

# Research on the High Quality Development Path of Digital Rural Construction in Gansu Province

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**Abstract:** The construction of digital countryside is not only a strategic direction for rural revitalization, but also an important part of building a digital China. Based on the specific reality of digital rural construction in Gansu Province, this article analyzes and summarizes the current situation and existing problems of digital rural construction in Gansu Province, and proposes countermeasures and suggestions to promote the high-quality development of digital rural construction in Gansu Province from aspects such as accelerating rural digital technology construction, vigorously cultivating digital rural industries, enhancing the digital literacy of rural residents, and strengthening the professional talent team in digital rural areas.

**Keywords:** Gansu Province; Digital rural construction; Development path.

## 1. Introduction

In January 2022, ten departments of the State Council jointly issued the Action Plan for Digital Rural Development (2022-2025) and the No. 1 central document in February 2022 proposed to focus on the implementation of the "Digital Rural Construction and Development Project", marking that digital rural construction has become an important focus in promoting rural development, rural governance and rural revitalization at the national level. On April 27, 2022, The No. 1 document of the Gansu Provincial Party Committee, "Implementation Opinions on Doing a Good Job in the Key Work of Comprehensively Promoting Rural Revitalization in 2022," also proposes specific strategic goals and plans for the implementation of rural construction actions in our province. Therefore, in the context of digital rural construction, focusing on the specific practices of the current implementation of rural construction actions in Gansu Province, clarifying the existing problems and influencing factors of the current implementation of rural construction actions in Gansu Province, further exploring digital technologies such as big data, the Internet, and artificial intelligence, and driving the application scenarios and implementation paths of rural construction in Gansu Province through "technology empowerment", Promote the extension and coverage of "Internet +government services" to rural areas, promote the upgrading of the "three living spaces" of rural production, ecology, and life in Gansu Province, accelerate the standardization construction of digital rural areas in Gansu Province, improve the digital precision governance level of rural construction in Gansu Province, actively build a digital rural governance community in Gansu Province, and continuously improve the service capacity of digital rural construction in Gansu Province for the convenience and benefit of the people.

## 2. Investigation on the Current Situation of Digital Rural Construction in Gansu Province

(1) Continuously Strengthening Rural Information Infrastructure

In recent years, Gansu Province has taken the construction

of the government network as a starting point, coordinated and promoted the construction of the three-level e-government network of "province city county", effectively solving the problems of self-governance, duplicate construction, and inconsistent data in the construction of government websites in different departments. The bandwidth of the government network has been expanded and upgraded to a 100G fiber optic network, and the provincial government service network ports have been extended to the convenience service halls of townships (streets) and villages (communities), The construction of rural information infrastructure such as radio and television, computers, broadband networks, mobile phones, and digital transformation of power grids in rural areas of the province has been continuously consolidated, providing strong network foundation support for carrying out agricultural informatization projects, developing digital economy, and enjoying convenient communication. The 5G network covers the main urban areas of 14 cities (prefectures) in the province, and all 15012 administrative villages in the province have achieved broadband access, with 4G+ network coverage rate of over 98.1%, The proportion of broadband users above 100 megabytes has reached 92.5%, achieving "same network and speed" in urban and rural areas.

(2) The level of rural digital economy is constantly improving

Since 2015, Gansu has implemented a comprehensive demonstration project for e-commerce in rural areas throughout the province. 75 townships and 225 villages in 58 poverty-stricken counties and 17 "flower arrangement" counties have launched e-commerce poverty alleviation pilot projects, vigorously supporting rural e-commerce, carrying out online live streaming sales, and building a "sweet" agricultural product online sales model. The level of rural digital economy has continuously improved. At the same time, various regions in Gansu are also connecting with large e-commerce platform enterprises such as JD.com, Pin duo-duo, and Taobao, improving the county-rural three-level logistics distribution mechanism, providing rural e-commerce and agricultural services such as commercial circulation, transportation logistics, and direct supply of agricultural products, expanding the sales channels of rural logistics service networks, and creating "sweet" agricultural products

such as Lanzhou Lily, Long-nan pepper industry, Ding-xi Traditional Chinese Medicine, Tian-shui Hua-niu Apple, and Min-qin Honey Melon, Breaking regional spatial restrictions and increasing awareness and market share of agricultural products in Gansu.

(3) The coverage of agricultural digital services continues to expand

Gansu attaches great importance to the construction of agricultural information service organizations, including the entry of information into villages and households as a key work item for the year. The province's agricultural and rural information services and utilization work have achieved significant results, and special funds for the construction of government centers are invested every year to expand, upgrade, and improve the quality and efficiency of government centers/platforms at all levels in the province. According to the needs of the people's government affairs, government centers at all levels continue to optimize government processes, compress government time Reduce and exempt various government expenses, effectively promote "big government" through "big data", and achieve "big data" benefiting the people. For example, Gansu has opened a 12316 "San Nong" information service hotline service platform, which provides multi-channel and comprehensive services to "San Nong", meeting the differentiated information needs of farmers. It has formed five levels of information service institutions at the provincial, municipal, county, town, and village levels, enabling ordinary farmers to enjoy convenient and efficient information services without leaving the village, effectively solving the "last mile" problem of farmers' information services, The coverage of digital agricultural services in the province has been continuously expanded, achieving seamless integration and precise services with the needs of agriculture, rural areas, and farmers, laying a solid foundation for the construction of digital rural areas in Gansu.

(4) Increasing efforts in digital skills training for farmers

In order to promote agricultural and rural informatization, enhance the informatization literacy of rural revitalization talents, and cultivate new types of vocational farmers, Gansu actively constructs a vocational education system, integrates training resources, and coordinates the promotion of rural construction talent skills training, so that the dividends of rural digital transformation benefit more people. It actively constructs a "one county, one school, one center" county-level vocational education system, and systematically integrates agriculture, education, women's federations, civil affairs Based on the training resources of departments such as human resources and social security, and in accordance with the needs of the six characteristic industries of "cattle, sheep, vegetables, fruits, potatoes, and medicine", a talent cultivation platform for county level rural revitalization will be constructed.

### **3. The Difficulties Faced by the Construction of Digital Countryside in Gansu Province**

(1) Uneven development of regional digital economy

The eastern, central, and Hexi Corridor regions of Gansu Province are imbalanced due to various factors such as geography, location, population, natural environment, and industrial planning. This is not only a difficult problem for high-quality agricultural development in Gansu Province, but

also a difficult point for digital rural construction in Gansu Province. Especially in some remote rural areas of Gansu Province, there are many constraints on the development of agriculture, and the development of agricultural informatization is slow. The imbalance and insufficient development among regions are prominent contradictions. Although Gansu has basically achieved the coverage of fiber optic broadband networks and 4G+networks in administrative villages throughout the province, and the number of fiber optic broadband network users in rural areas has increased significantly, the penetration rate has increased significantly. However, the development of digital technology facilities in different regions is uneven.

(2) Insufficient driving force for the development of rural digital industry

In recent years, although the digital industry in Gansu Province has made some progress, overall, the rural digital industry in Gansu is still in its early stages. Most of the rural digital industries have low technological content, insufficient innovation ability in agricultural product processing, and a lack of high-quality and branded leisure tourism. The industry has not yet formed a stable capital investment mechanism, and the ability to resist financial and industrial chain risks is insufficient. The driving force behind the industry is not strong. The internal driving force of digital rural construction is relatively limited. The development of rural digital industry requires a large amount of financial support. Although the government provides a large amount of financial support to agriculture and rural areas, various agricultural projects tend to focus on filling gaps, strengthening foundations, and benefiting people's livelihoods. There are few direct targets for the development of large-scale rural digital industries, and the construction of digital rural areas is still led by government departments. The spontaneous force of digital rural construction is clearly insufficient.

(3) Rural residents have low digital information literacy

With the new development of information technology in China, information literacy has become an important indicator of measuring information application ability and knowledge level. However, the ability of farmers in Gansu Province to access information is still not high. Rural residents' understanding of the application of information technology is not comprehensive enough, and the improvement of information skills is slow. They lack necessary information technology application and training, and their understanding of new technologies remains at the theoretical level. Due to the limited and insufficient reserves of information technology knowledge, farmers lack a deep understanding of information technology, resulting in a lack of professionalism in the promotion and sales process of agricultural products, The subjective will of farmers regarding the role of digital rural construction in agricultural production and increasing personal income has not yet formed, and the main force of digital rural construction has not been fully stimulated.

(4) Lack of rural digital technology professionals

The construction of digital rural areas requires a large number of composite rural revitalization informatization talents who are proficient in information technology and focus on agricultural production. With the acceleration of urbanization, young and middle-aged farmers have chosen to work in cities, and left behind children, left behind elderly people, and left behind women have gradually increased. With the rapid development of information technology, left

behind children, the elderly, and women have little application of modern information technology and intelligent devices. A large number of young and middle-aged farmers have entered cities, causing a large amount of rural land to be idle and left uncultivated, exacerbating the loss of rural wealth. Rural hollowness is severe, and there is still a certain gap in the requirements of rural revitalization and digital rural construction. Although some external forces such as "college student village officials" and "first secretary" have to some extent filled the gap in this regard, it is difficult to fundamentally solve the problem of technical leaders in digital rural informatization construction.

#### **4. Countermeasures and Suggestions for Promoting High-quality Development of Digital Rural Construction in Gansu Province**

##### **(1) Accelerate the construction of digital rural technology infrastructure**

Accelerate the construction and popularization of rural information network infrastructure, optimize the supply and services of information for farmers. We will improve the construction of new infrastructure such as rural mobile communication networks, fiber optic broadband, and digital television to provide more convenient and efficient information services for rural residents. We will actively develop the "Digital Agriculture, Rural Areas, and Farmers" app, integrate basic public service projects such as water, electricity, heating, and gas, and establish a wide coverage, multifunctional, and convenient information service system. Strengthen support for important information systems such as agriculture, e-government, and people's livelihoods. Strengthen network patrols, purify rural cyberspace, implement graded and classified protection, promote the improvement of rural networks and facilities' ability to prevent various intrusions and damages, strengthen network security education for farmers, and enhance the self-protection awareness and protection ability of various rural network groups.

##### **(2) Cultivate digital rural characteristic industries**

Continuously increasing support from finance, finance, taxation, and other aspects in the field of agriculture, rural areas, and farmers, comprehensively utilizing financial incentives, loan interest subsidies, agricultural insurance, and other methods to support the development of rural industries, drive rural revitalization, and promote digital rural construction. Establish key projects for digital rural construction, accelerate the integration and development of digital rural areas with digital government, digital society, and digital ecology, actively cultivate new rural formats. Gansu should utilize its unique geographical advantages and rich characteristic agricultural resources, actively attract investment, and create a group of "excellent, characteristic, and special supply" agricultural product leading enterprises. Following the "cooperative + farmer" model, integrate policies, finance, taxation, funds Talents and other elements and resources, accelerate the scale and digitization process of rural industries, support leading enterprises to become bigger and stronger, and play a demonstration and leading role in the construction of digital rural areas. With the help of new media means, focusing on the six characteristic industries of "cattle, sheep, vegetables, fruits, and potatoes", establish a "sweet" agricultural product big data center that covers the entire

industry chain, improve the brand awareness and market share of "sweet" agricultural products, and continue to optimize and strengthen the e-commerce of agricultural products in Gansu Province. Supported by "new infrastructure", we will lay out the application of 5G, Internet of Things, and artificial intelligence in agriculture, achieving deep integration of digital technology and agriculture.

##### **(3) Enhancing the Digital Literacy of Rural Residents**

With the construction theme of digital China, smart cities, digital villages, rural revitalization and other new media platforms, such as Gansu 12316 information platform, rural radio, APP and combined with typical cases and fresh data, interpret the policies, significance, and plans of the central, provincial, municipal, and county levels on digital rural construction, and enhance farmers' awareness and participation in digital rural construction, Create a strong atmosphere for the participation of the whole people in the "Digital Rural Construction" initiative, and combine it with the actual industrial development. Hire agricultural experts, technicians, and "soil experts" to give lectures and technical guidance on site, with a focus on cultivating the practical operation and hands-on abilities of high-quality farmers, so that they can quickly understand the agricultural information platform for digital rural construction and master the application of digital information technology in agricultural production. At the same time, in order to further broaden their horizons and broaden their thinking, learn from the successful experience and excellent practices of advanced local industrial development, organize farmers to study and train in other places, visit advanced digital rural construction teaching bases and typical demonstration sites, and enable high-quality farmers to master the development trends of digital agriculture and smart agriculture, as well as the high-end technologies of digital industry development, Effectively improve the awareness and ability to use digital information technology to promote rural construction.

##### **(4) Strengthen the professional talent team of digital rural areas**

Actively implement talent projects such as the "Long Yuan Talent Card" and high-level talent return to their hometowns for employment projects, ensure the implementation of various policies to attract, retain, and hire talents, create conditions to attract various talents to return to their hometowns and participate in rural construction, let them feel the dividends brought by rural revitalization and digital rural construction, fully mobilize the enthusiasm of rural aspiring youth, returning entrepreneurs, and other individuals in digital rural construction, and establish a team that loves agriculture and understands the internet A team of innovative talents. Create conditions for rural residents to participate in daily life and agricultural production through digital technology, introduce modern information technology in the production and operation management process, innovate the application scenarios of integrating digital technology into regional advantageous and characteristic agricultural products, innovate the planting management mode of regional advantageous and characteristic industries, reduce production costs, accurately and effectively guide farmers' production and operation, and improve the digital marketing level of advantageous and characteristic agricultural products in rural areas, Guide rural residents to better participate in digital society life, provide opportunities and create conditions for rural residents to access and use digital technology.

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