

## Research on Improvement of Internet Agriculture Development under Rural Revitalization Strategy

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**Abstract.** With the rapid development of society, China is facing a social problem, which is to shorten the gap between urban and rural areas, and build new villages. The 19th National Congress of the Communist Party of China pointed out that the issue of agriculture and rural peasants is a fundamental issue that affects the national economy and people's livelihood. However, in the specific construction of new countryside, there are many difficulties and challenges in agricultural development. This article specifically studies the problems of agricultural development under the strategy of rural revitalization. Based on a large number of practical studies, the existing problems of rural agricultural development are found[1]. Combined with Internet +, a network that can respond to these problems is designed. Platform to complete. Taking people's demand for green crops as an entry point, starting from several aspects such as user purchases and farmer planting, in order to effectively reduce farmers' planting risks, increase farmers' income, increase farmers' value, promote modern agriculture, increase land utilization, and increase agricultural products Quality is the goal, which has certain practical significance. At the same time, it also expands and enriches the practical application system combining the new rural construction theory and the Internet in China.

### Introduction

The 19th People's Congress of the Party pointed out the scientific judgment that socialism with Chinese characteristics has entered a new era, and proposed that China's major historical task is to implement the strategy of rural revitalization. The key measure to improve agricultural development is to implement the strategy of rural revitalization. Among ecological products, agriculture is an important supplier[2].

At present, China's agriculture is undergoing four major changes: land change, variety change, channel change, and organizational change. Through four major changes, four new comprehensive agricultural service systems will be born: a new smart agricultural planting system, a new Internet agricultural distribution system, a new agricultural technology service system and a new agricultural science and technology innovation system. The occurrence of changes will promote modern agricultural production. In addition, the Internet + winds that have emerged globally in recent years, the advent of the era of big data and the age of information sharing, and the current focus on rural revitalization and targeted poverty alleviation have made the combination of informatization, networking, and agriculture an inevitable trend.

### Problems in Agricultural Development

**Rural Infrastructure Construction is Weak.** Although the construction of water conservancy facilities in rural areas has made some progress with the support of national policies, it has not solved

all problems. If we want to build roads first, the overall situation of rural roads in China is poor. However, road grades are generally not high, and the proportion of oil roads and cement roads is relatively small. At present, it is not possible to achieve the "home-to-house, village-to-village" status, which is not conducive to the sale of agricultural products and restricts agricultural development in these areas[3].

**The Utilization Rate of Modern Agricultural Equipment is Not High.** At present, the construction of agricultural infrastructure in most areas of China is not complete, and the use of large-scale modern agricultural machinery equipment is relatively small. The main reason is that most of the farmland roads in many areas are seriously damaged, narrow and uneven, muddy in rain and snow, and even in some places so far, they are still not open to traffic.

The basic equipment of most livestock and poultry houses in China is limited to lighting equipment and heating equipment, and other modern breeding equipment is barely used; most of the agricultural irrigation facilities in the region are only artificially excavated simple waterways and ditches, which can only use traditional flood irrigation. The transportation pipelines required for high-efficiency water-saving irrigation such as sprinkler irrigation and drip irrigation are only built and put into use in some areas, resulting in serious waste of agricultural water, soil compaction and nutrient loss in farmland[4].

In addition, due to the low market volume, high prices of agricultural machinery equipment in China, and low government agricultural machinery subsidies, small and micro-scale agricultural producers in China are unable to purchase, resulting in many modern agricultural machinery unable to enter the farmland.

**Low Education Level of Agricultural Workers.** China's economy is developing rapidly, and many high-quality rural labor force flows to cities, which directly leads to the uncoordinated age, culture, and gender structure of left-behind farmers, high age, generally low education level, and mainly women. Less, the awareness of modern agricultural production is relatively weak. Moreover, China's current professional farmer education system has not yet been established, there are few new farmer training institutions, and the training process is sloppy, which makes it difficult for China's modern professional farmers to cultivate[5].

In addition, due to the lack of high-quality agricultural production management personnel, there are fewer rural start-ups and supporters of Internet agriculture. The endogenous impetus for the development of Internet agriculture is seriously insufficient, and the localization of rural agriculture in China is slow.

Therefore, the lack of high-quality agricultural production management talents has become a major problem that puzzles the development of Internet agriculture in China, and it is urgent to establish a new professional farmer education system.

**Low Conversion of Agricultural Scientific and Technological Achievements.** Due to the insufficient support of the government and society for its cultivation, the current agricultural research system in China is still not perfect, and the productivity of scientific research achievements is not enough. As a result, the progress of agricultural research in China is slow and difficult to apply to the development of Internet agricultural construction.

First of all, China has not yet established an organizational department that systematically organizes the national agricultural scientific research system at the top level. Many agricultural scientific research institutions have not become a unified system, there is no clear division of scientific research, cooperation guidance and communication channels. Many small scientific research projects of scientific research institutions repeat and breakthrough. Large-scale scientific research projects are difficult to complete through systematic cooperation[6].

In addition, due to the lack of unified guidance and support from China's agricultural scientific research institutions, the application and promotion of scientific research results are insufficient, making it difficult to determine the standard parameters of the operation of many agricultural science and technology systems in China based on large-scale production data. Many scientific research results lack application testing, leading to some agricultural scientific research. The accuracy of the achievement system is not enough, and the operation fluctuations are too frequent.

## Market Analysis of Internet Agriculture

**Industry Status.** With the continuous development of the Internet, the impact of the information age is closely related to the lives of each of us. Nowadays, countries pay attention to rural revitalization and targeted poverty alleviation. The coordinated development of the Internet and agriculture is beyond doubt. The government has also issued many related policies to guide and promote the development of Internet agriculture.

In 2015, the Central Document No. 1 pointed out: "Strongly support e-commerce, logistics, commerce, finance and other enterprises to participate in the construction of agricultural e-commerce platforms and carry out comprehensive demonstrations of e-commerce into rural areas." + Some areas of agriculture are even a Red Sea. In addition, in recent years, the global trend of Internet +, the era of big data, and the era of information sharing are coming. The combination of informatization, networking, and agriculture has become an inevitable trend. According to reports, as of the end of 2014, the number of Chinese netizens reached 649 million, and the Internet penetration rate was 47.9%, an increase of 2.1%, of which rural netizens accounted for 27.5%. Coupled with the increasing amount of rural land waste in recent years, the government has also successively issued corresponding support policies in this regard, so the term Internet agriculture came into being. According to the current market understanding, there is only one APP on the market that uses the combination of the Internet and agriculture. It has constructed an Internet breeding platform, and users can adopt the Le Nongjia APP online to adopt and raise their own pigs. Cattle, sheep ... While gaining an interesting breeding experience, you can also obtain safe breeding benefits, healthy green products, and leisure eco-tourism. However, there are not many companies currently involved in Internet agricultural cultivation, and this area has great potential for development.

In addition, on January 27, 2016, "Several Opinions on Implementing New Development Concepts, Accelerating Agricultural Modernization, and Achieving a Comprehensive Well-off Target", the 2016 Central Document No. 1, was released. This is the No. 1 document of the Central Government for 13 consecutive years focusing on "Sannong". "Internet +" modern agriculture has become the highlight of this year's No. 1 document. In 2016, the state issued a number of policies on Internet + agriculture to encourage the rapid development of Internet + agriculture: On January 11, the General Office of the Ministry of Agriculture issued the "Pilot Program for Agricultural E-commerce", and on March 17, the Ministry of Commerce and other six departments issued "National Special Plan for the Development of E-Commerce Logistics Development, on April 21, the General Office of the State Council issued the "Opinions on Deeply Implementing the" Internet + Circulation "Action Plan. On April 22, the Ministry of Agriculture, the National Development and Reform Commission, and the Central Internet Information Office and other 8 departments jointly issued "Internet +" Three-Year Implementation Plan for Modern Agriculture ", Ministry of Commerce released" Notice on Launching 2016 Comprehensive E-Commerce Demonstration Work in Rural Areas "on July 4th The "Opinions on Accelerating the Development of Rural E-commerce" was issued. On September 1, the Ministry of Agriculture officially released the "Thirteenth Five-Year Plan for National Agricultural and Rural Informatization Development". On November 23, the State Council issued the "Thirteenth Five-Year Plan" Tough plan ". These policies have vigorously promoted "Internet +" modern agriculture, the application of Internet of Things, cloud computing, big data, mobile internet and other modern information technologies. It has also accelerated the development of modern agriculture and the integrated development of the Internet and the "three rural" areas, and promoted the development of agricultural The transformation and upgrading of the industrial chain are all significant benefits for the development of the Internet + agriculture.

**Industry Demands.** With the development of the Internet and the country's attention to agriculture, the combination of the Internet and agriculture is becoming closer and closer. Whether from consumers or farmers, they will have greater demand for Internet agriculture.

For farmers who are still working in agriculture, they are mainly faced with two problems. First, it is very difficult to rely on crops to survive. Second, the asymmetry of information will cause the production and demand of agricultural products to be unbalanced, resulting in short supply or

oversupply. Seeking to cause waste of resources or insufficient resources. Internet agriculture is not just about allowing farmers to get funds back at the final harvest stage. It can get capital returns throughout the process, as long as they complete a specific stage of the goal in accordance with the customer's requirements. On the other hand, as long as the customer has a need for this piece, it will issue a notice on the Internet to allow farmers to take orders for planting, so that the market demand and farmers' production are linked.

For consumers, with the improvement of modern consumption levels, more and more people are pursuing a high-quality life and people are more willing to focus more on food safety, plus the current domestic food safety issue It 's very prominent. Many people don't believe those vegetables on the market anymore. They prefer natural and pollution-free organic vegetables. Internet agriculture can just meet the needs of consumers. Ideas to grow the vegetables they want[7].

**Industry Competition Analysis.** There are about 2,900 rural county-level administrative divisions in China; the county population is about 960 million, accounting for 70% of the total population of the country; from the perspective of the total economy, the total GDP of the county economy of the country accounts for about 56% of the national GDP; the rural county economy The total social consumption of the country accounts for about 50% of the country. In rural e-commerce platforms, absorbing rural surplus labor, optimizing the economic structure, and undertaking industrial transfer. Traditional rural e-commerce platforms compete with us in attracting customers.

According to the survey, the existing Internet agricultural platforms in Wuhan mainly include Yunlian Le Nong Agriculture and Animal Husbandry Technology Co., Ltd. and its high-end Internet agricultural and animal husbandry platform APP "Le Nong's Home". The number of similar industries is relatively small, and there are few competitors. This field is still in its infancy, which is conducive to the entry of new companies.

At the same time, buyers who purchase agricultural products to sell to consumers have traditional competitive advantages, occupying most of the customers, and their business model is still favored by most consumers. Traditional agricultural products procurement, breaking this monopoly position requires farmers Provide greater access to economic benefits and a more convenient product sales model.

## **Internet Agriculture Platform**

**Mode of Operation.** The construction of the Internet agricultural platform realizes two modes of service. The first one mainly realizes the connection between consumers and rural land contractors. The user pays seeds and other costs on the platform and selects the land. The land contractor receives the information and starts operation. The same area After the product is harvested, it will be delivered to the user's location through a logistics system that has signed a contract with the platform to meet the modern green food concept that is increasingly promoted; another service model except the existing functions in the first type, users can use it as a In this investment model, consumers pay a certain amount of cost and choose the required products independently. The land contractor is responsible for the specific operation accordingly. After the harvest, the platform is sold out and converted into funds, which is distributed to consumers and land contractors in proportion to achieve The win-win situation of the two hopes that this can solve the problem of scarce cost of idle labor and land contractors in rural areas and establish a complete industrial chain. Consumers can also choose to donate part of their products to public welfare undertakings[8].

The platform is based on the O2C online configuration e-commerce form, with the help of the state's support policy for the modernization of agriculture, quickly enter the company's intelligent information services into the market and expand market share. At the same time, the company will vigorously implement the development strategy of combining regionalized management, service supporting innovation, information coordination and upgrading, market docking, and talent training, and establish a platform for serving China's agricultural modernization with major breakthroughs.

**SWOT Analysis.** The marketing environment affects marketing activities by threatening the platform or providing opportunities. In the face of different threats and opportunities, the platform needs to analyze environmental opportunities and threats through environmental analysis.

As for strengths analysis, the Internet agricultural platform combines the development trend of the times with a deep understanding of consumer psychology. On the basis of meeting the needs of consumers, it also creates opportunities for cooperation with farmers to achieve a mutually beneficial and win-win situation.

For the weaknesses analysis, because people will not dare to try the products and sales methods just launched, have a distrust of psychology, a small publicity, and a small number of people who understand, this requires the platform to publicize and explain this model to consumers. The advantages and reliability make everyone more familiar.

Opportunities analysis mainly considers its potential attractiveness (profitability) and possibility of success (platform advantages). In terms of profitability, Cloud Farm allows consumers to enjoy the freshest and greenest crops, which is in line with contemporary needs and life concepts; secondly, combining the current era technology to make the most stable agricultural investment is highly feasible and adaptable Adopted the national policy of supporting agricultural development.

Threats analysis generally focuses on two aspects: One is to analyze the potential severity of the threat, that is, the degree of impact. There may be an Internet platform with the same function, which does not require rural field cultivation, thereby reducing customer sources, and the product backlog will cause capital turnover problems; the second is to analyze the possibility of threats, that is, the probability of occurrence. Due to the development of contemporary science and technology, there may be ways to replace this model, but it also requires a certain amount of research time, which is currently less likely. The product backlog is related to the degree of purchase of consumers in this way.

## **Summary**

Driven by the steady and steady growth of China's economy and the promotion of national policies and real trends, the emergence of Internet smart farms can effectively connect consumers and farmers and create a user experience platform, which can not only achieve more complete information The exchanges provide farmers with the opportunity to directly face consumers to ensure the full allocation of resources. The transparent and open agricultural product planting process makes consumers more at ease and simplifies the intermediate link in the agricultural product market. "Required" greatly reduces wasteful behavior, and in the process enriches the consumer experience link, consumers can directly contact farmers, with the strong support of China's land transfer policy, the "QQ Farm" is implemented into reality through this platform In life, rent land directly on this platform to experience the joy of planting and harvesting on the ground.

This breaks the traditional way of selling agricultural products and hopes to make a little contribution to the development of Internet agriculture.

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