Research on the innovative development mechanism of "Internet Plus" modern agriculture

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Abstract: With the vigorous development of the network, big data analysis, Internet of things, mobile Internet and other modern technologies in the manufacturing, production, trading of agricultural products, is the key technical means to promote the innovation and development of agricultural products. In order to adapt to this change, the country will accelerate the promotion of "Internet +" under the background of rural economic innovation and development mechanism, improve the legislative system, so that the public financial security more powerful increase, innovation and development policies and measures are increasingly perfect, can promote the technology and information in rural areas.

Key words: "Internet Plus"; Modern agriculture; Innovation mechanism

Every nerve end of China's economic development is riddled with Internet genes. Agriculture, as the root of all industries, currently has problems such as serious information asymmetry, low production efficiency, high transaction costs, low industrialization, and still exist a large number of small-scale farmers. This provides opportunities for the "embrace" of the Internet and modern agriculture. Therefore, the intersection between agriculture and the Internet is bound to occur, and the "Internet + modern agriculture" plan has not only been properly solved At the same time, the above problems have gradually formed a new driving force for its development, and are gathering momentum to cultivate and emerge a new growth pole of economic development in modern rural areas. Thus, it can be seen that China's modern agriculture is in urgent need of trans-boundary deep integration with "Internet +" and a new development model, and to advance towards precision agriculture, ecological agriculture and smart agriculture, which will also complete China's productivity transformation from traditional agriculture to smart agriculture.

I. Overview of "Internet Plus" and "Internet Plus Agriculture"

"Internet Plus" mainly refers to the digital technology based on the Internet to realize information mining, technology upgrading, and full application of information and technology. With the help of "Internet Plus", it can effectively improve the overall productivity of traditional industries and increase national wealth. "Internet + Agriculture" is on the basis of "Internet +" function, the network information technology is carried out and implemented into the agricultural products in the brand competitiveness planning, manufacturing, marketing and other links. Here, the concept represented by "+" does not refer to the direct patchwork and combination of network technology and agricultural products production, but the combination of network communication information technology, to achieve a comprehensive integration of agricultural products and the network, so as to effectively promote the optimal allocation of agricultural production factors, so that network technology for agricultural production and management activities to provide effective guarantee, so as to comprehensively promote the realization of agricultural products technology renewal Instead, it has effectively improved the production efficiency of agricultural products. To put it simply, the so-called "Internet + agriculture" refers to the transformation of China's traditional agricultural industry chain into a new and highly efficient modern agricultural product management mode through the traditional production mode of the Internet, which drives the further development of China's traditional agricultural product market towards the new industry. At present, "Internet + agriculture" has adopted the following three reasonable development modes: First, In the field of agricultural production, by combining the Internet of things technology, the establishment of a more extensive coverage of intelligent agricultural products model, and then achieve the precision of agricultural production, so as to reduce the cost of agricultural labor and agricultural production means, so as to improve the spatial distribution efficiency of agricultural products, so that farmers and agricultural enterprises to obtain the best operating benefits. For example, in foreign countries about the raising of cows, cows at different stages through intelligent monitoring customized feeding different feeds, in the process of milking cows to choose automatic equipment, through the Internet, real-time record analysis, for the health of substandard cows for early warning. The use of Internet cloud data can not only prevent the running of cows, but also disinfect the cow's nipples to ensure the health of all links; Secondly, in the field of circulation, through access to the network, the e-commerce model of agricultural products can be established to transform the circulation field of agricultural products from the original single way of online and offline circulation to the way of online and offline joint circulation, so as to achieve efficient output and marketing of agricultural products. Third, in terms of agricultural industry chain, the Internet and agricultural products are deeply integrated, the network information technology is integrated into the whole agricultural industry chain, so that more people can really grasp the information of agricultural products, including agricultural production technology information, agricultural marketing information, and constantly improve agricultural legal consulting services and investment and financing business, in order to comprehensively enhance the "Internet + agriculture" Strength.

2. Various problems existing in the development process of "Internet plus modern agriculture"

The construction of "Internet + modern agriculture" has no overall top-level design and ideas, and the implementation is not thorough. It is mainly reflected in the following three aspects: First, there is no overall top-level design and overall planning. Since the "Internet +" action plan was put forward, due to the lack of overall top-level design and planning, measures have been taken across the country

in response to the action plan, leading to the "Internet + modern agriculture" construction across the country in the fragmented, local characteristics of the development situation is more severe, thus reducing the timeliness and functionality of the network to the construction of modern agriculture. Second, the implementation of relevant preferential policies and measures by the government is not in place. At present, most Internet applications only stay at the sales end or the purchase end. And the technology related to the production end is still not used and popularized. The country has already raised the construction of "Internet + modern agriculture" to the national strategic height and issued a unified document to promote the overall, but from the overall perspective, the strategic highland process of Chinese agricultural construction is different, but the overall speed of progress is fast and slow. From the perspective of the status of agricultural products, there are also local governments through geographical location, regional advantages and other factors, so as to determine the key position of agricultural products in the social and economic development, some agricultural products in the development of agriculture is the leading position, some agricultural products are given priority to manufacturing, the development of agricultural products is small and not important and other special circumstances. This also leads to the formulation of relevant policies and measures is not perfect, which seriously inhibits the extensive application and scientific development of "Internet + modern agriculture". Third, there are no effective regulations on the standards of agricultural products. There are no standards on the detailed rules for determining the prices of agricultural products, and the origin certification and product certification mechanisms for pollution-free and green agricultural products are not yet sound. There are also no unified standards for the level and quality of agricultural products trading.

3. The innovative development approach of "Internet Plus" modern agriculture

(1) Improving the environment for agricultural innovation and development

First of all, it is necessary to base on the actual situation of rural work, and then make overall policy planning, so as to put forward specific policy suggestions for the construction of modern agriculture. In the specific top-level planning, the overall strategic goal is first established, and the overall strategic system is divided based on the realistic needs, and then the establishment of each short-term strategic planning, and can use this short-term planning to achieve the final goal of the national overall strategic system.

Secondly, in the process of modern agricultural innovation and development in China, relevant government departments also need to base on the background of the new era of "Internet +", in order to play their role as guiders. On the one hand, the government departments need to increase the guarantee of funds for the modern agricultural system, and increase the support of funds based on the guidance of advanced science and technology and the promotion of rural science and technology in all aspects, to ensure that the rural science and technology work can obtain a good guarantee of funds.

(2) Accelerate the construction of rural Internet infrastructure

First, under the background of "Internet Plus", the degree of networking in China's rural areas has indeed achieved a good foundation, but the network infrastructure in each rural area is still facing greater deficiencies. Under this premise, the relevant departments must also be determined to effectively unblock the "last kilometer" of agricultural Internet pattern. This requires the state to pay full attention to the network coverage of agricultural areas, and correspondingly reduce farmers' Internet access fees, or provide corresponding subsidies to farmers' Internet access Settings and applications, so as to promote the full coverage of the Internet in the agricultural field. The Internet of Things technology can ensure the quality of video in the transportation process and reduce the transportation cost as much as possible. The supply process is a farm-to-farm logistics-storage-retail process that can be connected and managed with the help of the Internet of Things. For example, it can be solved with the help of big data and cloud computing to realize the supervision and storage of products, ensure the safety management of food and reduce the input of transportation costs. RFID tags, for example, can be used to track and trace food, which helps to improve food quality, reduce errors and improve consumer satisfaction.

Second, with the innovation and development of modern agriculture in China, we need to gradually improve the agricultural e-commerce system in rural areas, and a new platform for agricultural e-commerce has been formed in rural areas. At present, Taobao platform also developed the agricultural Taobao section, and began to expand its business area to the whole rural areas of China. This also shows that China's rural e-commerce market has a huge potential for development, and local government departments can also based on the development of regional advantages of agriculture, resulting in the overall model of rural e-commerce + local leading enterprises, and ultimately promote the construction of e-commerce in the entire scope of China's rural areas.

Third, government departments also need to establish relatively complete big data analysis cloud services in some fields. In the process of building specific platforms, rural local governments need to pay more attention to the big data standards of the whole countryside. It is best to integrate the five levels of province, city, county, township and village together to carry out vertical and horizontal exchange of agricultural big data resources, and finally promote the common development of China's Internet and modern agriculture.

(3) Perfect the modern rural logistics system

From the perspective of "Internet Plus", the vigorous development of modern agriculture in China cannot be separated from the support of the logistics production system. Therefore, all rural areas must base on the development of "Internet +" and actively establish a complete rural e-commerce development system. On the one hand, a relatively complete logistics industry chain needs to be formed in rural areas. Here, we can also consider combining rural areas with urban areas, making use of logistics distribution bases and fresh and frozen warehouses in urban areas, so that all kinds of fresh products produced in rural areas can be preserved, and rural logistics schemes can be realized through the use of such bases. But in order to fully implement this model, it requires the people's government all over the country can play the radiation effect of each rural logistics park, can be based on the use of this rural logistics places to form product clusters, and

finally can form the key nodes and elements to promote the development of China's modern agricultural logistics system. In addition, the current agricultural field also needs to actively develop a variety of third party distribution business. This is because from the perspective of "Internet +", the e-commerce platforms are mostly targeted at some rural individual farmers. In order to let the logistics base directly interact with individual farmers, it is also unrealistic. In this case, farmers must be encouraged to set up third-party logistics companies, thus becoming an important connection point between individual farmers and local logistics distribution systems. At the same time, in order to ensure that third-party logistics companies can play a good service effect, local government departments also need to actively use a variety of big data analysis methods to make a comprehensive judgment on the commercial operation of third-party logistics, standardize the selection of logistics companies and the problems in various fields of e-commerce operation.

(4) Actively build a team of professional Internet talents

In order to ensure the completion of the construction of "Internet +" modern agricultural innovation and development system, local government departments must pay attention to training more perfect rural Internet professional personnel team. This requires local government departments to actively promote the cultivation of rural Internet professionals, in order to effectively improve the level of Internet literacy of agricultural grass-roots personnel. In this process, the various financial institutions in agricultural areas, including the agricultural Bank, can also consider cooperating with colleges and universities, in order to train oriented talents, for the modernization of modern agriculture in agricultural areas for a deeper level of training. In the process of innovation and development of China's modern agriculture, relevant local government departments must also take the initiative to introduce returning rural innovators, college student village officials and other groups to take the lead in the development and innovation of rural e-commerce education, so as to promote the healthy and all-round development of rural communities.

4. Conclusion

In the Internet era, the development of agricultural production and industrial economy, as well as the optimization of industrial structure are inseparable from the support of network technology and related technologies. It can be said that the modern rural operation and management mode and financing method based on the network will greatly promote the innovative development of rural economy. Therefore, in the development process of modern agricultural operation, we should attach great importance to the great influence of the network, and adhere to the "Internet +" perspective, and actively establish the innovation and incentive mechanism of modern rural operation and development.

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