

# Study on the Development Path of Urban-rural Economic Integration from the Perspective of Inclusive Green Development: A Case Study of Shanxi, Shaanxi and Henan Region in the Middle Reaches of the Yellow River

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## ABSTRACT

As an important economic phenomenon in the process of national development, urban-rural economic integration is an inevitable product of the development of productivity to a certain stage and an important link in promoting high-quality regional economic development. Taking the middle reaches of the Yellow River "Jin-Shaanxi-Yu" region as an example, we explore the development path of urban-rural economic integration by introducing the concept of inclusive green development. The study finds that (1) the characteristics of urban-rural economic development in the "Jin-Shaanxi-Yu" region: during 2014-2018, the overall income gap between urban and rural residents in each prefecture-level city is on the rise; except for the provincial capital cities, the income gap between urban and rural residents in resource-based cities is generally higher than that in other cities at the municipal level; poor counties/districts are mainly distributed in provincial borders and mountainous areas; the primary industry shows the characteristics of high proportion of employed people and low GDP share. (2) Low rural development capacity and opportunities in provincial border areas, weak industrial development, and urban-rural industrial chain disconnection are the shortcomings factors of integrated urban-rural economic development. Based on the research results, the article proposes Suggested paths to promote economic integration between urban and rural areas in the middle reaches of the Yellow River.

**Keywords-***inclusive, urban and rural economic integration, green growth, the middle reaches of the Yellow River*

## 1.INTRODUCTION

Urban-rural economic integration is an important economic phenomenon in the process of national development and an inevitable product of the development of productivity to a certain stage <sup>[1]</sup>. Since the reform and opening up, the overall urban-rural economic gap in China has been widening under the combined effect of various factors such as industrialization development, policy system and management system <sup>[2]</sup>, and until now, there is still a mismatch of development factors between urban and rural areas in China. The disparity between urban and rural economic development can negatively affect the long-term development of regional and national

economies by reducing consumer demand <sup>[3,4]</sup>, restricting the quality of labor force <sup>[5]</sup>, limiting investment opportunities for the poor, and reducing incentives to accumulate wealth <sup>[6]</sup>. According to the current situation and trend of urban-rural relations, the 19th Party Congress proposed to establish a sound institutional mechanism for urban-rural integration and to break the system of urban-rural division in order to achieve high-quality socio-economic development. The economic relationship between urban and rural areas plays a leading role in the development of urban-rural relationship and determines the changes in other aspects <sup>[7,8]</sup>, and how to promote economic integration is a key issue in the development of urban-rural integration.

The ecological protection and high-quality development of the Yellow River Basin has become one of the national development strategies. The Yellow River basin has certain special characteristics compared with other basins such as the Yangtze River basin. Firstly, the Yellow River Basin spans the east, middle and west, with huge differences between the upper and middle and lower reaches, and has phased characteristics in terms of economic <sup>[9]</sup>, social <sup>[10]</sup> and ecological protection <sup>[11]</sup> development; secondly, the Yellow River Basin is the ecological barrier of China; at the same time, it has an important position in terms of economy, with a concentration of poor people in the region, and is an important area to win the battle against poverty. In this context, urban-rural economic research is important for the coordinated and sustainable economic development of the entire watershed, based on the development characteristics of each section. Based on the perspective of inclusive green development, this paper takes the middle reaches of the Yellow River "Jin-Shaanxi-Yu region" as an example to discuss how to realize the integrated development of urban-rural economy and improve the quality of regional economic development.

## 2.ANALYSIS OF URBAN-RURAL ECONOMIC INTEGRATION MECHANISM UNDER THE PERSPECTIVE OF INCLUSIVE GREEN DEVELOPMENT

The concept of inclusive green development was first proposed after the Rio+20 Summit in 2012, and is a sustainable development approach that pursues economic growth, social equity and ecological environment <sup>[12]</sup>. Inclusive growth consists of four attributes: opportunity, capability, access, and security, which emphasize the creation of development opportunities, space for development, and improvement of the development environment to achieve economic growth in backward regions; the background of green growth concept is the deterioration of global ecological environment. The World Bank's report points out that green growth is to ensure efficient, clean and resilient use of resources in the process of growth <sup>[13]</sup>. The coupling of inclusive growth concept and green development concept realizes the organic unity of inclusion and greening, which is the organic combination of inclusive and harmonious production relations and greening productivity, as well as the dialectical unity of greening production methods and inclusive social forms to achieve harmonious and sustainable development among society, economy, and environment <sup>[14]</sup>, which provides an opportunity to study the regional economy <sup>[15]</sup> as well as poor and remote areas <sup>[16]</sup> development issues provides a new way of thinking.

From the perspective of inclusive green development, this paper constructs the mechanism of integrated urban-rural economic development from five aspects:

opportunity, ability, access, security and green. Through policies, resource tilting and infrastructure construction, we improve the economic location of backward areas for development, cultivate rural development capacity, improve rural development conditions, give rural development space, industrialize rural economy and scale rural industry, promote the transformation and upgrading of urban-rural factor circulation system, form a stable symbiotic relationship, enable urban and rural development to reach a level that cannot be achieved unilaterally, and realize overall regional The development of the region as a whole is of high quality.

## 3.STATUS AND PROBLEMS OF THE STUDY AREA

### 3.1 Overview of the study area

The Yellow River flows through nine provinces in China in the shape of "several", among which the middle reaches of the Yellow River are from Hekou Town to Taoyu, Zhengzhou, Henan Province, with a length of 1206.4 km and a watershed area of 344,000 km<sup>2</sup>, accounting for 43.3% of the total watershed area, which is the main source area of the Yellow River sediment.

The "Jin-Shaanxi-Yu" region is located in the middle section of the Yellow River, which is the intersection of the central and western parts of China and is of strategic importance to the national economic development. In terms of social economy, among the 39 prefecture-level cities in the "Jin-Shaan-Yu" region, 124 key counties in the former national contiguous special hardship areas and national key counties for poverty alleviation and development are important areas for national precise poverty alleviation. At the ecological level, the "Jin-Shaan-Yu" region is the main area for soil erosion control, and also an important area for the construction of the north-south ecological barrier, how to achieve economic growth under the premise of ecological protection is the key issue facing the region.

### 3.2 Data sources

The data on urban and rural development in Shaanxi, Shanxi and Henan provinces from 2014-2018 covered in this paper were obtained from the Statistical Yearbook of each province, and the data on poor villages and resource cities were obtained from the List of Poverty-stricken Counties in China and the Notice of the State Council on the Issuance of the National Plan for Sustainable Development of Resource-based Cities (2013-2020), respectively.

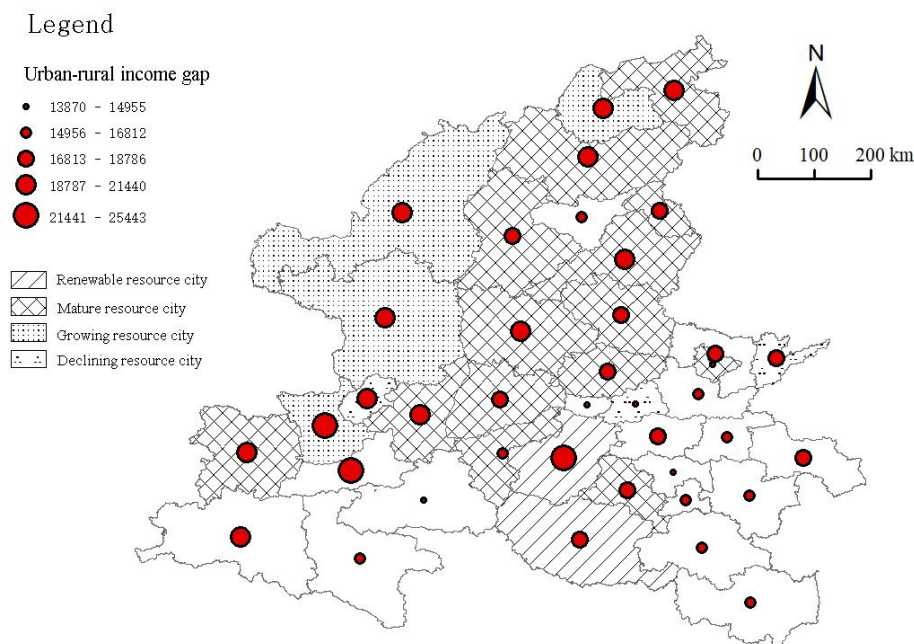
### 3.3 Analysis of the problems of economic integration development in the "Jin-Shaan-Yu" region

#### 3.3.1 Transformation of resource-based cities and small spillover effects

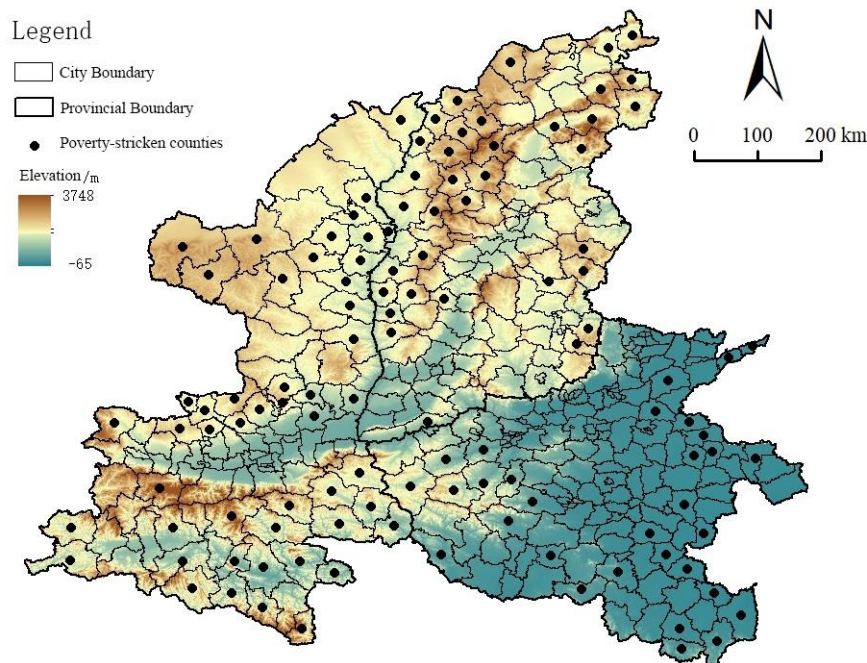
The policy of urban bias has led to a long-term one-way flow of production factors into the cities, and due to the single economic structure of resource-based cities, they have failed to feed the countryside in a timely manner, resulting in serious damage to the development interests of agriculture, rural areas and farmers<sup>[17]</sup>. Figure 1 shows that the income gap between urban and rural areas is generally larger in resource-based cities than in other cities. In the "Jin-Shaan-Yu" region, 24 prefecture-level cities, 13 county-level cities and one county city are defined as resource-based cities in the National Sustainable Development Plan for Resource-based Cities (2013-2020) issued by the State Council in 2013, of which three prefecture-level cities, three county-level cities and One county-level city was identified as a resource-depleted city. "In the context of green development, the economic development space of energy and mineral resource-based cities has been compressed, and the economy and industry have entered a stage of transformation and development.

#### 3.3.2 Environmental constraints on rural development

Figure 2 shows that there is a correlation between the distribution of poor counties (districts) in the "Jin-Shaan-Yu" region and the terrain. The poor counties (districts) in Shaanxi province are mainly located along the Yellow River and in mountainous areas, while in Shanxi province they are mainly located along the Yellow River and in the northern mountainous areas, and in Henan province they are mainly located in the southern mountainous areas and in the eastern provincial border. These areas suffer from a lack of economic development due to factors such as topography, environment or lack of development opportunities. The "Jin-Shaan-Yu" region is located in the middle reaches of the Yellow River and is the main source of sediment for the Yellow River. Soil erosion reduces soil fertility, affects agricultural development and, by destroying the level of the ground, exacerbates the occurrence and development of natural disasters such as droughts, leading to poverty and deterioration of production conditions for the population in the region and hindering sustainable social and economic development. Mountainous areas are inaccessible and the topography limits the development of the countryside in mountainous regions through resource endowments as well as development conditions.



**Figure 1** Spatial map of the income gap between urban and rural areas



**Figure 2** "Shanxi, Shaanxi and Henan" poverty-stricken counties/distribution map

### 3.3.3 Lagging industrial development

The "Jin-Shaanxi-Yu" region is an important area for agricultural development in China, but the productivity of the primary industry in this region is significantly lower than the overall level of regional industrial productivity. Data show that in 2018, the proportion of GDP in the primary sector in the three provinces of the "Jin-Shaan-Yu" region was 4.4%, 7.5% and 8.9% respectively, and the number of people employed in the primary sector was 33.7%, 38.0% and 35.4% respectively, while in developed countries, the above two proportions were less than 1%. As can be seen from Figure 3-2, from a regional perspective, the productivity of the primary sector is significantly lower than the productivity of the secondary and tertiary sectors in the three provinces, with the largest gap being in Shaanxi Province, where the productivity of the primary sector is only equivalent to 6% of the productivity of the secondary sector and about 17% of the productivity of the tertiary sector. The smallest gap is in Henan province, where primary sector productivity is only equivalent to 16% of secondary sector productivity and around 18% of tertiary sector productivity. The low productivity leads to a constant loss of primary sector factors, which contributes to the lagging development of the predominantly primary sector rural economy.

**Table 1.** Comparison of industrial productivity in the "JinShanYu" region in 2018

| Productivity | Secondary | Productivity |
|--------------|-----------|--------------|
|--------------|-----------|--------------|

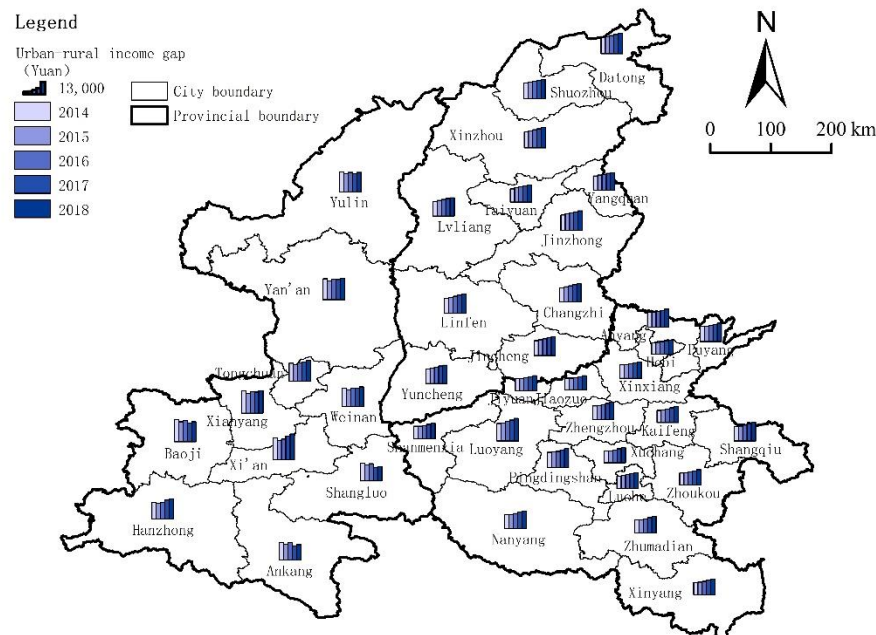
|         | of primary<br>industry<br>(%) | industry<br>productivity<br>(%) | of tertiary<br>industry<br>(%) |
|---------|-------------------------------|---------------------------------|--------------------------------|
| Shaanxi | 2.32                          | 36.87                           | 13.29                          |
| Shanxi  | 1.15                          | 16.02                           | 10.90                          |
| Henan   | 1.77                          | 10.61                           | 9.78                           |

### 3.3.4 The confrontation between traditional agriculture and modern industry

The disparity between urban and rural economic development in the "Jin-Shaanxi-Yu" region can be seen in two aspects: firstly, the income gap between urban and rural residents is large, and the living standard of urban residents is much higher than that of rural areas; secondly, there is a dichotomy between the industrial base of the urban and rural systems, that is, the dichotomy between traditional agriculture and modern industry, and the dual economic structure between urban and rural areas is obvious. The dual economic structure is significantly and positively correlated with the income gap between urban and rural residents<sup>[18]</sup>. As can be seen from Figure 3, the gap between the per capita disposable income of urban and rural residents at the municipal level in the "Jin-Shaan-Yu" region widened between 2014 and 2018, with a few prefecture-level cities (or directly administered districts) fluctuating under the trend of widening gap. These prefecture-level cities (or districts) are all under

the jurisdiction of Shanxi Province, such as Weinan, Xi'an, Xianyang and Yulin; the gap in disposable income

between urban and rural residents in Henan and Shaanxi provinces has increased year on year.



**Figure 3** Map of changes in disposable income gap between urban and rural residents of prefecture-level cities

#### 4.CONCLUSION AND DISCUSSION

Taking the "Jin-Shaanxi-Yu" region as an example, this paper analyses the current situation of urban-rural economic integration development in the middle reaches of the Yellow River and its shortcomings from the perspective of introducing inclusive green development, with the following main conclusions:

(1) Except for the provincial capital cities, the income gap between urban and rural residents is generally higher in resource-based cities than in other cities at the municipal level

(2) The distribution of poor counties (districts) in the "Jin-Shaanxi-Yu" region has a certain degree of correlation with the terrain. They are mainly located in mountainous areas, provincial borders and areas along the Yellow River.

(3) The primary sector in the "Jin-Shaanxi-Yu" region is characterised by high employment and low GDP, i.e. low productivity in the primary sector.

(4) The disposable income gap between urban and rural residents in the region is large. During the period 2014-2018, the overall income gap between urban and rural residents in each prefecture-level city was on the rise; and the disposable income of urban and rural residents in Henan Province and Shaanxi Province has been increasing year by year.

Inclusiveness is a new requirement of the times. Inequality in the allocation of resources in terms of

finance, policy and markets is the main reason for the separation of the urban and rural economic systems. The Government will also promote economic balance between rural and urban areas and enhance the strength of rural economic development by improving access, capacity, access and security.

Secondly, efforts should be made to strengthen cross-provincial cooperation. Improve the transport environment within and outside the region and between provinces, integrate development resources and promote the circulation of economic factors between the three provinces, thus changing the economic location of inter-provincial areas that deviate from the main axis of provincial economic development. In addition, the ecological protection system should be improved, based on the ecological protection pressure faced by the "Jin-Shaan-Yu" region, the type of watershed area ecological protection as a whole, through the establishment of cross-provincial ecological reporting platform, improve ecological compensation mechanism and rural production and life management system, improve the ecological protection system, to ensure the sustainable development of the regional economy.

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