



Study on the Path of Equalization of Urban and Rural Public Weather Services in the Context of Rural Revitalization

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Abstract. Against the backdrop of the rapid advancement of the rural revitalization strategy, the equalization of urban and rural public meteorological services is an important guarantee and support for the promotion of integrated urban and rural development and the comprehensive construction of a modern socialist country. Equalization of public meteorological services is an important part of equalization of public services, which is of certain significance for the effective prevention and reduction of major meteorological disasters and the maintenance of citizens' life and property safety. This paper analyzes the current problems of equalization of public meteorological services in urban and rural areas of Jiujiang City, and provides practical solutions for equalization of public meteorological services in urban and rural areas of Jiujiang City.

Keywords: rural revitalization, meteorological services, equalization.

1 Introduction

The report of the 20th CPC National Congress clearly puts "equalization of basic public services and basic modern living conditions in rural areas" as one of the overall objectives of China's development in 2035. In the context of the current rural revitalization strategy, the problem of unbalanced development between urban and rural areas is becoming more and more prominent, and the equalization of public services between urban and rural areas has become one of the focuses of social attention, and as an important public service area concerning people's livelihood and agricultural production, the equalization of meteorological services has become particularly important. The National Meteorological Development "14th Five-Year Plan" clearly puts forward the guiding ideology of improving the ability and level of meteorological services to safeguard the country's economic and social development and to build a community of human destiny. It is the original intention and mission of meteorological services to ensure people's prosperity and serve their happiness and well-being.^[1]

Jiujiang City is located in the northernmost part of Jiangxi Province, between longitude 113°57' -116°53' East and latitude 28°47' -30°06' North, in the subtropical

monsoon climate zone. In recent years, meteorological disasters have occurred frequently in Jiujiang City, resulting in heavy losses. Under the same natural disasters, the losses and impacts caused by rural areas are more serious than those in urban areas, highlighting the serious structural imbalance in the supply of basic public meteorological services in urban and rural areas. Therefore, it is of great significance to study the path of equalization of urban and rural public meteorological services in Jiujiang City to accelerate the implementation of the strategy of rural revitalization and promote the integrated development of urban and rural areas.

2 Public Weather Services and Equalization

2.1 Connotation of Public Meteorological Services

Public meteorological service refers to the process by which meteorological departments utilize all kinds of public resources or forces to provide meteorological information and technology to governmental decision-making departments, the public and production departments. Public meteorological service is an important part of public service, which is of great significance to disaster prevention and mitigation, response to meteorological changes, smooth economic and social development, and the coordinated development of human beings and nature.^[2]Public meteorological service is a comprehensive system covering many aspects, aiming at providing comprehensive, accurate and timely meteorological information and services to the public.

2.2 Connotation of Equalization

In the equalization of public meteorological services, "equalization" refers to the guarantee of equal opportunities for all people to obtain meteorological information and services, and all people, whether in urban or rural areas, and whether in affluent or impoverished areas, should have access to meteorological services of the same quality and level.^[3] The equalization of public meteorological services in urban and rural areas means that, with the Government as the main body and with the focus on the "three rural areas", all public service resources should be reasonably allocated between urban and rural areas, so that the different residents of urban and rural areas can enjoy public meteorological services of roughly the same quantity and quality.

3 Major Problems in the Equalization of Public Meteorological Services in Urban and Rural Areas in Jiujiang City

3.1 Uneven Differences in Service Resources

Jiujiang City is rich in meteorological service resources, with relatively dense meteorological observation stations, wide coverage, timely updating of observation equipment, and many professional and technical personnel, who are able to issue timely and more accurate meteorological early warning and forecasting information, and provide

more comprehensive and fine meteorological services. In rural areas, on the other hand, there is a relative lack of meteorological service resources, and in some areas there are even problems such as aging observation facilities,^[4] lagging technical equipment, etc. The number of service personnel is small, the technical level is relatively low, and the timeliness and accuracy of forecast information is far inferior to that of urban areas, which results in the insufficiency of meteorological services in terms of coverage and quality.

3.2 Significant Urban-Rural Differences in the Dissemination Capacity of Meteorological Services

At present, the dissemination mechanism of public meteorological service products in Jiujiang City is not perfect enough and the dissemination capacity is not sufficient, the coverage of meteorological warning information services is not wide, and the warning notices of sudden meteorological disasters are not sufficient to achieve efficient, timely and fast dissemination.^[5-6] Residents in urban areas usually have more convenient access to meteorological information because they have easier access to high-speed Internet and cell phone signals, while residents living in some remote rural areas are limited by insufficient network coverage, making it difficult for them to receive meteorological forecast and warning information in a timely manner, and the convenience of information access may be lower, and traditional media such as radio may be the main means of dissemination, with very limited dissemination channels.

3.3 Large Gaps in the Construction of an Integrated System of Meteorological Disaster Prevention

As a result of the imbalance in the level of economic development of various regions and the varying degrees of importance attached by various departments to meteorological disaster prevention and mitigation, there are wide differences in the organizational capacity for meteorological disaster prevention and mitigation, and the responsibility system for meteorological disaster prevention and mitigation in some towns and villages has not yet been fully implemented. Therefore, residents in urban areas have generally received a higher level of disaster prevention and mitigation knowledge training, and have certain self-rescue and mutual-rescue capabilities, and are able to effectively respond to meteorological disasters, and urban areas have a more comprehensive meteorological disaster prevention and mitigation system and emergency rescue mechanism, which can quickly respond to disaster events, organize effective rescue operations,^[7] and reduce the losses of disasters. On the other hand, residents in rural areas have a relatively low level of awareness and knowledge of disaster prevention and mitigation, lack knowledge and skills to cope with disasters, have to improve their ability to withstand disasters, are relatively weak in disaster prevention and mitigation, lack professional emergency rescue forces and resources, and lag behind in the rescue response to disaster events.

3.4 Inadequate Sectoral Institutional Mechanisms

At present, the meteorological department is practicing a dual financial system, which to a certain extent promotes the improvement of the level of decision-making meteorological services, but objectively also creates a situation of insufficient financial input. The development of the meteorological cause requires a large amount of financial support, and the cultivation of talents and sophisticated instruments all need a certain amount of funding to provide support. Nowadays, China's grass-roots meteorological departments of the public meteorological cause of the funding mechanism is not perfect, mainly from the central financial allocations, local financial subsidies and meteorological science and technology services. Moreover, under the three-level vertical management system of province-municipality-county, due to financial constraints, the more the grass-roots meteorological departments receive fewer development funds, which results in a large gap between the construction capacity of various types of base stations and the service capacity of the grass-roots meteorological departments.^[8]

4 The Realization Path of Equalization of Public Meteorological Services in Urban and Rural Areas of Jiujiang City

4.1 Promote the Sharing and Optimal Allocation of Meteorological Service Resources between Urban and Rural Areas

Setting up cross-departmental coordination bodies for urban and rural meteorological services, including meteorological departments, agricultural departments and urban and rural planning departments, to coordinate the integration and sharing of urban and rural meteorological service resources. Relevant policies and norms have been formulated to clarify the mechanisms and channels for sharing urban and rural meteorological service resources, encouraging all parties to actively participate in sharing and collaboration. Establish meteorological service stations in rural areas to cover all regions and provide comprehensive meteorological services. Through the construction of meteorological service networks, the optimal allocation of urban and rural meteorological service resources is realized, and the needs of urban and rural residents for meteorological services are guaranteed to be met.^[9] Strengthen the training and skill enhancement of rural grassroots meteorological service workers to improve their knowledge and understanding of meteorological service needs. Promote exchanges and cooperation between urban and rural meteorological service workers, facilitate the sharing of experience and technology, and enhance the level and quality of meteorological services.

4.2 Building a Complete Urban and Rural Meteorological Service System Supported by Digital Technology

Gradually improving meteorological observation stations in townships and rural areas, including automatic weather stations and meteorological radars, in order to realize real-

time monitoring and collection of meteorological data, and combining technological means such as the Internet of Things and big data to realize the real-time transmission and sharing of meteorological monitoring data and ensure the timeliness and accuracy of the data. Developing a digitalized meteorological warning system based on data analysis and artificial intelligence technology for accurate prediction and timely release of meteorological disaster warning information in rural areas. Disseminate early warning information to rural areas through various channels such as cell phone text messages, APPs, and television, so as to improve farmers' knowledge of and ability to respond to meteorological disasters. Digital means have been utilized to carry out rural meteorological science education, producing meteorological science videos and publicity posters, etc., so as to improve farmers' understanding and awareness of meteorological knowledge.

4.3 Sound Meteorological Disaster Defense Capabilities

Sound meteorological disaster defense capability is a key initiative to ensure the safety of farmers' lives and property and to promote sustainable rural development. Rural areas often face a variety of meteorological disasters, such as floods, droughts and freezes, which have a serious impact on agricultural production and farmers' lives. Governments at all levels and relevant departments should establish comprehensive emergency plans and emergency response mechanisms, and clarify the responsibilities and tasks of all parties to ensure that rescue and response work can be carried out quickly and effectively when disasters occur, so as to minimize the losses caused by disasters. Relevant departments should strengthen collaboration, enhance the training and team building of rural meteorological disaster prevention and mitigation personnel, continuously improve the level of rural meteorological disaster defense, and provide solid personnel support for rural disaster defense.

4.4 Advancing Sectoral Reforms

Further improving the dual-planning system and public financial guarantee mechanism in line with the dual-leadership and management system for meteorological work can satisfy the central government's overall planning and guidance of meteorological work, while giving full play to the role of local governments in meteorological services and management. Strengthening the local financial guarantee can enable local meteorological departments to better fulfill their service responsibilities and meet local needs. Adhere to the development direction of public meteorology to promote the comprehensive reform of grassroots meteorological agencies, sinking the center of gravity of public meteorological services, moving the center of gravity of management downward, and really putting meteorological management in place by the government. Promote the socialization of public meteorological services, reform the provision of public meteorological services, make full use of social resources, fully mobilize social forces, support social organizations and manage social organizations in accordance with the law, and support and guide their effective participation in public meteorological services.

5 Conclusions

Under the background of rural revitalization strategy, this paper puts forward a series of feasible paths and countermeasures by exploring the connotation, status quo and existing problems of urban and rural public meteorological service equalization, which will be helpful for gradually narrowing the gap between urban and rural meteorological service levels, realizing the goal of urban and rural public meteorological service equalization, and providing a strong support for the implementation of rural revitalization strategy.^[10] At the same time, it will also promote the continuous improvement and enhancement of China's meteorological service system, better meet the needs of the general public for meteorological services, and promote the integration of urban and rural development in China to a new level.

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