# Research on the Mechanism and Path of Local Applied Universities Serving Rural Revitalization

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Abstract: This paper takes the local applied universities as the research theme, aiming at deeply discussing the role, mechanism and feasible path of universities in rural revitalization. Through literature review, case analysis and field investigation, we systematically studied the theoretical basis and practical experience of local applied universities participating in rural revitalization. First of all, at the mechanism level, the paper finds that establishing a sound institutional system is the key to promoting the university to serve the rural revitalization. Policy support and the establishment of incentive mechanism will effectively stimulate the enthusiasm of university faculty and staff, making serving the countryside a social responsibility of universities. Secondly, in terms of practical path, the paper puts forward a set of multi-level service system. The organic combination of these practical paths aims to make local applied universities participate in rural revitalization more deeply and extensively, provide all-round support for the countryside, and promote the all-round development of rural economy and society. Through the research results of this paper, it can provide useful reference for local universities to better fulfill their social responsibilities and serve rural revitalization, and make contributions to building a beautiful and livable rural new era.

#### 1. Introduction

In recent years, China has implemented the strategy of rural revitalization, and devoted itself to promoting rural modernization in an all-round way and building beautiful countryside. Rural revitalization, as a major national strategy, needs the joint efforts of all walks of life to give full play to the advantages of various resources and provide strong support for realizing the goal of rural revitalization. Under this background, local applied universities, as an important force in local economic and social development, shoulder the mission of cultivating applied talents and serving the society, and should play a more active role in rural revitalization.

Local applied universities have geographical advantages and special positioning, which are closely related to local communities and rural areas, and have profound local cultural heritage and profound understanding of local social economy [1-2]. Therefore, how to give full play to the unique advantages of local applied universities in rural revitalization and build a mechanism to serve rural revitalization has become an urgent problem to be studied and solved.

The purpose of this paper is to deeply explore the service mechanism and path of local applied universities in rural revitalization, and put forward a series of practical suggestions through combing relevant theories and concrete research, so as to contribute wisdom and strength to local applied universities to better fulfill their social responsibilities and serve rural revitalization. Through in-depth research, we are expected to provide new ideas and methods for promoting the smooth implementation of the rural revitalization strategy and create a more powerful support system for building a dynamic, livable and suitable modern village.

# 2. Advantages of local applied universities in serving rural revitalization

Rural revitalization is the key strategy of social and economic development in China, and local applied universities have obvious advantages because of their unique geographical advantages and functional orientation, and can play an important role in rural revitalization.

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# (1)Regional advantages and profound cultural integration

Local applied universities are usually deeply rooted in the local culture and social environment, and have deep historical roots with the countryside [3]. By deeply understanding the local culture, traditions and social needs, these universities can better formulate and implement rural revitalization plans. Its teaching staff and discipline setting are also easier to match with local characteristics, providing training and research that is more in line with the actual needs of rural areas.

# (2)Practical teaching and technological innovation

Local applied universities usually feature practical teaching, emphasizing the cultivation of students' practical operation and application ability. This enables these universities to better meet the actual needs of rural work and cultivate applied talents that are more suitable for rural development [4]. At the same time, these universities often have unique advantages in technological innovation, which can introduce new technologies and ideas to the countryside and promote the upgrading of local industries.

(3) Community participation combined with Industry-University-Research.

Local applied universities have a closer relationship with rural communities. By developing community participation projects, we can more directly understand the needs of rural areas and provide solutions to practical problems. At the same time, these universities usually pay more attention to the combination of Industry-University-Research, which can transform academic research results into practical productivity more quickly and provide more direct support for rural revitalization.

### (4) Talent cultivation and the construction of rural cadres

Local applied universities aim at cultivating practical and compound talents, and pay more attention to cultivating professionals with rich practical experience in rural areas [5-6]. This is helpful to the construction of rural talent team and improve the quality and ability of rural cadres. Through customized training programs, local applied universities can better meet the training needs of rural cadres and promote the improvement of rural governance.

# (5)Regional economic development and social responsibility

Local applied universities not only serve the development of local regional economy, but also actively undertake social responsibilities. Through cooperation with local governments, enterprises and communities, we will promote the development of rural economy, increase employment opportunities and create favorable conditions for rural revitalization.

Local applied universities have profound regional background, practice-oriented educational characteristics and close ties with rural areas, which make them have unique and important advantages in serving rural revitalization. By giving full play to these advantages, local applied universities can better promote the implementation of rural revitalization strategy and make positive contributions to building a modern and livable rural society.

## 3. Mechanism of local applied universities serving rural revitalization

The mechanism construction that local applied universities play a key role in serving rural revitalization is the core to promote the successful implementation of rural revitalization strategy [7]. The mechanism of local applied universities serving rural revitalization is shown in Figure 1.

System construction. The primary mechanism for local applied universities to serve rural revitalization is to establish a sound institutional system. This includes formulating relevant policies, clarifying the responsibilities and tasks of universities, and establishing an incentive mechanism that is in line with the goal of rural revitalization. The system construction also needs to strengthen the internal organizational structure of universities, ensure that there are institutions specifically responsible for rural revitalization, and encourage faculty and staff to participate more actively in rural services.

Project cooperation and resource integration. Local applied universities should establish cooperation mechanisms with rural-related projects and establish cooperative partnerships with local governments, enterprises and social organizations. Through resource integration, universities

can gather more social resources and promote the sustainable development of the project. Such cooperation can also make rural areas better benefit from the professional knowledge and technical support of universities, and promote the upgrading of rural industries and economic development.

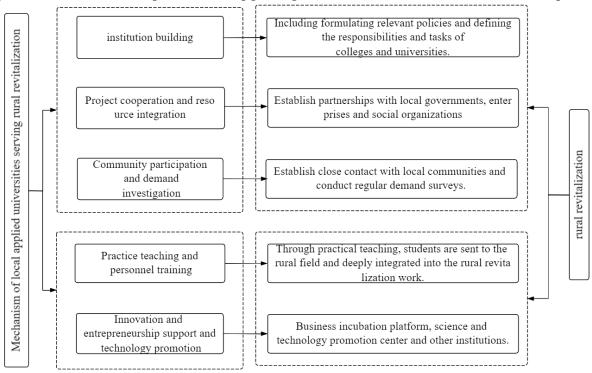


Figure 1 Mechanism of local applied universities serving rural revitalization

Community participation and demand investigation. Establishing an effective community participation mechanism is an important link for local applied universities to serve rural revitalization. Universities can establish close ties with local communities, conduct regular demand surveys, and understand the actual needs and problems in rural areas. This will help universities to provide more targeted services, ensure that service projects are more in line with the actual situation in rural areas, and enhance the effectiveness and sustainability of services.

Practice teaching and personnel training. Through practical teaching, local applied universities send students to the rural field and deeply integrate into the rural revitalization work. This mechanism can not only cultivate talents who are more suitable for rural development, but also provide professional technical support for rural revitalization [8]. Universities can set up special practice bases so that students can better understand and solve rural problems in practice and form a "win-win" situation.

Innovation and entrepreneurship support and technology promotion. Establishing a mechanism to support rural innovation and entrepreneurship is a key link for local applied universities to serve rural revitalization. Universities can provide innovative technology and entrepreneurial support for rural areas through business incubation platforms, science and technology promotion centers and other institutions, and promote the upgrading of local industries and the improvement of innovation capabilities. This mechanism is helpful to better transform the scientific research achievements of universities into actual productive forces and promote the sustainable development of rural economy.

Through the construction of the above mechanism, local applied universities can serve the rural revitalization strategy more effectively, provide all-round and in-depth support for rural communities, and help achieve the goal of rural revitalization. Such a mechanism will not only help universities to better fulfill their social responsibilities, but also help the rural revitalization strategy to advance smoothly.

# 4. Practical path for local applied universities to serve rural revitalization

### 4.1. Establish a research center for rural revitalization

Rural revitalization is a strategic task of national development, which is crucial to the sustainable development of local economy and society. Local applied universities have the mission of cultivating practical talents and serving the community. By establishing rural revitalization research centers, they can more effectively participate in the formulation and implementation of rural revitalization strategies. The purpose of establishing rural revitalization research center is to integrate university resources, concentrate on studying major issues related to rural revitalization, provide scientific decision-making and practical guidance for local governments and rural communities, and promote the sustainable development of rural revitalization.

Teams of experts and scholars from different disciplines should be established, covering agriculture, economics, sociology, environmental science and other fields, so as to form a comprehensive research force [9]. Team members went deep into the countryside to conduct field research, understand the local natural resources, economic situation, social structure and so on, and form the basis of empirical research. Establish close cooperative relations with local governments, enterprises and social organizations, participate in research projects together, and promote the research results to be better translated into practical actions. This paper analyzes the policy system of local rural revitalization, and puts forward relevant policy suggestions to urge local governments to promote the rural revitalization strategy more scientifically. By organizing training courses for rural cadres, farmers and other groups, we can impart knowledge in science and technology, management and entrepreneurship, and improve the overall literacy of rural residents. Through the establishment of rural revitalization research center, local applied universities can participate in the practice of rural revitalization strategy more comprehensively and deeply, provide strong intellectual support for rural communities, and push rural revitalization to a higher level.

## 4.2. Build a cooperation mechanism in Industry-University-Research

The implementation of rural revitalization strategy needs comprehensive utilization of resources from all sides, and local applied universities have rich scientific research and practical experience. Constructing Industry-University-Research cooperation mechanism will help to better play the role of universities in rural revitalization. The purpose of establishing Industry-University-Research's cooperation mechanism is to integrate the academic research strength of universities, industrial practical experience and the actual needs of rural revitalization, promote industrial upgrading and scientific and technological innovation through win-win cooperation, and push rural revitalization to a higher level.

Universities have in-depth dialogues with local governments, enterprises and social organizations to understand the actual needs of rural revitalization. Through seminars, symposiums and other forms, the cooperation intentions and needs of all parties are clarified. To meet the needs of rural industrial development, universities can establish cooperative relations with local agricultural enterprises and cooperatives. Promote the upgrading of local industries through joint research and development of new products and technologies. Cooperate with relevant scientific research institutions and enterprises to jointly apply for national and local scientific research projects. In this way, universities can better apply scientific research results to the practical problems of rural revitalization. Universities can build practice bases with local governments to provide students with practical opportunities, and at the same time better understand the needs and problems of rural revitalization through field practice. Through personnel training and technical exchanges with rural enterprises and farmers, the skills upgrading and knowledge transfer of both sides will be promoted, and the innovation ability of rural areas will be enhanced. The achievements of Industry-University-Research cooperation need to be shared in time [10]. Universities spread the results of cooperation to a wider society by organizing academic seminars and technical exchanges.

Through deep cooperation with industry, universities can better promote scientific and technological innovation and inject new impetus into rural revitalization. The construction of Industry-University-Research cooperation mechanism can help rural industries upgrade more

quickly and improve economic benefits. It can better cultivate talents that meet the needs of local industries and deliver more professionals to the countryside. Through in-depth cooperation, universities can better serve the rural revitalization strategy and provide strong support for the sustainable development of rural economy and society.

## 4.3. Promote agricultural science and technology innovation

Agricultural science and technology innovation is one of the core elements of rural revitalization strategy. Local applied universities are rich in scientific research resources and practical experience, which can provide advanced agricultural technical support for rural areas and promote the sustainable development of agricultural production by promoting agricultural scientific and technological innovation.

By introducing advanced agricultural science and technology, we can improve the efficiency of agricultural production and realize the efficiency and benefit of agricultural economy. Agricultural scientific and technological innovation will help to promote the upgrading of agricultural industry, transform from traditional agriculture to modern and intelligent agriculture, and increase the added value of the industry. Provide agricultural science and technology innovation services, so that farmers can make better use of land resources, increase agricultural income and improve farmers' living standards. Scientific and technological innovation can improve the quality of agricultural products, ensure food safety, meet market demand and enhance the competitiveness of agricultural products. Introduce information technology and intelligent equipment to promote rural digital development and build a modern agricultural production system.

Local applied universities can set up agricultural science and technology extension centers, gather agricultural experts, impart the latest agricultural science and technology knowledge to farmers and provide technical guidance. Government agricultural agencies and agricultural research institutions" should establish agricultural science and technology demonstration bases, display advanced agricultural science and technology applications, and let farmers feel the benefits brought by science and technology at close range. By organizing training courses, lectures and other forms, we will cultivate farmers' cognition and application ability of new agricultural science and technology and improve their agricultural production skills. Agricultural authorities and technology development agencies should use big data technology to collect agricultural information, provide farmers with accurate agricultural production guidance and improve the scientific nature of production management. Additionally, they should establish close cooperation with agricultural science and technology enterprises and agricultural scientific research institutions, promoting agricultural science and technology research and development, and applying new technologies to actual production more quickly. Furthermore, introducing technologies such as the Internet of Things and artificial intelligence will promote the development of agricultural intelligence and improve the accuracy and automation level of production.

Promoting agricultural science and technology innovation through local applied universities can give full play to the advantages of scientific research and practice of universities, provide scientific and technological support for sustainable development for rural revitalization, and realize the modernization transformation of agriculture. This not only contributes to the prosperity of rural economy, but also provides strong support for rural communities to build modern villages that are livable and suitable for business.

## 4.4. Building digital countryside and intelligent agriculture

Digital village and intelligent agriculture are one of the key factors to promote rural revitalization. As an important place for scientific research and practice, local applied universities can lead the construction of digital villages and intelligent agriculture, provide scientific and technological support for rural revitalization, and realize the modernization transformation of agricultural production.

Agricultural authorities and technology integration teams should introduce digital and intelligent technology to optimize agricultural production process and improve the efficiency and output of agricultural production. Through digital management and intelligent agricultural technology, we can

reduce the waste of resources, improve the utilization rate of land and promote the sustainable development of agriculture. Agricultural authorities and technology implementation teams should introduce a new generation of information technology and intelligent equipment to promote agriculture from traditional labor-intensive to modern and intelligent industrial upgrading. The popularization of digital countryside and intelligent agriculture will help to improve farmers' scientific and technological literacy and enhance their ability to accept and apply new technologies.

We should build rural broadband network and digital information platform to improve the level of digital rural infrastructure and lay the foundation for agricultural informatization. Agricultural authorities and technology development organizations should promote agricultural mechanization and intelligence, introduce advanced agricultural robots and sensor technologies, and improve the automation level of agricultural production. Additionally, they should provide digital agriculture training for farmers, enabling them to skillfully use agricultural information equipment and improve the management level of digital agriculture. Through demonstration bases and training courses, we will promote intelligent agricultural technologies, including intelligent irrigation and drone inspection, and improve the scientific and technological content of agricultural production. Use big data technology to analyze the relevant data of agricultural production, provide scientific decision support for farmers, and help them make more informed agricultural management decisions. Agricultural authorities and industry stakeholders should promote the digitalization of the agricultural industrial chain, realize the digital management of the whole process from production to sales, and improve the operating efficiency of the industrial chain.

Promoting the construction of digital villages and intelligent agriculture through local applied universities can make agriculture more modern and intelligent, and improve the efficiency and sustainable development level of agricultural production. This will not only contribute to the implementation of the rural revitalization strategy, but also provide more scientific and technological support for farmers and push the countryside towards the digital age.

### 5. Conclusions

Local applied universities have unique advantages and important functions in serving rural revitalization. By establishing an effective mechanism and formulating a scientific path, universities can play a greater role in the rural revitalization strategy. However, we should also realize that some challenges that may be faced in practice, such as the popularization of science and technology and financial support, need to be solved through multi-party cooperation and joint efforts. It is hoped that universities will continue to play an active role in the journey of rural revitalization in the future and make greater contributions to building a beautiful and livable rural new era.

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### References

- [1] Zhou Mingyong. (2018). Research on the Ecological Path of Rural Revitalization in China Based on Behavioral Statistics— On the Education Supply of Applied Talents in Rural Revitalization. Modern Management Science (10), 3.
- [2] Li Yanhua. (2019). An Important Path for Universities to Serve the Revitalization of Rural Talents— Comment on "Research on the Mechanism of College Student Village Officials". Exploration of Higher Education (8), 1.
- [3] Huang Juchen,&Liu Chang. (2023). Construction of incentive mechanism for local universities to promote high-quality rural revitalization. Journal of National Education Administration College

- (5), 86-95.
- [4] Jie Tao, Du Jianguo,&Xu Lingyan. (2019). Path and policy suggestions for knowledge spillovers of universities serving rural revitalization. Agricultural Modernization Research, 40(3), 10.
- [5] Xiao Guosheng. (2020). The path of deepening the "double innovation" education of practical courses in local applied universities. Continuing education research (2), 4.
- [6] Zhou Jin, & Zhao Zhengyu. (2018). Research on the path of cultural construction under the background of rural revitalization strategy. Rural economy (9), 7.
- [7] Zhao Xin,&Liu Yan. (2021). Study on the mechanism and implementation path of the strategy of serving rural revitalization in universities for nationalities. Agricultural economy (5), 2.
- [8] Zhang Rui. (2020). Status quo and path optimization of local university think tanks serving rural revitalization in the post-epidemic era. Journal of Yunnan Administration College, 22(4), 6.
- [9] Dong Xiaojun, Wan Yantong. (2022). Research on the Mechanism, Mode and Path of Supply Chain Financial Services for Rural Industry Revitalization. academic journal of zhongzhou (11), 56-62.
- [10] Han Song, & Zhang Baoge. (2018). Path analysis of local universities serving rural revitalization strategy-taking Liaoning Province as an example. Journal of Hebei Agricultural University: Agriculture and Forestry Education Edition, 20(5), 5.