

# **Exploring the Pathways for College Students to Contribute to Digital Rural Development in the Context of Rural Revitalization**

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**Abstract:** This paper examines the significance of college students in driving digital rural development within the context of rural revitalization. It identifies various pathways through which college students can actively contribute to the establishment of a robust digital rural culture. These avenues encompass engagement in digital rural education, facilitation of rural tourism development, and preservation of cultural heritage. However, the engagement of college students in rural development is accompanied by certain challenges such as regional economic disparities, inadequate provision of both physical and intangible resources to support college students' engagement, the influence of traditional rural ideologies that impede the dissemination of innovative ideas and the adoption of emerging technologies, as well as a limited understanding of agriculture, rural life, and farming among college students. In conclusion, this study proposes a range of measures to encourage and equip college students to contribute to the advancement of digital rural development effectively. These measures include augmenting investments in rural infrastructure, formulating policies that incentivize and guide college students' engagement, establishing a comprehensive financial support system, enhancing talent services, intensifying promotion and education programs, and fostering stronger channels for communication and exchange.

**Keywords:** Rural Revitalization; Digital Rural Development; College Students' Engagement, Rural Tourism; Rural Education; Digital Culture

## **1. Introduction**

The digital rural strategy serves as both a strategic direction for rural revitalization and a

crucial element in constructing a digital China[1]. College students' engagement in digital rural development holds significant implications for enhancing agricultural modernization, promoting rural economic development, strengthening rural governance capabilities, advancing rural cultural development, and facilitating urban-rural integration[2]. In order to fully leverage the role of college students in digital rural development, cooperative efforts are required among the government, colleges, and various sectors of society to inject new impetus into rural revitalization and agricultural modernization.

## **2. The Significance of College Students in Digital Rural Development within the Context of Rural Revitalization**

### **2.1 Providing Robust Talent Support for Rural Revitalization**

Rural revitalization has become a crucial part of China's strategic layout, and talents are crucial to its achievement. [3] College students, as an integral part of the talent pool for rural revitalization, play a vital role in advancing rural revitalization and accelerating agricultural and rural modernization.

### **2.2 Bringing Unlimited Possibilities to Rural Development and Unlocking New Value through Digital Means**

College students possess abundant knowledge of modern science and specialized skills, which they can apply to rural development through learning and practice. For instance, they can utilize advanced digital techniques to precisely plan, explore, and exploit rural resources in agriculture, tourism, and culture. Moreover, through innovation and entrepreneurship, they can transform rural resource advantages into economic strengths.

### **2.3 College Students, within the Framework of Rural Revitalization, Assume a Significant Role in Propelling the Advancement of Digital Rural Construction, and They Become the Vital Link and Cohesive Force in the Pursuit of Rural Revitalization Embracing Their Role as Pioneers and Trailblazers.**

With extensive knowledge reserves and high technological proficiency, college students can integrate digital technology with the practical aspects of rural areas, advancing agricultural modernization and digitizing rural governance. [4] By engaging in innovative research in rural areas, they can explore new fields and models of digital technology application in rural contexts. They can also collaborate closely with local farmers and grassroots officials to jointly research and address practical issues in rural development.

## **3. Pathways for College Students to Contribute to Digital Rural Development**

### **3.1 Contributing to Digital Rural Education through Engagement**

College students can actively engage in the digital literacy education in rural schools through teaching support and assuming teaching positions in rural areas. [5] By fostering digital awareness, enhancing information literacy, acquiring digital skills, cultivating cybersecurity consciousness, and nurturing innovative thinking, education and practical experiences contribute to effectively elevating the digital literacy and competency of rural students.

### **3.2 Facilitating Digital Rural Development through Promoting Rural Tourism**

#### **3.2.1 Analyzing the Market Digitally and Developing Products/Services that Meet Market Demands**

College students can analyze rural tourism data to understand the needs and preferences of tourists, and develop, design, upgrade, and improve products and services that better align with market demands based on data feedback. [6] By predicting market trends and analyzing market trajectories, scientific grounds and decision-making support can be provided for the development of rural tourism.

#### **3.2.2 Utilizing e-commerce Platforms to Enhance the Tourist Experience in Rural Areas**

With the help of e-commerce platforms, college students break through geographical constraints, allowing more people to learn about and purchase rural tourism products and services. They can also provide convenient and efficient services for rural tourism visitors through features like online payments and online reservations.

#### **3.2.3 Achieving Precision Marketing and Personalized Recommendations through Digital Marketing**

College students can utilize digital marketing methods to achieve precision marketing and personalized recommendations. [7] By understanding the needs and preferences of tourists, more thoughtful and customized services can be provided. For example, outdoor adventure activities in rural areas can be recommended for visitors who enjoy outdoor sports, and historical and cultural attractions in rural areas can be recommended for those interested in traditional culture.

#### **3.2.4 Providing Intelligent Management for rural Tourism through Smart Tourism Technologies**

College students can leverage smart tourism technologies to provide rural tourism enterprises with intelligent management methods and personalized customer services. By utilizing technologies such as the Internet of Things, big data, and artificial intelligence, more precise and effective management approaches can be offered to rural tourism enterprises.

### **3.3 Facilitating digital Cultural Development in Rural Areas through Cultural Inheritance and Preservation**

#### **3.3.1 Digitizing Exemplary Rural Culture to Preserve and Pass down Traditional Heritage**

College students can employ innovative digital methods to safeguard and perpetuate invaluable rural intangible cultural heritage and folk culture. [8] They can utilize information and digital technologies to record, organize, and sustain rural intangible cultural heritage and folk culture.

#### **3.3.2 Showcasing Exemplary Rural Culture on the Internet to Enhance Global Understanding and Recognition of Outstanding Traditional Rural Culture**

Moreover, college students can utilize online resources to present the essence and uniqueness of rural culture to the world

through various social media and online platforms. Through online dissemination, China's exceptional traditional rural culture will reach global audiences, fostering international understanding and recognition of outstanding traditional Chinese culture.

#### **4. Challenges Faced by College Students in Contributing to Digital Rural Development**

##### **4.1 Imbalanced Regional Economic Development and Inadequate Hardware and Software Conditions for Supporting College Students in Digital Rural Development**

###### **4.1.1 Outdated Infrastructure Affecting the Effectiveness and Quality of College Students' Contributions to Digital Rural Development**

In some remote rural areas, outdated infrastructure poses difficulties for college students, such as unstable internet connections, limited transportation, and insufficient power supply, which hinder their work. This not only directly restricts college students' engagement in digital cultural development in rural areas but also affects the quality and effectiveness of their work.

###### **4.1.2 Insufficient Funding**

Considerable financial support is required for infrastructure construction, recruiting professional technical talent, investing in information technology, and implementing information education and training. The lack of adequate funding can undermine the enthusiasm of college students to participate in digital rural development.

###### **4.1.3 Low Technological Proficiency in Rural Areas and Insufficient Technical Support**

Compared to urban areas, rural areas generally have lower levels of informatization and technological proficiency. Insufficient attraction of high-skilled talents specialized in information technology and agricultural technology to rural areas, combined with the lack of prompt and effective technical assistance for college students and local farmers when encountering technology-related issues, result in technical difficulties and challenges when college students engage in digital cultural construction in rural areas.

##### **4.2 Limited Understanding of Rural Traditional Culture Among College**

##### **Students Hampering the Dissemination of New Ideas and the Adoption of New Technologies in Rural Areas**

###### **4.2.1 Exclusion of External Ideologies and Limited Understanding and Acceptance of New Ideas and Concepts**

Some farmers hold skeptical and exclusionary attitudes towards the engagement of college students, believing that these "young men from the city" are unfamiliar with rural life and lack understanding of rural needs and issues, making it difficult for them to play an effective role in rural development.

###### **4.2.2 Influence of traditional agricultural production methods and concerns about disrupting rural stability and the continuity of traditional agriculture**

Some farmers perceive the engagement of college students in rural development as a threat to traditional agriculture, fearing that they will introduce new varieties, technologies, and models that may impact their livelihoods. As a result, they strongly resist the digital rural development activities led by college students.

###### **4.2.3 Emphasis on short-term benefits at the expense of long-term developmental potential**

Some farmers view the engagement of college students as driven solely by short-term economic interests, without contributing to the long-term development of rural areas. This mindset leads to a negative perception of college students' digital rural development activities among farmers.

###### **4.2.4 Conservatism and lack of trust in college students**

Influenced by traditional conservative thinking and their living environment, some farmers prioritize stability and are reluctant to embrace new things or take risks. They are concerned that the engagement of college students is driven by personal gain rather than the overall interests of the rural community. This lack of trust may hinder effective communication and collaboration between college students and farmers.

##### **4.3 College Students' Limited Understanding of Agriculture, Rural Areas, and Farmers, Leading to a Detachment From the Actual Rural Life And Production**

###### **4.3.1 Superficial understanding of agriculture, rural areas, and farmers**

Many college students possess only a surface-level understanding of agriculture,

rural areas, and farmers. Their knowledge about these aspects remains shallow, and their understanding of digital rural development is also limited in scope.

4.3.2 Lack of rural living experience, unable to grasp the complexity and diversity of rural life  
Most college students lack real-life experiences in rural areas and have vague concepts about rural living. They often struggle to comprehend the intricacies and diversities of rural life. Without firsthand experience and practical engagement, they are unable to contribute meaningfully to enhancing the quality of rural life through digital rural development projects.

4.3.3 Insufficient grasp of agricultural and rural development, lacking a clear understanding of the direction for digital rural development

The modernization process of agriculture and rural areas is relatively slow, and many college students have limited awareness of the urgency and necessity of agricultural and rural development. They lack a clear understanding of the direction and focal points of digital rural development, as well as how to leverage digital technologies to drive agricultural and rural development forward.

## **5. Measures to Ensure College Students' Engagement in Digital Rural Development**

### **5.1 Augmenting Investment in Rural Infrastructure**

The government should increase investment in rural infrastructure, including transportation, communication, education, healthcare, and other basic facilities, <sup>[9]</sup> to provide the necessary hardware conditions for college students to engage in digital rural development. With access to these infrastructures, college students can immerse themselves in rural areas and carry out various digital initiatives. The government can also establish public service platforms to provide convenient and efficient information consultation, policy guidance, and other services to support college students in their digital rural development work.

### **5.2 Formulating Policies That Encourage and Guide College Students' Engagement In Digital Rural Development**

Firstly, the government can provide preferential tax policies to alleviate the

financial burden on college students during the initial stage of entrepreneurship, thereby igniting their entrepreneurial enthusiasm. Secondly, the government should strengthen the development and improvement of relevant laws and regulations to provide legal protection for college students' engagement in digital rural development. Additionally, the government can create a favorable entrepreneurial environment for college students by establishing startup incubators, organizing entrepreneurship training programs, and enhancing their entrepreneurial capabilities and competitiveness.

Moreover, the government can establish a dedicated reward system to recognize and reward outstanding college students who contribute to digital rural development. By setting an example, this approach can inspire more college students to actively participate in digital rural development initiatives.

### **5.3 Establishing a Financial Support System**

The government can collaborate with reputable financial institutions to provide various financial services such as loans and financing to address college students' financial needs. Additionally, the government can support college students' digital rural development projects by establishing special funds.

### **5.4 Improving Talent Service Mechanisms**

By implementing preferential policies, the government can attract more college students to return to rural areas and engage in digital rural development. These policies can include providing living subsidies, housing guarantees, career development opportunities, and promotion channels <sup>[10]</sup> to attract capable and motivated college students to engage in digital rural development.

### **5.5 Enhancing Publicity, Education, and Interaction, Bridging the Gap Between College Students and Rural Areas/Farmers**

Through publicity, education, and interactive activities, college students and farmers can gain a deeper understanding of the importance and development prospects of agriculture and digital rural development. It also promotes mutual understanding between college students and farmers regarding their respective perceptions and desires for digital rural

development, thus eliminating communication barriers.

## 6. Conclusion

In conclusion, the strategy of digital rural development is a crucial part of both the rural revitalization initiative and the construction of a digital China. By establishing a support mechanism involving the government, colleges, and society, college students can actively engage in digital rural development through pathways such as digital rural education, rural tourism, cultural heritage, and preservation. This not only contributes to the modernization of agriculture and the economic development of rural areas but also strengthens rural governance capacity, promotes rural cultural development, and facilitates urban-rural integration.

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