Discussion on the Problems Existing in Agricultural Technology Popularization under the Strategy of Rural Revitalization

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Abstract: Under the background of rural revitalization strategy, more and more superior resources are gradually sinking, supporting the construction of new countryside and helping rural economic development. In agriculture, the application of advanced agricultural technology in agricultural production can not only enhance the effectiveness and efficiency of agricultural production, but also increase farmers' income and promote rural economic development. Therefore, agricultural technology popularization is particularly important. However, some practical problems and shortcomings in the process of agricultural technology popularization have become the biggest obstacle in agricultural technology popularization, which affects the value of agricultural technology popularization. This thesis briefly analyzes the problems existing in agricultural technology popularization, and summarizes the corresponding optimization measures for specific problems, aiming at improving the effectiveness of agricultural technology popularization and helping the rural revitalization strategy to land.

Keywords: rural revitalization strategy; Agriculture; Technology promotion; Problems; Optimization strategy

1. Introduction

Agricultural technology popularization is a concrete practice of rural revitalization strategy to help new rural construction, which plays a positive role in improving rural landscape and enhancing agricultural productivity. However, in the process of agricultural technology extension, the efficiency and quality of agricultural technology extension work are seriously affected by the imperfect extension operation mechanism, insufficient quality and ability of extension personnel, limited extension funds and single extension method. Relevant departments must pay special attention to this problem and take targeted optimization measures to solve it, so as to give full play to the advantages of agricultural technology popularization and help the development of rural areas, agriculture and farmers.

2. Value and significance of agricultural technology popularization under the strategy of rural revitalization

2.1 Improve agricultural production efficiency and help the development of rural planting industry

Under the strategy of rural revitalization, feasible and reasonable agricultural technology popularization can not only help agricultural production, improve the efficiency and quality of agricultural production, but also bring greater opportunities for the development of rural planting. In the development of traditional farming, farmers rely more on weather and season to judge agricultural production activities. Because the rural news is relatively closed, some farmers' agricultural planting techniques can not be updated in time, and they are not familiar with the relevant national planting policies, which hinders the development of rural planting to some extent. In the process of agricultural technology extension, extension workers will go deep into the countryside and work in the field planting practice, and farmers will know more about the corresponding agricultural technology, which also lays a good foundation for improving the efficiency and quality of rural planting. With the continuous expansion of agricultural technology popularization and propaganda, more and more people are beginning to realize the importance of agricultural technology popularization, and more and more extension talents are beginning to spontaneously organize agricultural development teams and actively participate in the production of rural planting industry, which can lay a solid talent foundation for promoting the implementation of rural revitalization strategy.

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2.2 Promote deepening reform in rural areas

When advanced agricultural production technology is applied to agricultural production, the biggest beneficiaries will definitely be the farmers. In the current household contract responsibility system management mode, China's agricultural cultivation is mostly family-style small-scale peasant economy. Under the background of rural revitalization, actively promoting agricultural technology can not only help farmers improve their planting level, but also gradually guide rural growers to transform modern agricultural production technology into important agricultural productivity, thus increasing agricultural production and farmers' income. With the increase of farmers' income, farmers' disposable funds increase, and it is more likely to apply advanced technology and upgrade production investment in modern agricultural production, which will not only boost the scientific and technological progress of agricultural production, but also further shorten the distance between farmers and advanced productive forces and optimize the rural agricultural production mode. When the traditional extensive agricultural production mode changes into the modern intensive production mode, the rural system reform will get a steady stream of impetus. Agricultural technology popularization, which is more in line with the development law of agricultural production and can better meet the actual needs of rural agricultural production, will further promote rural deepening reform.

2.3 Optimize agricultural industrial structure and promote rural economic development

Agricultural technology popularization is helpful to promote the adjustment and optimization of agricultural industrial structure and promote the all-round development of rural economy. Agricultural technology popularization can reduce the human input in agricultural production to a certain extent, for example, advanced irrigation technology, harvesting technology, sowing technology and so on can effectively reduce the human input in agricultural production, promote the intensive development of agricultural production, and thus realizing the optimization of agricultural industrial structure. The laborers liberated from agricultural production can work in the process or engage in other industrial activities, so as to broaden the channels for farmers to increase their income. The integration and application of various production technologies in the process of agricultural technology popularization can not only promote agricultural scientific production and professional management of crops, but also further enhance the fit and adaptability of agricultural products and markets and promote the optimization of rural economic system. Rural revitalization provides a good external environment for the sustainable development of rural agriculture and makes grassroots agricultural producers become real beneficiaries. In the process of popularizing agricultural technology, it can effectively make up for the shortcomings in agricultural production, and provide more possibilities for the healthy development of agriculture and the promotion of regional economy.

3. Problems existing in agricultural technology popularization under the strategy of rural revitalization

3.1 The promotion mechanism is not perfect

Under the strategy of rural revitalization, it is easy to promote agricultural technology because of many factors. For example, the degree of economic development in the promotion area, the ideas of farmers in the promotion area, the complex social environment in the promotion area and so on. The fundamental reason why there are many factors affecting agricultural technology popularization is that the operating mechanism of agricultural technology is not perfect in the process of popularization. In some areas, the operation mechanism of agricultural technology extension has lagged behind, which can not match the actual agricultural development and the demand of agricultural extension, resulting in improper methods and insufficient effectiveness of agricultural technology extension in some areas.

3.2 The comprehensive quality of the extension team needs to be improved

Agricultural technology popularization has higher requirements for extension personnel's professional ability, professional accomplishment and practical operation level. Extension personnel have solid and excellent professional skills to flexibly deal with various problems existing in the process of agricultural technology extension. However, from the reality, the lack of professional skills and professionalism of agricultural technology extension personnel in some regions directly affects the efficiency and quality of agricultural technology extension. Even some agro-technical extension workers

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simply don't have a complete framework of agricultural knowledge and don't understand the core content of agricultural technology, they also lack practical operation ability and learning spirit. What's worse, they even don't pay attention to knowledge updating and technology optimization, which directly affects the progress of agro-technical extension [1].

3.3 Insufficient promotion funds

Agricultural technology extension is a long-term and systematic work, which needs certain financial support. The lack of funds will directly affect the implementation of various measures for agricultural technology popularization. However, judging from the financial support of agricultural technology popularization, agricultural technology popularization lacks systematic financial support channels, and in many cases, financial support cannot be guaranteed, which affects the promotion progress. Even in some areas, agricultural technology popularization will be directly interrupted because of insufficient promotion funds, resulting in unnecessary waste of manpower, material resources and financial resources. From the source of funds, most of the funds for agricultural technology popularization come from financial allocation, and most of the funds will be distributed to professional technicians, and the investment in other related aspects is limited. The fund channel is relatively single and the fund support is insufficient, which affects the orderly progress of agricultural technology popularization.

3.4 Promotion methods need to be optimized urgently

At present, the methods of agricultural technology extension in most regions are still relatively simple or relatively conservative, and the promotion effect is not good. Especially in some remote rural areas, traditional methods are still being used to popularize agricultural technology. For example, distributing leaflets, on-site technical display, teaching and so on. The promotion coverage is limited and the promotion effect is not ideal. In some areas, government departments attach great importance to agricultural technology extension, and the extension work is only limited to issuing some relevant policy documents, which is more formal and practical. In addition, the lack of effective supervision in the whole extension process has aggravated the formalization of agricultural technology extension work. Some extension technicians have insufficient professional ability and limited sense of professional responsibility, so they can't popularize agricultural technology knowledge scientifically, and will also cause unnecessary loss of manpower, material resources and financial resources.

4. Optimization strategy of agricultural technology popularization under the strategy of rural revitalization

4.1 Improve and perfect the operation mechanism of agricultural technology popularization

We need to effectively implement the strategy of rural revitalization and development and accelerate the construction of a new socialist countryside. Local governments must first realize the importance and necessity of agricultural technology popularization, combine the actual situation of local agricultural production and the actual conditions of agricultural technology popularization, what's more, the government also need to build a more scientific management mechanism for agricultural technology popularization and clarifythe rights and responsibilities of extension personnel. It is also important to innovate extension methods and truly let agricultural technology popularization work suitable for farmers, and additionally, truly let farmers understand and master agricultural technology. It is also required to actively apply agricultural knowledge and agricultural technology in daily agricultural production and strive to improve the current situation of agricultural production. The person in charge of agricultural technology extension should really go deep into the peasants and sum up the previous experience of agricultural extension. They also need to analyze the actual agricultural extension environment, revise and optimize the operation mechanism of agricultural technology extension under the premise of strictly following the instructions of superiors, so as to make it more suitable for the actual agricultural extension situation and form certain constraints and norms for agricultural extension work. In the process of popularization, we should truly understand the demands of farmers' agricultural production, combine the daily agricultural production situation of farmers and start agricultural technology popularization work from solving the practical problems of farmers' agricultural production so that farmers can truly recognize agricultural technology and actively learn and apply agricultural technology [2].

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4.2 Cultivate and form a high-quality and high-professional promotion team

Only a high-quality, high-professional, high-responsibility agricultural extension team can effectively ensure that the agricultural extension work is carried out in an orderly manner and truly landed. Relevant departments should pay special attention to the training of agricultural extension personnel and devote themselves to building an agricultural technology extension team with excellent skills, high quality and strong sense of responsibility. First, we should raise the selection criteria for agricultural technology extension talents. We are supposed to pay special attention to the comprehensive quality and professional skills of talents in the recruitment process; It is also necessary to improve the comprehensive ability and quality of extension personnel from the source; Second, make full use of villages and towns to promote publicity. We should select professional agricultural technology extension personnel to go deep into the grassroots, enter the masses, and teach agricultural technology to farmers hand in hand; Third, pay special attention to the supervision of agricultural technology extension process. We need to really understand farmers' production needs, solve farmers' practical problems and do necessary technical guidance; Fourthly, It is vital to establish and improve the training mechanism of agricultural technology extension personnel, organize agricultural technology extension personnel to participate in professional knowledge and technical training regularly or irregularly. Meanwhile, we also need to improve their professional skills and professional responsibility, promote the sharing and exchange of successful experiences in agricultural technology extension, thus laying a good foundation for the smooth progress of agricultural technology extension work.

4.3 Increase investment in promotion funds and improve the effectiveness of fund utilization

Relevant departments should consciously expand the sources of funds for agricultural technology popularization and devote themselves to providing sufficient financial support for agricultural technology popularization. Government departments should give full play to the macro-control role, set up special funds for agricultural technology popularization and do a good job in fund management. Moreover, we still need to pay attention to review, ensure earmarking, and effectively improve the utilization rate of agricultural technology popularization funds. With the help of the strategic advantages of rural revitalization, we should actively do a good job in optimizing and adjusting the rural industrial structure, promote the combination of agriculture, industry, tourism and other industries. Promoting the transformation of agricultural technology, increasing farmers' income and feeding back the promotion and innovation of agricultural technology within the region are also of great significance.[3].

4.4 Innovative agricultural technology extension methods

Relevant departments should pay special attention to the effectiveness of agricultural technology popularization and realize the importance of agricultural technology popularization methods[4]. They should also follow the development law of the times, combine the actual situation of regional agricultural technology popularization and actively practice the agricultural technology popularization strategy. Furthermore, they need to focus on innovating the agricultural technology popularization methods, and devoting themselves to truly transforming agricultural technology into efficient agricultural productivity. For example, we can rely on the advantages of the current advanced information technology, make the relevant contents and practical operation methods of agricultural technology into videos so that agricultural producers can upload them to the agricultural technology extension platform to learn and understand at any time and place. You can also use popular short video platforms such as Auto Quicker and Tik Tok, which are loved by the public at this stage, to release information on agricultural technology popularization, so that agricultural producers can realize the importance of learning and applying agricultural technology in a subtle way, and teach agricultural technology to agricultural producers in an easy-to-understand way.[5]

5. Conclusion

To sum up, under the strategy of rural revitalization, relevant departments in China have gradually increased their attention and practice on agricultural technology popularization. However, some problems and shortcomings in the process of agricultural technology popularization seriously affect the efficiency and quality of agricultural technology popularization in China, hinder the construction of new countryside and affect the landing of rural revitalization strategy. According to the actual problems in the process of agricultural technology popularization, it is more helpful to formulate a more feasible

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popularization and optimization scheme to improve the effectiveness of agricultural technology popularization.

References

- [1] Luo Wei.(2023). Research on basic agricultural technology extension strategy under the background of rural revitalization [J]. Henan Agriculture, NO.11.P4-6. doi: 10.15904/j.cnki.hnny.2023.11.019.
- [2] Gui Fang. (2023). Analysis on the current situation and optimization of grass-roots agricultural technology popularization [J]. Rural Practical Technology, NO.04.P7-9
- [3] Wang Min.(2023). Application and Thinking of "internet plus" in Agricultural Technology Extension [J]. Business News, NO.05.P147-150.
- [4] Li Xiang(2023). The role of agricultural technology extension in agricultural planting [J]. Contemporary Agricultural Machinery, (05):66+68.
- [5] Sun Yanling, Hao Lu, Li Mengyuan(2023). Problems and development suggestions in the promotion of green agricultural planting technology in rural revitalization [J]. Contemporary Agricultural Machinery, (05):75-76.