatives is relatively small, and can play a demonstration and driving role is relatively limited. In addition, the park creates low added value in the deep processing of agricultural products with geographical indication, and the preservation, warehousing, logistics technologies of agricultural products are relatively weak, and the consciousness of development from intensive to high-end is still biased, which somewhat hinders the research and development and innovation of geographical indication agricultural products.

Due to the ineffective marketing of farmers, the demonstration and promotion of some geographical indication agricultural products are not in place, and the attitude of local governments to attach great attention to market competition and open cooperation is not felt by the outside world, resulting in a weak market competition pattern, lack of profit effect and low enthusiasm of operators.

3. SICHUAN NATIONAL AGRICULTURAL SCIENCE AND TECHNOLOGY PARK DEVELOPMENT MEASURES DURING THE 14TH FIVE-YEAR PLAN PERIOD

3.1. We will Continue to Demonstrate Science and Technology to Lay a Solid and a Solid Foundation for Rural Revitalization

To give full play to the leading role of national agricultural science and technology demonstration, focus on talent sinking, science and technology, Aba, Liangshan Autonomous Prefecture, strengthen agricultural technology integration, fully explore the construction, culture, history, ecology and other minority resources, into local characteristic culture, creative culture, further consolidate the foundation of rural revitalization; in innovative agricultural development mode, vigorously develop advantages characteristic agriculture, tourism health agriculture, ecological landscape agriculture, leisure experience agriculture, cultural and creative agriculture; Guide farmers to dig deep into ecological tourism projects, Such as famous and excellent livestock breeding experience area, fine vegetables and fruit picking garden, rare aquatic products cooking competition, agricultural science and technology park sightseeing tourism, etc. Arrange more fun face-to-face shows with visitors, Deepen the overall impression of tourists on the park; Encourage leading enterprises to invite tourists to visit, Build a VR real-scene experience network interactive cloud platform in the agricultural products processing park. Visitors can also apply online for a free visit experience online, With the help of web celebrity effect, Attract more tourists to come here, We will promote the integrated development of agriculture, science and technology, culture, tourism, and creativity, We will build a new paradigm for agricultural science and technology to revitalize rural areas.
3.2. Integrate Scientific and Technological Service Institutions and Improve the Agricultural Technology Service Level

Vigorously develop farmers specialized organization, with geographical indication of agricultural products, cooperative management, technical support, deep processing, production and sales of mutual cooperation, further increase farmers income; Sichuan related agricultural universities, expert institutes, research institutes, agricultural science and technology park and other agricultural technology service institutions, establish innovative coverage, and improve the overall agricultural technology service level and marketization of national agricultural science and technology park.

3.3. Give Full Play to the Main Role of Science and Technology, and Make Competitive Industries Bigger and Stronger

Due to the serious homogenization of geographical indication agricultural products in the province, it directly affects its sales and promotion. It is suggested to start from two aspects: first, the superior industries bigger and stronger, second, scale operation, "park + enterprise + farmers", "management committee + leading enterprise + cooperative + farmers" development mode, to further expand the radiation scope of the park, unified planting, picking, processing, transportation, sales, management, to expand the scale of leading enterprises, achieve cost reduction and efficiency, scale benefits.

3.4. Emphasize the Transformation of Scientific and Technological Achievements, and Build an Information Resource Platform

In the face of unprecedented changes in one century, agricultural science and technology achievements without "Internet +" and "big data application technology", speed up the construction of agricultural science and technology achievements transformation and development cloud platform, information consulting, information sharing, technology exchange, talent training, such as directional services, scientific and technological achievements through platform real-time online sharing, timely help solve some national agricultural science and technology park facing technology supply and demand problems, boost the transformation and application of more agricultural science and technology achievements.

3.5. We will Improve the Ranks of Scientific and Technological Personnel and Pay Attention to Practical Innovation Awareness

In the introduction of agricultural scientific and technological talents, No attention should be paid to academic qualifications, titles or awards, We should pay attention to the practical experience and innovation consciousness of agricultural science and technology, Good at tapping its development potential; In performance assessment, rank promotion, Develop attractive reward mechanisms, Innovate the talent management system; Vigorously cultivate and gather a group of compound high-tech agricultural scientific and technological talents, Expand its participation and influence in the selection of park projects; The government should provide complete supporting services, Priority will be given to policy settlement, talent introduction subsidies, government talent apartments, and children's enrollment, To create a good external environment that attaches great importance to talents, Build the park into an incubator and gathering place for agricultural high-tech talents.

4. EPILOGUE

This paper summarizes the three development stages of Sichuan National Agricultural Science and Technology Park And the empirical study of Neijiang National Agricultural Science and Technology Park, The development measures of Sichuan National Agricultural Science and Technology Park during the 14th Five-Year Plan period are put forward, In order to build the park into a new benchmark for the revitalization of ethnic minority rural areas; Expand the new fields of science and technology, finance and agriculture; Integrate the new main body of agricultural technology service institutions; Support the incubators of leading enterprises; Cultivate and transform new heights of agricultural scientific and technological achievements and gathering places to attract agricultural high-tech talents, We will boost the implementation of the rural revitalization strategy.

ACKNOWLEDGMENTS

This research was supported by the project of CUIT for education & teaching research and reform (JYJG2021117, JYJG20211117).

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