

# Research on the Integration Mode of Urban and Rural Economic Development Based on “Internet +”

Ming Yang

School of Information  
Yunnan University of Finance and Economics  
Kunming, China  
705515930@qq.com

Tilei Gao

School of Information  
Yunnan University of Finance and Economics  
Kunming, China  
gtllel@ynufe.edu.cn

Ying Li\*

School of Information  
Yunnan University of Finance and Economics  
Kunming, China

Yijia Li

School of Information  
Yunnan University of Finance and Economics  
Kunming, China

Wanyu Xie

Personnel Department  
KunMing Metallurgy College  
Kunming, China

**Abstract**—Under the background of the new era, use the idea of "integration of urban and rural development" and "Internet +" to explore a new practice mode that helps to tackle poverty and help rural revitalization and development. The new model does not increase the burden of the government, applies internet technology, takes rural industrial products and livable ecology as the breakthrough point, aggregates the material and cultural needs of urban and rural areas, constructs an internet platform for urban and rural exchanges, and promotes the two-way exchange of material and cultural between urban and rural areas, so as to promote the two-way flow of urban and rural socio-economic factors, implement the key to poverty alleviation, and realize the strategic goal of rural revitalization.

**Keywords:** *urban-rural coordination, urban-rural composition, rural revitalization, “Internet +”, urban and rural economy*

## I. INTRODUCTION

The coordinated development of economy and society is the fundamental goal of governing the country and government. However, unbalanced development is the normal state of economic and social development. The report of the Nineteenth National Congress of the Communist Party of China clearly put forward the idea of "establishing and improving the system, mechanism and policy system of urban-rural composition and development". Among them, urban-rural composition refers to the optimal combination of urban-rural natural elements, economic elements, spatial

elements and personnel elements. The development of urban-rural economic composition refers to the integration of urban and rural areas, realizing the smooth flow of economic factors, the reduction of interest distribution pattern, the optimization of ecological space, and the blending of spiritual civilization, so as to achieve the integrated development of co-construction, co-existence, co-prosperity, co-ownership, sharing and sustainable development.

In the report of the Nineteenth National Congress, General Secretary Xi Jinping put forward many new concepts and expressions on the work of "agriculture, countryside and farmers", and put forward the strategy of Rural Revitalization for the first time. Therefore, how to narrow the gap between urban and rural economy? How to maintain the sustainable and coordinated development of urban and rural economy? How to realize the real composition of urban and rural economy? These problems become particularly important at this stage. In view of these problems, this article, with the idea of "integration of urban and rural development" and the way of "Internet +", explores a new pattern of urban and rural economic composition and development. This model does not increase the burden of the government. By gathering and guiding all sectors of society, it promotes the material and cultural exchanges between urban and rural areas, and promotes the composition and development of urban and rural social and economic elements. It not only helps to alleviate poverty at the current critical stage, but also breaks the current pattern of urban-

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\*Corresponding author

rural dual economy and provides a feasible way for the integration and development of urban-rural economy.

## II. LITERATURE REVIEW.

The imbalance of urban and rural economic development is a prominent manifestation of the main contradictions in our society in the new era. At present, there is still a relatively obvious urban-rural dual economic structure in China. The urban economy is dominated by new service industries, while the rural economy still retains the economic system dominated by traditional agriculture. There is a lack of effective integration between the two. In this regard, Hao Guilin believes that only urbanization can break the current dual economic structure of China, which is the only way from developing countries to developed countries[1]. In order to achieve urbanization, Deng Dahong thinks that there are still shortcomings in this way of promoting rural economy through urban economy[2]. To achieve economic exchanges between urban and rural areas, the core is to use urban science and technology, especially those related to agriculture, to transform the traditional agriculture in rural areas, to extend the industrial chain of agriculture with urban industry, and to enrich rural industries with urban internet service industry. Reference [3] also thinks that industrialization should be driven by informationization and that the tertiary service industry should be continuously expanded and developed while using scientific and technological on the premise of ensuring the stable development of Agriculture.

It can be seen from the above that, in the era of digital economy, the difference of informatization has caused the digital divide between urban and rural areas, which determines the differential development of urban and rural economy; Reference [4] thinks that narrow the digital divide between urban and rural areas, it is necessary to speed up the information exchange between urban and rural areas and solve the communication problems. Reference [5] believes that solving the "new digital divide" between urban and rural areas cannot narrow the digital gap between urban and rural areas only by solving the "physical access" problem. With the continuous development of China's economy, the gap between urban and rural areas in infrastructure has been narrowing. Internet access is no longer the main cause of the new digital divide between urban and rural areas. Therefore, to bridge the new digital divide between urban and rural areas, we should improve the rural economy, develop rural information education, and improve the information literacy of rural residents. Start with aspects. It can be seen that only solving the problem of informationization materially cannot improve the current pattern of urban and rural economy. It is also necessary to cultivate rural population's information awareness, improve farmers' traditional concepts in education and enhance their subjective initiative in using Internet technology. In this regard, reference [6] found that the main reasons why rural people are reluctant to use Internet technology are as follows:

- 1) Lack of interest in the use of the Internet
- 2) Lack of sufficient knowledge to use Internet products

3) High cost of Internet connection

4) Lack of understanding of the nature of the Internet and technical capabilities

In summary, to promote the integration of urban and rural economy, we need to rely on information technology, that is, based on the Internet platform. However, it is still not enough to apply Internet technology to the development of urban and rural economy. Besides the subjective initiative, it also includes the objective transformation of industrial structure. In view of the above mentioned problems, this article will combine the concept of "Internet +" to solve the problem fundamentally, and propose a coordinated mode of urban and rural based on "Internet +". Finally, it will form a two-way communication between capital, technology, talents and materials under the impetus of information flow [7].

## III. THE CONCEPT AND CHARACTERISTICS OF URBAN-RURAL SYNERGY.

The Urban-Rural Coordination model is different from the traditional urban-rural communication, but a complementary two-way communication model, which requires both sides to be the main body, providing each other with channels of exchange of funds, talents, technology and materials. On the one hand, it can solve the consumption needs of urban residents, on the other hand, it can improve the production and marketing problems of rural residents, and help rural areas to realize industrial transformation, so as to form a mutually beneficial, comprehensive and coordinated sustainable development model. The model mainly includes the following characteristics:

*A. Urban-rural synergy is a mode of two-way exchange of material and culture.*

Focusing on the general requirements of rural revitalization for industrial prosperity, ecological livability, rural culture, effective governance and affluent life, the urban-rural composition model promotes material and cultural exchanges between urban and rural areas, guided by the principles of equality, openness, integration and sharing, with rural industrial products, ecological environment and culture as the starting point for urban-rural exchanges. Social and economic factors such as population, capital, culture and technology flow and merge between urban and rural areas, promote the process of modern civilization, urban capital, technology and talents going to the countryside, promote the construction of rural material and spiritual civilization, and realize the two-way integration of urban and rural elements and the optimization of capital resource allocation.

*B. Urban-rural synergy is a model of poverty alleviation gathering social forces*

In the past, the party and the state took unconventional measures to advance the plan of fighting poverty and making decisive progress, creating the best achievements in the history of poverty reduction in China. Under the background of the new era, how to organize social forces to participate extensively in the task of poverty alleviation, and realize the strategic goal of rural revitalization without increasing the

burden of the government, is the problem to be solved by the Urban-Rural synergy model. In the Urban-Rural synergy mode, the high-quality famous and excellent agricultural products and ecological farming life exported from the countryside are introduced to the agglomerated urban residents to meet the growing needs of the people for a better life, and gather all social forces and guide them to participate in the construction of rural economy so as to further promote the integration of urban and rural economic elements.

*C. The mode of urban-rural synergy is the mode of dual support of wisdom and ambition.*

Developing rural industry is the fundamental measure to improve the self-development ability of rural poor areas and to achieve poverty alleviation of the poor. Only by relying on the development of rural industry can we stimulate and improve the self-development ability of the poor, enhance the function of "hematopoiesis" of the rural itself, and realize the strategic goal of rural revitalization. At the same time, the development and prosperity of rural industry can also attract more urban talents, funds and technology into rural areas, so that rural areas will be full of vitality. Rural areas take characteristic industrial products and livable ecology as the basic entry point, and promote high-quality industrial products and distinctive ecological environment to urban consumer groups to develop and strengthen rural industries. The key point is to revitalize the industry in the countryside. Only in the prosperous countryside can we get rid of poverty and not return to poverty. Only in this way can we truly build the economic foundation of the countryside, improve the living standards of farmers, and effectively promote the revitalization of other aspects.

Generally speaking, urban-rural synergy is a new model suitable for the current urban and rural economic structure in China. It is an effective way to solve the problem of urban and rural economic disparity on the basis of "Internet +". It differs from the traditional urban-rural development model, as shown in TABLE I.

TABLE I. THE DIFFERENCE BETWEEN URBAN-RURAL SYNERGY MODEL AND TRADITIONAL MODEL

<b>Model</b>	<b>Traditional model</b>	<b>Urban-Rural Coordination Model</b>
<b>Compare contents</b>		
<b>Exchange direction</b>	One-way communication	Two-way communication
<b>Exchange content</b>	Capital, Material	Capital, Technology, Talent, Material
<b>Economic investment</b>	government investment	Multi-input
<b>Help and development</b>	blood-transfusion	Hematopoiesis, sustainable development
<b>industrial structure</b>	Primary industry	Primary industry and Tertiary industry

IV. RESEARCH ON URBAN-RURAL SYNERGY MODE BASED ON "INTERNET +" PLATFORM

With the concept of urban-rural synergy, based on the reality, this paper will put forward feasible plans on how to develop the Urban-Rural Coordination Model from the following four aspects.

*A. Platform Composition and Function*

First of all, the development of the model must be based on the platform, and the exact platform support is the foundation of everything. It is known that with the popularization of the network, even in remote villages in China, mobile communication can be carried out in real time. Internet access is no longer a problem, which provides a guarantee for rural and urban communication based on the "Internet".

In order to better expand communication between urban and rural areas, the establishment of the platform must meet the needs of anytime, anywhere accessible. For this reason, the platform is mainly composed of mobile communication, including the current mainstream Android and IOS mobile platforms, and the web site. The main functions include property management, community business circle, peripheral services, cultural exchanges, rural channels and housing information. The establishment of the whole platform needs to be carried out under the conditions of policy guidance, enterprise R&D and government support.

*B. Urban-rural Link Node*

After determining the function and composition of the platform, it is necessary to further study the linking points of urban-rural synergy model. Different from the traditional urban-rural integration, this paper proposes an urban-rural information channel based on "community" and "rural".

In cities, the places where the population is concentrated are the work units and living places of urban residents. In the future, smart communities will also be the cells of smart cities. Intelligent community Internet platform is the best choice for urban and rural information aggregation.

The countryside takes the countryside as the link unit, and each countryside is an independent link point. Each village is guided by the government, and a special person in charge is set up in the local area. The person in charge collects rural information and uploads it to the platform.

Through the connection of "community" and "countryside", a channel to the nearby countryside is embedded in the community property management platform. In this way, the main residents of the city can browse the characteristic rural information while facilitating their own property management. On the contrary, through the platform, rural residents can not only solve their own production and marketing problems, but also understand the needs of the city and carry out cultural exchanges with urban residents, so as to enhance the subjective initiative of rural residents.

C. Service Content and User Object

For urban residents, it mainly includes businesses, community residents and property management companies. Through the establishment of the platform, a triangular bridge is built to provide daily necessities and services, and convenient property management functions for all platform users.

For the rural residents, it mainly includes: rural leaders, labor services and agricultural businessman. The contents include introductory and transactional information on village features, characteristic industries, ecological agricultural products, ecological tourism, leisure pension, investment needs, loving donations, cultural and educational volunteers, etc. Platform users can read and buy rural products, achieving multi-angle and multi-level assistance to the countryside, and also to promote the two-way flow of social and economic elements such as talent, capital, culture between urban and rural areas, to achieve urban-rural integration, mutual promotion and co-prosperity.

Rural provides high quality agricultural products, labor services, livable ecology and agricultural cultural experience to cities. The city consumes the famous and excellent agricultural products exported from the countryside, enjoys the ecological farming life in the countryside, provides surplus labor jobs for countryside, and exports capital, technology, management experience and more advanced civilized culture to the countryside.

D. Support for Industrial Structure Transition

The model of urban-rural synergy proposed in this paper is not only a commodity marketing channel for the countryside, but also provides the possibility for upgrading and transforming the industrial structure of the countryside. On the one hand, the countryside promotes characteristic industries and livable green mountains and rivers to the city, so that the urban people can consume high-quality rural products and enjoy a good ecology; on the other hand, the urban residents understand the needs, life and investment opportunities of the countryside, and promote the flow of idle capital, technology and talents of the city into the countryside, so as to develop agriculture and the countryside. It will inject strong elements into the development of agriculture and rural areas, bring more advanced culture into the countryside, improve the basic quality of farmers, and promote the transformation of rural industrial structure.

To sum up, the whole framework based on the "Internet +" mode of urban rural synergy is shown below in Fig 1.

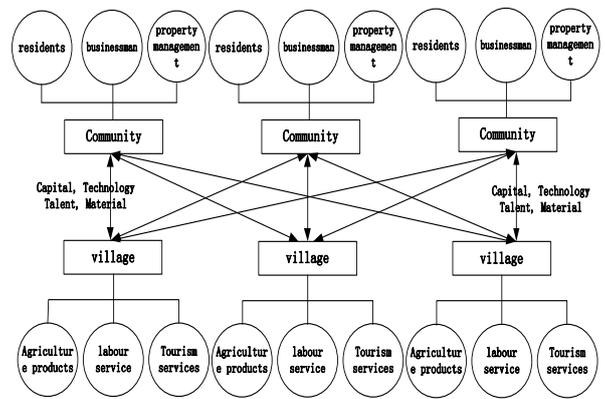


Fig. 1. Based on the "Internet +" framework for urban rural synergy

Through this framework, with the help of the Internet + platform, the model proposed in this paper has effectively solved the problems of agricultural product sales channels, the weak initiative of farmers, the consumption of urban residents, the disconnection of rural residents' information culture, and the problems of product transformation.

V. CONCLUSION

In this paper, the urban-rural synergy model using internet technology, put forward an effective way to promote the two-way exchange of urban and rural. It collects a lot of information such as industrial products, ecology, civilized rural customs, investment demand, volunteer demand, donation demand and so on in each village, forms a relatively complete rural information block, and then gathers a number of rural information blocks and puts them into the community-based urban population to form a new urban-rural integration model. The model is feasible and has certain innovation and research value. In the process of development, with the participation of rural and related units, the mode of "urban-rural synergy" based on the "Internet plus" is bound to gather all social forces, and provide a new path for poverty alleviation and rural revitalization, thus promoting the development of urban and rural integration in the future.

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REFERENCES

[1] Hao Guilin. Brief discussion on the coordinated development of urban and rural regional economy in China [J]. Theoretical observation, 2018 (09): 107-109.  
 [2] Deng Dahong. The First Year of Urban-Rural Integration in 2019 [J]. China Business, 2019 (06): 14-17.

- [3] Li Jianguo, Li Zhizhi. China's exploration of coordinated regional economic development and urban-rural integration [J]. *Contemporary economic research*, 2017 (04): 78-85.
- [4] Miaowei. Reducing the "Digital Divide" between Urban and Rural Areas and Serving Rural Economic and Social Development [J]. *People's Forum*, 2014 (33): 6-9.
- [5] Ai Weiyi, Chen Minghui. Analysis of the new digital divide between urban and rural areas and Its Countermeasures [J]. *Seeking truth from facts*, 2018 (03): 67-70.
- [6] Rubaeva O, Nikitina T. Digital Economy as a Factor of Increasing the Socio and Economic Sustainability of Rural Territories [C]//International Science and Practical Conference "Digital Agriculture-Development Strategy" (ISPC 2019). Atlantis Press, 2019.
- [7] Che Wenbin. Digital Village Accelerates County-level Urban-Rural Integration [J]. *Contemporary County Economy*, 2019 (07): 20-23