



Problems and Optimization Countermeasures of Digital Government Construction under Rural Governance

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Abstract. Chinese government governance is undergoing a digital transformation, while rural governance, as the cornerstone of national governance, has encountered a bottleneck in digital government construction. The process of governance in digital villages and the construction of governance capacity of digital government show a mismatch, which poses a serious challenge for the improvement of digital village governance capacity. On the basis of analyzing the connotation of digital rural governance, the current situation of digital rural governance is sorted out, the realistic obstacles constraining the digitization of rural governance are analyzed, and the requirements of digitization of rural governance are summarized, and the corresponding policy recommendations are given on this basis.

Keywords: rural governance; digital government; digitization

1 Introduction

Effective governance is a key step towards rural revitalization. In the strategy of rural revitalization, rural governance is the most basic link, and good or bad governance has a bearing on whether the rural revitalization strategy can be successful. The operation of the rural governance system is of great significance to the implementation of the rural revitalization development strategy in China in the new era and the promotion of national governance modernization. In the context of artificial intelligence, big data, and Internet + construction, the implementation of the rural revitalization strategy must grasp the major historical opportunities brought about by digital technology. However, at the present stage, there are still some problems in the construction of digital government in the process of rural governance in China, which does not give full play to the positive role of digital technology, so this study, through the analysis of the existing text, puts forward the opinions of enhancing the construction of digital government in the process of rural governance, so as to promote the application of the construction of digital government in the process of rural governance, as well as to promote its adaption to the implementation of the strategy for the revitalization of the countryside in the new era.

2 Connotation of digital governance in rural governments

Rural governance is the cornerstone of national governance, and comprehensive rural revitalization cannot be achieved if the countryside lacks effective governance. Since the reform and opening up of China, the economic and social development of rural areas has been greatly improved. However, with the advancement of urbanization and industrialization, a large number of rural laborers, especially those from the countryside, have flocked to the cities and towns, resulting in the phenomenon of "hollowing out" of the countryside. Therefore, in recent years, the CPC Central Committee and the State Council have introduced a series of national strategies, such as poverty alleviation and rural revitalization, emphasizing the focus on promoting rural governance¹. However, there are still problems with the current rural governance, such as: low awareness and participation of the heads of grass-roots organizations, low efficiency of services, incorrect culture, lack of scientific decision-making, and lack of effective governance methods. As an important means of promoting the modernization and refinement of social governance, digital technologies such as artificial intelligence, cloud computing and big data have received widespread attention from all sectors of society, providing an important impetus for achieving the goal of effective rural governance.

Rural governance is a basic element of social governance and part of the governance of a country; it is the application of public power to rural society and the joint participation of the State and local governments in the process of solving rural problems. At present, China's rural areas are at the historical intersection of "informatization-digitalization-modernization", and digitization is an important means to realize the modernization of rural governance(**Fig. 1**). Under the dual promotion of "Digital China" and "Digital Countryside", China's rural digital infrastructure has been further developed, "Internet + community", "Internet + community", "Internet + government services" and other modes gradually extended to the countryside, all over the world have carried out a lot of exploration and practice, emerged a series of typical experience, such as Beijing Nankou Town smart village, Shanghai Baoshan "community", Yangjiang City, Guangdong Province, "smart village + village services", "smart village + village services", "smart village + village services". "smart village + village management", Deqing, Zhejiang Province, "rural governance digital platform"and so on². The use of digital means of rural governance has not only enriched the mode of governance, but also reflected the modernization of the country's governance capacity, and provided experience for promoting the construction of digital agriculture and rural areas.

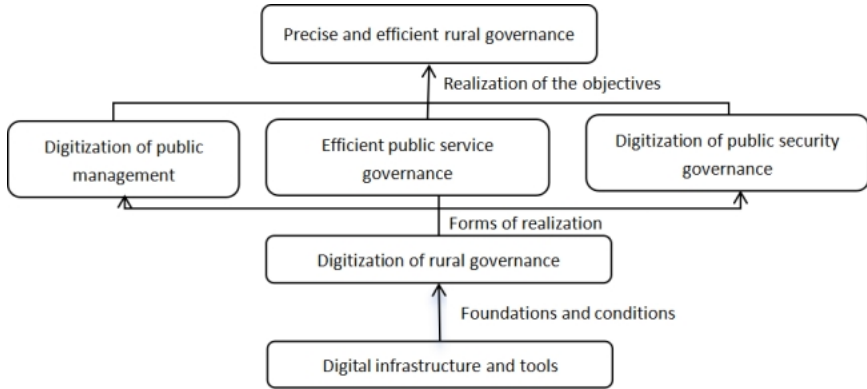


Fig. 1. Architecture of digital government building for rural

3 Problems in the construction of digital government for rural governance

3.1 Lack of standardization of rural governance and low level of data sharing

First, there is a lack of standards and norms, which is mainly manifested in the lack of technical standards established for the content, technical application and data exchange of digital governance in rural governance. There is a lack of unified management standards for rural digital government management, which has led to regional differences. The progress of rural digital government construction varies. Secondly, there is a lack of unified standards and regulations, relatively outdated data collection methods, and difficulties in data sharing³. Some grassroots managers do not understand the existing data resources acquired, and digital management is still at the stage of resource integration. Grassroots managers believe that there are still problems with digital management, with insufficient data sharing and openness between departments, insufficient clarity in the underlying database, and villagers have indicated that a unified platform that can provide villagers with such one-stop services has not yet been established in their villages. Third, the security of the information platform has made grass-roots cadres reluctant to participate in rural governance.

3.2 A mature operational mechanism has not been formed and the effectiveness of rural digital government governance is not obvious

Currently, China's rural digital governance system is dominated by government departments and government funding, with a relatively low proportion of social capital and low enthusiasm for grassroots participation. This hinders both the introduction of new digital government governance concepts and the absorption of digital professionals, resulting in the focus of rural digital government construction in various places being concentrated on the updating of infrastructure and the construction of information technology platforms. The lack of research on the needs of farmers and the

lack of a perfect mechanism have led to the function of the platform can not meet the needs of the platform, and the operation and management of the later stage of the operation and management of the platform is also a lack of updating, which restricts the subjective initiative of the farmers, and also restricts the level of digitalization and the development of digitalization and the speed of rural governance⁴. At present, China's rural "digital government" platform has been initially established, but due to the lack of third-party maintenance organizations and professional operation team, its data update work is not perfect. Problems such as the lack of timely feedback from the online public and the idleness of digital equipment occur from time to time.

3.3 The overall quality of the main body of governance is low, and participation in rural governance is not highly motivated.

General Secretary Xi Jinping emphasized in an important speech at a symposium on cybersecurity and informatization that "competition on the Internet is ultimately a competition for talent", and that the loss of elites, the exodus from rural areas, and the aging of the population are all serious problems. Relevant studies predict that China's agricultural employment rate will continue to fall below 10 percent in 2035, with the rural population remaining at about one-tenth of that level. At the same time, due to the lack of grassroots education and popularization of network-related issues in the countryside, most villagers' understanding of digital governance is still limited to the publication of laws and regulations and the dissemination of information through the Internet⁵. The state of "building but not using". The survey shows that some rural grass-roots cadres urgently need to game network technology-related training, and some agriculture-related cadres reflect the need to accelerate the construction of digital management platform training and training, promotion team⁶.

4 Countermeasures to promote the construction of a digital government for rural governance

4.1 Strengthening the integration of rural governance resources and establishing a unified rural digital government building platform

First, a "one-stop" platform for the integration of online government services has been established. On the basis of the provincial government portal, local government service resources at all levels have been integrated to create a unified "converged media + government services" integrated portal covering the rural grass-roots level, providing rural residents and farmers with "one-stop" government services.

Second, an information-sharing and exchange platform will be established to realize integrated construction. Through the establishment of an information exchange catalog, real-time data will be provided to the platform to realize the interoperability and sharing of information resources across regions, levels and departments⁷.

Third, improve the rural digital government construction standards. A unified data standard, big data indicator system and database resource coding system will be estab-

lished, and a unified evaluation system for data management and common governance and sharing will be set up to support rural construction behavior in monitoring and evaluating the governance level of the national rural governance demonstration area.

4.2 Promoting the digitalization of the content of digital government management and the digitalization of rural governance at a hierarchical level

On this basis, we will give full play to the integration of digital technology and the spillover effect of information and knowledge, focusing on "smart cities" and "digital villages", applying digital technology to rural public management, public security and public services, and digitizing various factors of governance in the countryside. Regional digitization of rural governance factors⁸. Pilot demonstrations of big data platforms for rural governance can be carried out in pilot areas, and comprehensive experiments can be conducted on the digitalization of rural social governance, such as the integrated monitoring of rural natural resources by remote sensing, telemedicine, tele-elderly care, and smart policing. People's livelihood "one map" coordinated public opinion, intelligent emergency command, and so on. A series of digital rural governance and rural governance innovation projects have been carried out in the areas of rural public security, public services and public affairs management.

4.3 Encouragement of the participation of a number of main bodies and improvement of the operation mechanism for the construction of rural digital governments.

First, it is necessary to highlight the subjectivity of farmers and accelerate the training of digital farmers. On the one hand, on the basis of the experience already gained, the right of villagers to participate should be fully respected, and their digital quality should be upgraded so as to ensure that they have sufficient space for participation and the basic ability to do so. First of all, under the guidance of digital thinking, we should transform "meeting villagers' needs" into "promoting villagers' participation".

Secondly, under the perspective of administrative power, citizen participation is a combination of procedural and substantive rights⁹. Through the digital platform, the government will disclose the basic information required for rural governance to villagers, so as to guarantee their right to know and create preconditions and safeguards for their participation in rural governance. From the perspective of procedural legitimacy, the villagers' right to participate is a procedural right and interest, a procedural right to realize the real interests. On this basis, the government should expand the procedural enforcement mechanism for effective participation of villagers and improve the digital quality of villagers on the basis of following the principle of equality and the principle of differentiation¹⁰. It is also necessary to establish a way of relief in case of failure to fulfill, so that villagers can better participate in digital village governance.

thirdly, young and high-quality talents should be introduced to the grass-roots level in the countryside. We will improve the environment for entrepreneurship and em-

ployment in the countryside, vigorously implement the "Return of the Village Sage" project, attract highly educated, financial and economic talents to return to their hometowns and take root in the countryside to develop rural industries, set up a digital government platform for the countryside, and actively promote the development of the rural economy, so that they can be lifted out of poverty but not return to it, and thus achieve the ambitious goal of revitalization of the countryside.

5 Conclusion

The exploration of rural governance practices in the new era has manifested itself in the transformation of governance modernization, and the construction of digital government has responded to the needs of informatization. Digital government is widely used and plays an active role in the process of rural governance, which can narrow the development gap between towns and villages in the process of new urbanization. Therefore, it is necessary to establish a unified rural digital government platform, promote the digitization of governance content, and encourage multiple subjects in the countryside to join the governance process, so as to realize digital rural governance and effectively.

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