

Strengthening Rural Talent Development under China's Rural Revitalization Strategy: Evidence from NN

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Abstract: Under the strategic framework of rural revitalization, NN has actively explored innovative approaches to strengthen rural talent development. Efforts include engaging new social strata as rural advisors, cultivating professional and technical personnel, deploying young professionals to grassroots positions, and leveraging science and technology commissioners to boost industrial revitalization. Despite notable progress, challenges persist—such as talent outflow, aging workforce, weak extension services. Recent studies highlight that rural talent revitalization is increasingly linked to digital transformation, green agricultural practices, and cross-sector collaboration. To address persistent issues, a multi-pronged strategy is recommended: attract and mobilize returning local talent, enhance skill training and mentorship programs, build supportive platforms for employment and entrepreneurship, improve incentive and evaluation systems, and provide comprehensive humanistic care. These measures aim to transform rural talent from “being asked to return” to “wanting to stay,” ensuring a sustainable and dynamic workforce to support high-quality rural development.

Keywords: Rural Revitalization; Talent Development; Grassroots Governance; Agricultural Modernization;

1. Introduction

Rural revitalization has become a central strategy in China's transition from poverty alleviation to high-quality development. As articulated in the policy report, rural revitalization constitutes not only a socioeconomic imperative but also a political commitment to achieving balanced regional development. Among its five key dimensions—industrial, ecological, cultural, organizational, and talent revitalization—human capital is widely acknowledged as the most decisive factor [1].

Talent revitalization addresses the structural weaknesses of rural governance, agricultural modernization, and community resilience. The state has emphasized the need to “promote rural talent revitalization, allowing those who wish to stay and build their hometowns to feel secure, and those who wish to return to the countryside to feel confident.” This policy orientation has led to a wave of local experimentation, with NN emerging as a representative case.

Recent policy analyses suggest that local governments are increasingly integrating digital platforms for talent mapping, enabling more precise deployment and retention strategies [2-3]. This paper draws on field research conducted across multiple counties and districts in NN, including LA, WM, LQ, JN, MS, and QX. Through interviews with village leaders, surveys of rural residents, and analysis of local policy documents, the study explores practical innovations, identifies persistent challenges, and proposes strategic recommendations for rural talent development.

2. Practices in Rural Talent Development in NN

2.1 Engaging New Social Strata as Rural Advisors

NN has pioneered the integration of new social strata—such as entrepreneurs, professionals, and returnees—into rural governance through the “Rural Revitalization Advisor” program. These advisors are selected based on education, professional expertise, civic commitment, and alignment with local development goals.

In LA County, the program is managed by a dedicated leadership team that oversees recruitment, matching, and performance evaluation. Advisors are paired with villages based on industrial profiles and community needs. Their contributions range from strategic planning and industrial consulting to capacity building and conflict mediation. This model not only diversifies rural leadership but also enhances the

professionalism and responsiveness of village governance [4-5].

2.2 Leveraging Professional and Technical Talent

WM District has adopted a comprehensive talent strategy anchored in the principle of “attracting, retaining, and empowering.” The district has implemented competitive selection mechanisms, performance-based incentives, and rotational leadership programs to revitalize its grassroots cadre system.

A key innovation is the establishment of agricultural talent hubs, including the Citrus Technology Park and the Vocational Training Plaza for Modern Agriculture. These platforms host expert teams from domestic and international institutions, including the Chinese Academy of Sciences and the Citrus Research Institute. Over 800 agricultural professionals and 1,100 practical rural talents have been mobilized, supported by ¥10 million in annual funding. Training formats include livestreamed workshops, field demonstrations, and mentorship programs. Similar integrated training hubs have been shown to significantly improve adoption rates of modern agricultural technologies in other provinces [6-7].

2.3 Deploying Diverse Talent to Rural Frontlines

LQ District has prioritized the deployment of young professionals to rural service positions. Through streamlined recruitment procedures and targeted incentives, the district has recruited 79 township-level staff and 61 grassroots service workers, including “Three Supports and One Assistance” graduates, special-post teachers, and rural doctors.

These professionals engage in household surveys, policy outreach, and grassroots governance. Their presence has improved service delivery in education, healthcare, and agricultural extension, while also enhancing the credibility and capacity of village-level institutions. The district has also introduced one-time settlement subsidies and career advancement pathways to retain talent. Recent evidence suggests that such targeted deployment programs can reduce rural service gaps by up to 25% within three years [8].

2.4 Utilizing Science and Technology Commissioners

JN District has institutionalized the role of science and technology commissioners, integrating

academic research with rural development. Since 2022, over 10 university teams have conducted field research in local villages, translating theoretical knowledge into practical solutions.

The Baboshan Lemon Base exemplifies this model. Operating under a “company + commissioner + cooperative + base” framework, the base generates ¥9 million in annual output and employs 80 villagers. Commissioners have conducted 184 service visits, benefiting 1,840 villagers and establishing 10 demonstration bases. Training topics include eco-friendly pest control, precision irrigation, and post-harvest processing. Similar commissioner-led initiatives have been shown to accelerate rural industrial upgrading in other provinces [9-10].

2.5 Strengthening Grassroots Cadres

MS County has restructured its village leadership selection process to prioritize local entrepreneurs, university graduates, and veterans. Of the 1,281 newly elected committee members, 318 are rural entrepreneurs, 89 are returning migrant workers, and 53 are local graduates.

The county has implemented a star-rated evaluation system, with 80 Village organization rated three stars or above. Media platforms are used to highlight exemplary leaders, fostering a culture of peer learning and public accountability. This approach enhances organizational cohesion and aligns leadership with community aspirations [11].

2.6 Mobilizing Financial Talent

QX District has partnered with Bank to deploy 60 young financial professionals to village-level youth organizations. These individuals serve as part-time youth leaders, promoting financial literacy, entrepreneurship, and cooperative development.

Support measures include housing subsidies, education benefits, and employment incentives. The district has also established green channels for rural employment and entrepreneurship, creating a favorable ecosystem for talent retention and industrial growth [12-13].

3. Challenges in Rural Talent Development

3.1 Talent Outflow and Aging Workforce

The acceleration of urbanization has led to a significant outflow of rural youth, resulting in demographic imbalances and labor shortages. In NN, over 70% of remaining agricultural workers

are aged 51 and above, with limited capacity for innovation or sustained engagement. This demographic shift not only reduces the available labor force but also weakens the potential for adopting new technologies and practices in agriculture.

Training programs for vocational farmers remain outdated, often relying on passive lectures rather than hands-on learning. Many programs fail to incorporate modern agricultural techniques, digital tools, or market-oriented skills. Recent research emphasizes that experiential and digital training methods can significantly improve adoption of modern agricultural techniques among older farmers, but such approaches are still rare in NN's rural areas. The lack of digital literacy and exposure to modern agricultural techniques further limits productivity and adaptability, creating a cycle where older farmers are less competitive in the labor market, which in turn discourages younger generations from returning to rural work.

3.2 Recruitment, Utilization, and Retention Difficulties

Despite policy efforts, many rural areas struggle to attract and retain talent. Barriers include low compensation, limited career advancement opportunities, and inadequate infrastructure such as housing, healthcare, and education services. Professionals often lack awareness of available policies, and local governments sometimes lack the capacity to implement targeted recruitment strategies effectively.

The absence of integrated platforms for talent engagement—such as incubators, cooperatives, or innovation hubs—reduces the effectiveness of existing programs. Without clear pathways for career development, many talents opt to leave or disengage after short-term assignments. Studies from other provinces show that integrated rural innovation hubs can increase retention rates by over 20% within two years, suggesting that NN could benefit from similar models if adapted to local conditions.

3.3 Shortage of Agricultural Extension Personnel

Agricultural extension services face systemic challenges, including understaffing, aging personnel, and weak incentive structures [14]. In many townships, extension workers lack access to modern equipment, research funding, or professional development opportunities. This limits their ability to provide timely and relevant

technical guidance to farmers.

Performance evaluation systems are poorly implemented, with little differentiation between high and low performers. This undermines motivation and accountability, leading to suboptimal service delivery. Without reforms to improve incentives, training, and resource allocation, extension services will continue to lag behind the needs of modern agricultural production.

3.4 Inadequate Talent Deployment Mechanisms

Mechanisms for deploying talent to rural areas remain fragmented. Issues such as misallocation of teachers and doctors, low compensation, and poor working conditions persist [15]. Village-level leadership roles face the “three difficulties and one low” challenge: difficult to select, difficult to serve, difficult to retain, and low compensation.

The lack of institutional support—such as housing, healthcare, and social security—further discourages long-term engagement. In some cases, talented individuals are assigned to positions that do not match their skills, leading to inefficiencies and frustration. Without systemic reform, talent deployment will remain reactive and unsustainable, failing to address the structural needs of rural revitalization.

3.5 Weak Innovation Capacity

Limited funding, outdated equipment, and lack of research infrastructure constrain rural innovation. Many townships lack basic laboratory facilities, making it difficult to conduct soil testing, pest analysis, or crop trials. This hampers the ability to develop locally adapted solutions to agricultural challenges.

Recruitment systems often misplace qualified professionals, while non-specialists occupy technical roles. In some cases, experts are seconded to unrelated departments, disrupting continuity and focus. These structural inefficiencies hinder the translation of research into practice, slowing the pace of technological adoption and industrial upgrading in rural areas.

4. Policy Recommendations

4.1 Enhancing Talent Attraction Mechanisms

Establish multi-tiered talent databases and conduct comprehensive surveys to identify local human resources. Promote success stories through media campaigns and develop liaison systems to maintain

regular contact with potential returnees.

Encourage village organizations to integrate returning talent into leadership roles and provide clear pathways for career development. Offer honorary titles, public recognition, and community engagement opportunities to enhance social capital.

4.2 Strengthening Talent Training and Mentorship

Implement multi-tiered training programs tailored to local needs. Partner with universities and research institutions to provide technical guidance, mentorship, and joint projects. Establish “Rural Skills Exchange Centers” and “Master Studios” to facilitate peer learning.

Organize talent competitions and demonstration projects to showcase best practices. Use benchmarking and cross-regional exchanges to broaden perspectives and stimulate innovation.

4.3 Improving Talent Services and Incentives

Develop integrated service platforms for employment and entrepreneurship. Offer financial subsidies, interest-free loans, and tax incentives for rural startups. Recognize contributions through professional title evaluations and public awards. Provide housing, healthcare, education, and social security support to eliminate barriers and foster long-term engagement. Establish grievance redressal mechanisms and feedback loops to improve service delivery.

4.4 Refining Talent Policy Frameworks

Reform evaluation systems to link performance with promotions, compensation, and recognition. Expand opportunities for rural talent to participate in academic exchanges, short-term training, and advanced studies.

Introduce incentive schemes for grassroots service and prioritize rural talent in institutional recruitment. Create flexible career pathways that allow for mobility between rural and urban sectors.

4.5 Promoting Humanistic Care

Organizing regular communication and emotional support mechanisms is essential for retaining rural talent. Local governments should hold periodic forums and feedback sessions to understand the aspirations, challenges, and needs of grassroots professionals. These interactions help build trust and foster a sense of belonging.

In addition, symbolic gestures—such as holiday greetings, public recognition, and community

events—can reinforce emotional ties between talent and their hometowns. Establishing a three-tier leadership contact system (city–county–township) ensures that rural professionals receive timely support in areas such as housing, healthcare, childcare, and career development.

The construction of transitional housing, provision of living subsidies, and creation of “residential + work contact” models can significantly reduce the cost of rural engagement. By aligning personal values, professional goals, and community identity, humanistic care transforms rural service from a temporary assignment into a meaningful life choice.

5. Conclusion

As China enters a new phase of rural modernization, talent revitalization stands as both a strategic necessity and a moral imperative. NN’s experience illustrates the potential of local innovation, cross-sector collaboration, and policy responsiveness in building a resilient rural workforce.

The city’s multi-pronged approach—engaging new social strata, cultivating technical experts, deploying young professionals, and institutionalizing science and technology support—offers valuable lessons for other regions. At the same time, persistent challenges such as talent outflow, aging demographics, weak extension systems, and limited innovation capacity must be addressed through systemic reform.

This paper proposes five strategic directions: enhancing attraction mechanisms, strengthening training and mentorship, improving services and incentives, refining policy frameworks, and promoting humanistic care. Together, these measures can transform rural talent development from a reactive task into a proactive strategy, ensuring that rural revitalization is not only sustainable but also inclusive and empowering.

Looking ahead, future research should explore the long-term impact of talent policies on rural governance, industrial transformation, and social cohesion. Comparative studies across provinces and integration of digital platforms for talent mapping and engagement may further enrich the discourse. Ultimately, the success of rural revitalization depends not only on infrastructure and investment, but on the people who choose to stay, return, and build.

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