



Smart Agriculture helps Rural Revitalization

Xin Zhang ^{1,2,3,4, *}, Na Wang ^{1,2,3,4}

¹Shaanxi Provincial Land Engineering Construction Group Co. Ltd, Xi'an 710075, China;

²Institute of Land Engineering and Technology, Shaanxi Provincial Land Engineering Construction Group Co., Ltd., Xi'an 710075, China;

³Key Laboratory of Degraded and Unused Land Consolidation Engineering, the Ministry of Natural Resources of China, Xi'an 710075, China;

⁴Shaanxi Provincial Land Consolidation Engineering Technology Research Center, Xi'an 710075, China

Abstract: Smart agriculture is an important part of the smart economy. It is a product of the integration of modern information technologies such as the Internet of Things, cloud computing, and 3S technology with agricultural production. It can realize precision management of agricultural production through intelligent perception and data analysis of the agricultural production environment and visual diagnosis. Rural revitalization is based on agriculture. Ensuring overall food security is the meaning of the implementation of the rural revitalization strategy. "Smart agriculture" can just solve this problem. With the help of science and technology, "smart agriculture" will surely support the hope of rural revitalization.

Keywords: Smart agriculture, Rural Revitalization, Food.

1. Development status of smart agriculture in my country

China's agriculture is in an important stage of transformation from traditional agriculture to modern agriculture, facing problems such as the reduction of agricultural land, farmland water and soil loss, the decline of soil productivity, the pollution of agricultural products and groundwater caused by the massive use of chemical fertilizers, food safety and the deterioration of ecological environment [1]. Smart agriculture is an important part of smart economy. It is the product of the integration of modern information technologies such as Internet of things, cloud computing and 3S technology with agricultural production. It can realize accurate management and

visual diagnosis of agricultural production through intelligent perception and data analysis of agricultural production environment [2].

At present, there are still a series of problems in the construction and development of smart agriculture in China, mainly including: the lack of high-quality farmers and the establishment of vocational farmers' education system; The scientific research system is imperfect, the promotion of agricultural science and technology is weak, the infrastructure is backward, and the modernization of agricultural machinery and equipment is low. There is an urgent need for Chinese government, enterprises and agricultural related personnel to increase investment in smart agriculture in terms of human, material and financial resources, so as to help China's agriculture quickly realize modernization [3].

2. Necessity of promoting smart agriculture

Globally, smart agriculture is being carried out development layout. Smart agriculture is also an important strategic development direction in China, but due to the weak foundation in the early stage, there is still a gap compared with developed countries in terms of current development. The digitization level of China's agricultural production in 2019 is generally 3.8%, far behind developed countries. At present, the coverage of domestic network broadband in farmers and farmland is not enough, 4G traffic is expensive, 5g base stations are few, and there are some problems such as unbalanced regional development and low technology application level.

3. Strategic Countermeasures to Promote the Development of Smart Agriculture in my country

Attract high-quality agricultural talents and speed up the cultivation of new professional farmers. Governments at all levels have increased their support for the construction and development of China's smart agriculture in terms of policies, funds, materials and manpower, comprehensively publicized smart agriculture in rural areas through newspapers, television, radio and other multi-channel media, adjusted farmers' cultural level, age and gender structure, and encouraged them to take the initiative in Entrepreneurship and innovation. Give full play to the leading role of the successful smart agriculture demonstration base, organize farmers to visit regularly to understand the operation mode of smart agriculture, and deeply learn how to build and manage smart agriculture. Combined with the strong teachers and basic scientific research advantages of China's agricultural universities and relevant scientific research institutes, bring the training of professional farmers into the national education and training development plan, establish a long-term education mechanism suitable for training China's high-quality agricultural talents, teach farmers and young students the

theoretical knowledge of smart agriculture, and provide a steady stream of agricultural talents for the development of smart agriculture[4].

Accelerate the improvement of the agricultural scientific research system and improve the ability to transform and apply agricultural scientific research results. Promote mutual cooperation and exchanges between agricultural scientific research institutions, make agricultural scientific research projects proceed in an orderly manner, reduce repeated research, strengthen integrated innovation, and coordinate various high-tech technologies required for the development of smart agriculture. Encourage agricultural technology extension personnel to take full advantage of their extensive contact with agricultural producers, do their best to promote agricultural technology through various means, promote the application of soil remediation technology, digital management and other technologies, and extensively collect agricultural production problems and production data for agricultural scientific research Provide feedback, timely test the utility of agricultural scientific research results, and improve the function of agricultural scientific research results[5].

Construct a brand-new agricultural product e-commerce marketing system, strengthen the construction of agricultural product wholesale market business application system, improve the comprehensive, networked, and timely transmission of information, realize information sharing through modern transaction methods such as e-commerce, network transactions, and improve agricultural product wholesale The radiation of the market, build a modern agricultural product circulation system that is in line with the international market, promote farmers' income and ensure the safety of agricultural product circulation, and give full play to the overall function of the agricultural product modern circulation system. Establish an agricultural product quality and safety traceability system to improve the level of agricultural informatization[6].

4. Conclusion

The proposal of the concept of smart agriculture is consistent with the urgent internal needs of the development of modern agriculture in our country. It is not only a coincidence of historical opportunities, but also an inevitability of agricultural development. It is necessary to firmly seize the national strategic opportunity, deeply promote the integration of the Internet and agricultural production, operation, management and services, and vigorously develop smart agriculture.

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