

Research on the Application of "Internet +" in Agricultural Technology Popularization

Pengchao Sui¹, Yingnan Liang^{2*}

spc9804@163.com¹, liang_ying_nan@163.com^{2*}

School of Management, Dalian Polytechnic University, Dalian 116034¹
Dalian Polytechnic University, Department of Basic Teaching, Dalian 116034²

Abstract. With the development of our country economy and the continuous innovation of science and technology, Internet + technology is widely used in the society, agriculture as the cornerstone of social development, agricultural technicians how to efficiently use Internet + technology in agricultural technology promotion work, this is an important link in the development of national agricultural modernization, combining agriculture and Internet + technology, can improve the efficiency of agricultural scientific research achievements, promote the construction of rural intelligent Internet + platform of infrastructure. Article through a brief analysis of Internet + technology in agricultural technology promotion advantages and existing problems, and the Internet + in agricultural technology promotion application strategy, strengthen talent training, increase capital investment, innovation promotion of application strategy, in order to improve the "Internet +" in the application of agricultural technology popularization, promote rural revitalization and to agricultural power.

Keywords: Internet +; agricultural technology promotion; integrated application

1 Introduction

The CPC Central Committee and the State Council pointed out in the Opinions on comprehensively promoting rural revitalization in 2023 that the most arduous task in comprehensively building a modern socialist country is still in rural areas. As the world faces profound changes unseen in a century, China has entered a period of both strategic opportunities, risks and challenges, and increasing uncertain and unpredictable factors. It is of great importance to maintain the basic fundamentals of agriculture, rural areas and farmers. In order to further improve the economic benefits of agriculture, it is necessary to strengthen the promotion of new agricultural technologies in the new era, and to strengthen the communication and application of Internet + in agriculture. This has laid a deep foundation for the dissemination of Internet + in the agricultural field, to fully integrate Internet + with the promotion of agricultural technology, spread the latest scientific research results to the hands of farmers, promote the improvement of agricultural production technology level, and improve economic benefits.

¹ Sui Pengchao (1998-), male, Han Nationality, from Dongying, Shandong Province, master student, research direction: Agricultural management

² Corresponding author Liang Yingnan (1980-), female, Han Nationality, born in Harbin, Heilongjiang Province, professor, doctor, postgraduate supervisor. Research direction: Applied psychology.

2 Advantages of Internet + in agricultural technology popularization

"Internet +" refers to the combination of traditional industries and emerging industries based on the basis of Internet technology, the Internet and the advantages of all walks of life, to achieve the effect of resource integration, improve the new vitality of economic development, optimize the new economic development system, reshape the new development model, and complete industrial upgrading.

2.1 Internet + technology test

Through the Internet + technology, a complete and accurate record of the agricultural experimental data results can be realized^[1]. In the planting and breeding experiments, a detailed experimental record is needed to be carried out. However, due to the large scale of the experiments, it completely relies on manual recording, and the experimental results are inevitably biased or even incomplete. From the perspective of agricultural powers such as Europe and the United States, with perfect infrastructure and the division of labor in agricultural production is relatively clear, the Internet + technology platform is also built, so as to use Internet technology to organize and analyze the whole experiment, complete record of experimental data, and summarize, so as to obtain more accurate experimental results. For example, in the wheat planting experiment, researchers can connect the wheat experimental detection system with the network in advance, and record all the data in the wheat growth process in real time through the Internet, so as to reduce data collection errors and waste of resources in the detection process^[2].

2.2 Strengthen the connection between the Internet and agriculture

In the process of traditional agricultural technology promotion, agricultural technicians go to the field to communicate with farmers face to face, and demonstrate and promote new agricultural technology and new agricultural equipment. However, this method is inefficient, and will be limited by time, place and personnel, so it cannot quickly promote agricultural technology to farmers. Relying on Internet + technology, farmers can have a more intuitive understanding and understanding of new agricultural technologies, learn more new technologies and new knowledge, and greatly save the time and energy of agricultural technicians. Through the Internet to spread agricultural technology, technical personnel only need a simple demonstration can, effectively promote the process of China's agricultural modernization. At the same time, the application of Internet + in agricultural technology popularization can reduce the cost of agricultural technology popularization and promote the development of agriculture in China^[3].

2.3 Improve the promotion of technologies and promote the green development of agriculture

China has always emphasized the importance of agricultural modernization and green agricultural development, but in the process of agricultural development, a large number of pesticides and fertilizers are still used, resulting in serious pollution to the environment. Promoting high-quality agricultural technologies through the Internet and sharing more advanced, efficient, environmentally friendly, green and safe technologies with farmers can not

only improve the awareness of environmental protection of farmers and choose green ecological planting methods independently, but also reduce the damage to the environment in agricultural production^[4].

3 Main problems existing in Internet + in the popularization and application of agricultural technology

3.1 Lack of funds for agricultural technology extension

Capital is the basis for the promotion of agricultural technology under the "Internet +" mode, and sufficient financial support can provide an important guarantee for the work. Whether to build a new type of agricultural science and technology demonstration base, or through the "Internet +" to promote agricultural technology promotion, or welfare policy to encourage farmers to use advanced agricultural technology, should have sufficient financial support, and under the "Internet +" agricultural technology promotion to ensure the normal operation of network equipment and promotion workstation^[5]. However, for a long time, the fund source of agricultural technology popularization in China is the national financial allocation guarantee, the participation in other aspects of the society is small, and the source of funds is very single, which restricts the promotion of agricultural technology under the background of "Internet +".

3.2 Lack of cultural literacy of relevant personnel

In the process of agricultural technology promotion under the background of the Internet, a large number of talents with relevant professional background are needed to support it, otherwise its promotion efficiency will be greatly reduced. However, at present, most of the agricultural extension personnel in China have not received systematic Internet technology training, and they do not master the Internet knowledge system systematically, resulting in their work can not achieve the expected goals. In addition, in the process of work, some staff lack the awareness of innovation, and still follow the original mode of promotion, such as emphasizing demonstration promotion, superior orders to complete tasks, etc. This promotion method is inefficient and the promotion effect is not good. In addition, the farmers' culture level is low, will only use simple smartphone software operation, not easy to find excellent agricultural technology teaching video, unable to learn some excellent advanced agricultural technology, therefore, although the government has been trying to conduct the Internet agricultural technology promotion, but the effect is general, agricultural personnel at the grass-roots level still did not master the advanced agricultural technology^[6].

4 Optimization strategy of agricultural technology promotion under the Internet +

4.1 Strengthen the training of talents

Rural promotion talents is the core force of promoting science and technology and driving the development of rural industry in the construction of new countryside. We will increase the recruitment positions of college graduates with corresponding majors, increase the recruitment

proportion of college graduates from key universities, and increase the selection and recruitment of highly educated and high-quality college students, so as to increase new blood for the agricultural technology extension team. The government has introduced new welfare policies to not only attract high-quality talents, but also retain them. To continuously improve the proportion of high-quality talents and young people in the rural promotion team, to avoid the talent fault and the overall age of the team phenomenon^[7].

4.2 Innovate the promotion methods

The traditional agricultural extension mode has failed to keep up with the trend of The Times, we must conform to the development of The Times to complete the reform and innovation. Into the era of new media, although people also watch traditional media such as TV, but by the impact of the larger, proportion has fallen sharply, new media with its rich and colorful information into the ordinary farmers, TV should be fully combined with Internet media, to continuously expand the spread of transmission, can put the agricultural program to the people contact using short video software, such as TikTok, quickly to webcast, let the broad masses of farmers open the phone can understand relevant agricultural knowledge anytime and anywhere, and to further expand the audience of agricultural programs. In the process of live, real-time network interaction with the audience, invite agricultural experts to live with the audience, listen to farmers real ideas, and clearly feedback the needs of farmers, answer the questions to the latest scientific knowledge and technology, slowly change farmers' old ideas, old ideas, to solve the problems of farmers in production, bring more convenient service, promote the progress of agricultural productivity, promote the development of agricultural modernization^[8].

4.3 Increase capital input

Each region should, based on its own reality, gradually establish a diversified fund raising system with the government as the leading role and the participation of financial institutions, banks and rural cooperatives. In addition to examining and approving the funds of the Internet in the promotion of agricultural technology, the state should also increase the construction cost of agricultural technical team and build a high-quality and high-quality promotion team. The state should constantly guide the funds at the social level to actively participate in the popularization of advanced agricultural technology and improve the utilization efficiency of special funds^[9]. Create a good communication environment for the Internet to engage in agricultural technology innovation, continuously expand the funding sources of agricultural technology, ensure the stable promotion of the promotion work, and lay a foundation for the healthy and stable development of national agriculture^[10].

5 Conclusion

The popularization and application of agricultural technology under the Internet model is closely related to the promotion of agricultural modernization, which has a direct role in promoting China's economic development and becoming an agricultural power. The popularization of agricultural technology under the Internet + model plays a great role in optimizing agricultural production mode and improving the efficiency of agricultural production. Chinese agriculture under the background of "Internet +", it will have a more powerful development momentum and environment, the future "Internet +" will further promote the transformation of the traditional

Chinese agriculture to a higher level, promote continuous reform and innovation of agricultural science and technology, improve the quality of agriculture and productivity, to ensure the vigorous development of agriculture, make progress to agricultural power in our country.

References

- [1] Su Xin. Application of Internet in agricultural technology promotion[J].Southern Agriculture,2020,14(06):176+193.DOI:10.19415/j.cnki.1673-890x.2020.06.083.)
- [2] TANG Hui, ZHANG Ruyi, SU Shengsong, LUO Yu, ZHANG Yu. " Analysis of the promotion path of Internet +"agricultural planting technology[J].Agricultural Technology and Equipment,2022(08):107-109.)
- [3] YANG Lu,HE Guangxi,LI Qiang. Investigation and analysis of agricultural technology extension team construction in China[J].Soft Science,2014,28(06):104-107.DOI:10.13956/j.ss.2014.06.017.)
- [4] Wang Kai. Research on ways to accelerate the construction of agricultural technology extension informatization[J].Agricultural Economics,2020(11):15-17.)
- [5] ZHANG Songwei. Agriculture and Technology,2019,39(07):39-40.DOI:10.19754/j.nyyjs.20190415016.)
- [6] ZHENG Yanyan, SHAN Donglin, LIU Qin, TAN Lüke, ZHANG Bin, XU Yu. Construction of agricultural technology extension system in VUCA era[J].Chinese Journal of Agricultural Mechanization,2021,42(07):190-195.DOI:10.13733/j.jcam.issn.2095-5553.2021.07.28.
- [7] XING Benxin,YANG Zhiqi,CHEN Kailin. Research on effective countermeasures for agricultural technology extension in the new era[J].Agricultural Development and Equipment,2023(01):116-118.)
- [8] LI Xue. Research on the innovation and development of agricultural program concept in new media environment[J].News Research Guide,2021,12(02):152-153.)
- [9] Lorna. Analysis of the effect of agricultural technology extension on rural economic development from the perspective of rural revitalization[J].Marketing Circle,2023(01):68-70.)
- [10] Ji Zongren. Analysis of the development status, path and countermeasures of smart agriculture in China[J].New Agriculture,2022(18):65-67.)