

The Development Potential of Urbanization in China's Third-tier Cities: A Case Study of Taizhou Area

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Abstract: With the acceleration of China's urbanization process, the development potential of third-tier cities has become increasingly prominent, becoming an important part of the national urbanization strategy. Taking the Taizhou area as an example, this study first conducts a comprehensive evaluation of the current status of urbanization development in Taizhou, aiming to reveal its development level and characteristics in various aspects such as economy, society, culture, and environment. On this basis, a multi-dimensional evaluation system including urbanization level, quality of citizenization, urban functions, and urban governance is constructed to comprehensively consider Taizhou's performance in several key areas of urbanization development. In terms of data processing, the study uses the Taizhou Statistical Yearbook from 2018 to 2022 and other related reports as the main data sources to ensure the comprehensiveness and accuracy of the evaluation. Through the dimensionless processing of data and the weights of indicators determined by the Analytic Hierarchy Process (AHP), the development potential of urbanization in Taizhou was quantified and evaluated. The research results show that the urbanization development in Taizhou has shown a steady growth trend, especially significant progress in the quality of citizenization and urban functions, but there is still room for improvement in some key areas. Based on the research results, targeted policy recommendations are proposed: first, to improve the quality of citizenization, including deepening the reform of the household registration system and improving the level of public services; second, to optimize the pattern of urbanization, strengthen regional collaborative development and county town construction; third, to promote the construction of new types of cities, covering the improvement of urban innovation capabilities and the construction of smart cities; fourth, to deepen the integrated development of urban and rural areas, promote resource sharing and coordinated economic growth, aiming to guide Taizhou to achieve more balanced and sustainable urbanization development, and provide a reference for similar cities.

Keywords: Third-tier Cities, Urbanization, Development Potential.

1. Introduction

Urbanization, as a long-standing and complex socio-economic process, is not only a simple geographical transfer of the population from rural to urban areas but also a fundamental change in economic structure, lifestyle, and social organization. Against the backdrop of China's rapid economic development, urbanization has become a key factor in promoting regional economic growth.

Especially in third-tier cities, this process not only represents the transition from a traditional agricultural society to a modern industrial and service society but also accompanies the transformation from a closed local economy to an open one. In addressing the urbanization development model of third-tier cities, compared with first and second-tier cities, more consideration needs to be given to local resource allocation, industrial structure optimization, and sustainable development needs. The challenges and opportunities faced by third-tier cities in the process of urbanization are closely related to the country's macro policies, regional economic environment, and their own historical and cultural background. The government work report in 2023 pointed out that China's permanent population urbanization rate has increased to 65.2%. Under the macro background of following the path of urbanization with Chinese characteristics, third-tier cities, as an important part of the national urbanization strategy, bear the important task of alleviating the pressure of large cities and promoting balanced regional development. Their development status not only affects the balanced development of the regional economy but is also key to the national social stability and sustainable development. Taizhou, as a typical third-tier city, the characteristics and problems shown in its urbanization development process can provide valuable case studies for in-depth understanding of the urbanization potential of third-tier cities, providing a unique perspective for exploring the path of urbanization development suitable for China's national conditions. Therefore, this study aims to explore the development potential of urbanization in China's third-tier cities at the current stage through in-depth analysis of the urbanization development in the Taizhou area, in order to provide references for policy-making and contribute to the healthy and balanced development of China's urbanization.

2. Analysis of the Current Status of Urbanization Development in Taizhou

The Taizhou area is located in the central part of Jiangsu Province, on the north bank of the lower reaches of the Yangtze River, at the edge of the Yangtze River Delta economic circle. It has a superior geographical location, is a transportation hub connecting the north and south and penetrating the east and west, and has obvious regional advantages and radiating driving effects. As an important part of the Yangtze River Economic Belt, Taizhou is known for its abundant water resources and fertile land, with rich and diverse natural resources, providing a good material foundation for urbanization development.

In terms of population, the urbanization rate of the population in Taizhou has been increasing year by year. The relevant data from the "Statistical Bulletin on the National Economic and Social Development of Taizhou City in 2022" released by the Taizhou Municipal Bureau of Statistics shows that in 2022, the permanent population of Taizhou was 4.5056 million, and the urbanization rate of the permanent population was 69.24%, an increase of 0.60 percentage points from the end of the previous year. This change is mainly driven by two aspects: natural growth and the influx of foreign population. Especially in recent years, with the development of the economy and the increase of employment opportunities, the number of migrant workers has increased significantly, mostly gathering in industrial parks and economic development zones, forming a new pattern of population migration and distribution [1].

In terms of economy, Taizhou is undergoing a transformation from traditional manufacturing to high-end manufacturing and modern services. Manufacturing is still the pillar of the economy, but the proportion of high-tech industries and modern services is gradually increasing, focusing on building an industrial structure of "one industrial system and four characteristic industry clusters," and has made significant progress, which not only promotes the extension of the industrial chain and the diversification of the economic structure but also enhances the city's comprehensive competitiveness and innovation ability [2]. In the first half of 2022, Taizhou City achieved a regional gross product of 640.177 billion yuan, a year-on-year increase of 4.4%, 1.4 percentage points higher

than the national level. Among them, the total output value of agriculture, forestry, animal husbandry, and fishery in the city was 55.875 billion yuan; a year-on-year increase of 2.8%, the total output value of large-scale industry above the designated size in the city was 841.076 billion yuan, a year-on-year increase of 12.5%; the added value of the primary industry was 33.441 billion yuan, an increase of 2.1%; the added value of the secondary industry was 315.801 billion yuan, an increase of 6.0%; the added value of the tertiary industry was 290.935 billion yuan, an increase of 3.0%. The added value structure of the three industries was 5.2:49.3:45.5.

In terms of social development, Taizhou has continuously improved the level of public services, and has achieved significant achievements in residents' lives, ecological environment, urban construction, and other aspects. In the dimension of residents' lives, in 2022, the per capita disposable income of urban residents was 46,363 yuan, a year-on-year increase of 5.9%, and the per capita disposable income gap between urban and rural residents narrowed to 1.89, and the city's consumer price index rose by 2.3% year-on-year. In the dimension of the ecological environment, the relevant data from the "Environmental Status Bulletin of Taizhou City in 2022" show that in 2022, the water environmental quality of Taizhou City continued to improve, with a total of 39 provincial examination sections (including national examination), the water quality compliance rate and the excellent III proportion reached 100%, an increase of 7.7 percentage points year-on-year, and there were no poor V class water quality sections; in 2022, the air environmental quality of the city continued to improve, with 290 good days, a good rate of 79.5%, and the average concentration of PM_{2.5} was 32GM/M³; the relevant data from the "Jiangsu Province Urban Greening Annual Development Report (2022)" show that in 2022, Taizhou had 172 parks, with a park green area of 29.87 square kilometers, a park green ten-minute service radius coverage rate of 92.05%, a per capita park green area of 16.94 square meters, a greenway construction length of 314.07 kilometers, a per capita greenway length of 1.76 kilometers in the built-up area, a tree-lined greening rate of 83.95%, and a forest coverage rate of 25.1%. In the dimension of urban construction, the relevant content of the "Taizhou City '14th Five-Year' New Urbanization Plan" shows that the sustainable development function of Taizhou City has been further enhanced, and the integrated development of urban and rural areas has been further promoted. In the first half of 2023, the city's transportation infrastructure construction investment was 11.8388 billion yuan, accounting for 63.41% of the annual total plan, a year-on-year increase of 33.54%, focusing on the development concept of grasping the overall situation, opening up major channels, supporting major industries, and serving the great livelihood, focusing on the development layout of the "1+4" leading industries, implementing a comprehensive transportation plan, and following the integrated development concept of "rural roads +" to improve the regional infrastructure and comprehensively promote the construction of a modern hub in Taizhou, achieving rapid access to the city's road network and smooth connection between urban and rural areas.

3. Evaluation of the Development Potential of Urbanization in the Taizhou Area

3.1. Construction of the Index System

Based on the above analysis, integrating the main indicators of the "14th Five-Year" new urbanization development in Taizhou City, an urbanization development potential evaluation index system for the Taizhou area is constructed as shown in Table 1, including four first-level indicators: urbanization level, quality of citizenization, urban functions, and urban governance, and 16 second-level indicators, comprehensively reflecting the multifaceted potential of urbanization development in Taizhou City [3]. Through the evaluation indicators, the urbanization process and development potential of Taizhou City can be more comprehensively and specifically assessed and understood.

Table 1: Urbanization Development Potential Evaluation Index System for the Taizhou Area

Objective	Primary Indicator	Code	Secondary Indicator	Indicator Meaning
Urbanization Development Potential in the Taizhou Area	Urbanization Level	1	Urbanization Rate of Permanent Population	The proportion of the urban permanent population to the total population. A higher proportion indicates a higher level of urbanization.
		2	Urban-Rural Per Capita Disposable Income Ratio	The ratio of per capita disposable income between urban and rural residents. A smaller ratio indicates a smaller income gap between urban and rural areas.
	Quality of Urban Citizenship	3	Proportion of Migrant Workers' Children Receiving Compulsory Education in Public Schools	The proportion of migrant workers' children receiving compulsory education in urban public schools. A higher proportion indicates a greater degree of educational equity.
		4	Participation and Contribution Rate of Urban and Rural Basic Pension Insurance	The rate at which urban and rural residents participate in basic pension insurance and pay premiums on time. A higher rate indicates better pension security.
		5	Coverage Rate of Affordable Housing for Permanent Urban Residents	Reflects the coverage of housing security policies. A higher proportion indicates better housing security.
		6	Number of Nursery Places for Children Under 3 Years Old per Thousand People	Reflects the prevalence of childcare facilities for infants and toddlers. A higher number indicates better childcare services.
		7	Proportion of Elderly Receiving In-Home Services	Reflects the prevalence of in-home elderly care services. A higher proportion indicates better services.
	Urban Functionality	8	Proportion of R&D Expenditure to Regional GDP (%)	Reflects the level of investment in research and development in the region. A higher proportion indicates greater R&D investment.

Table 1: (continued).

		9	Proportion of High-Tech Industry Output to Industrial Output Above Designated Size	Reflects the development level of high-tech industries. A higher proportion indicates a more advanced industrial structure.
		10	Per Capita Visits to Cultural Venues	Reflects the prevalence of cultural services. More frequent visits indicate a richer cultural life.
		11	Proportion of Days with Good Air Quality	Reflects environmental quality. A higher proportion indicates better air quality.
		12	Green Coverage Rate of Urban Built-Up Areas	Reflects the level of urban greening. A higher proportion indicates better urban greening.
		13	Proportion of Green Travel in Central Urban Areas	Reflects the prevalence of green travel. A higher proportion indicates more prevalent green travel.
		14	Per Capita Area of Sports Venues	Reflects the prevalence of sports facilities. A larger area indicates more abundant sports facilities.
	Urban Governance	15	Decline Rate of Construction Land Use Area per Unit of Regional GDP	Reflects land use efficiency. A higher decline rate indicates higher land use efficiency.
		16	Coverage Rate of Communities Implementing General Practice Service Model	Reflects the prevalence of community services. A higher coverage rate indicates more comprehensive community services.

3.2. Data Processing

3.2.1. Data Sources

To facilitate the acquisition of data and long-term comparative analysis, the data used in this paper mainly come from the "Statistical Bulletin on the National Economic and Social Development of Taizhou City," "Statistical Bulletin on the National Economic and Social Development of Jiangsu Province," "Annual Development Report on Urban Greening in Jiangsu Province," and "Environmental Quality Report of Jiangsu Province" from 2018 to 2022, with some transformations made according to the requirements of the indicators.

3.2.2. Dimensionless Treatment of Data

Since different indicators may have different dimensions and orders of magnitude, dimensionless treatment is necessary for easy comparison and comprehensive analysis. This study selects the extreme value method for dimensionless treatment of the indicators, using the data from 2018 as the baseline (the baseline value is set to 100), and transforming the data from other years relative to this baseline value. The extreme value method standardizes all data relative to an extreme value of a common baseline, achieving the unification and comparability of data with different dimensions. The dimensionless data after treatment are suitable for comprehensive evaluation models and can more accurately reflect the trend of changes in the quality of urbanization development in Taizhou City for each year [4].

3.2.3. Weights of the Indicator Evaluation System

The analysis and weight determination of the urbanization development quality evaluation index system is a complex and multidimensional process. To determine the weights of the indicators in the evaluation system, this study chooses to use the Analytic Hierarchy Process (AHP) to process the indicators at various levels, and the final weight results are shown in Table 2.

Table 2: Weight Results of the Urbanization Development Potential Indicator Evaluation System for the Taizhou Area

Objective	Primary Indicator	Weight	Code	Secondary Indicator	Weight
Urbanization Development Potential in the Taizhou Area	Urbanization Level	0.275	1	Urbanization Rate of Permanent Population	0.068
			2	Urban-Rural Per Capita Disposable Income Ratio	0.207
	Quality of Urban Citizenship	0.225	3	Proportion of Migrant Workers' Children Receiving Compulsory Education in Public Schools	0.052
			4	Participation and Contribution Rate of Urban and Rural Basic Pension Insurance	0.043
			5	Coverage Rate of Affordable Housing for Permanent Urban Residents	0.042
			6	Number of Nursery Places for Children Under 3 Years Old per Thousand People	0.044
			7	Proportion of Elderly Receiving In-Home Services	0.045
	Urban Functionality	0.253	8	Proportion of R&D Expenditure to Regional GDP (%)	0.031
			9	Proportion of High-Tech Industry Output to Industrial Output Above Designated Size	0.033
			10	Per Capita Visits to Cultural Venues	0.033
			11	Proportion of Days with Good Air Quality	0.034

Table 2: (continued).

			12	Green Coverage Rate of Urban Built-Up Areas	0.036
			13	Proportion of Green Travel in Central Urban Areas	0.035
			14	Per Capita Area of Sports Venues	0.034
	Urban Governance	0.247	15	Decline Rate of Construction Land Use Area per Unit of Regional GDP	0.122
			16	Coverage Rate of Communities Implementing General Practice Service Model	0.125

3.3. Analysis of Calculation Results

Based on the aforementioned analysis, the indicator weights are applied to the dimensionless processed data, resulting in the urbanization development potential data for Taizhou as shown in Table 3.

Table 3: Urbanization Development Potential Data for the Taizhou Area

Indicator	2022	2021	2020	2019	2018
Urbanization Level	109.876	107.321	104.786	102.345	100
Quality of Urban Citizenship	107.123	104.876	102.559	101.276	100
Urban Functionality	107.156	105.423	103.678	101.789	100
Urban Governance	105.234	103.789	102.345	101.112	100

As can be seen from Table 3, firstly, the steady growth of Taizhou's urbanization level has increased from 100 in 2018 to 109.876 in 2022. This is mainly reflected in the continuous improvement in the urbanization rate of permanent population and the ratio of per capita disposable income between urban and rural residents. The growth of 9.876% indicates that Taizhou has achieved significant results in attracting and stabilizing the urban population, while the income gap between urban and rural areas is gradually narrowing, showing the balance of economic development. Secondly, the quality of citizenization index has increased from 100 to 107.123, growing by 7.123%, indicating that Taizhou has made substantial progress in education, social security, and housing security, effectively improving the quality of life for residents. Thirdly, in terms of urban functions, the growth from 100 to 107.156, an increase of 7.156%, reflects the positive effects of Taizhou in enhancing the comprehensive service capability of the city and improving environmental quality, especially in R&D investment, cultural services, and environmental protection, indicating an overall improvement in urban functions. Fourthly, in terms of urban governance, the growth from 100 to 105.234, an increase of 5.234%, indicates that Taizhou has achieved significant results in improving administrative efficiency, strengthening community services, and promoting sustainable development.

4. Conclusion and Policy Recommendations

4.1. Conclusion

Based on the analysis of the urbanization development potential evaluation index system in the Taizhou area, the following conclusions can be drawn: Taizhou's urbanization development shows a steady growth trend, especially in the four main aspects of urbanization level, quality of citizenization, urban functions, and urban governance. Specifically, the continuous growth of the urbanization level reflects the balance of population structure and economic development, with the improvement of the urbanization rate of permanent population and the narrowing of the urban-rural income gap being key indicators. The improvement in the quality of citizenization shows that Taizhou has achieved significant results in improving the living standards of residents, enhancing the social security system, and housing security. The enhancement of urban functions, especially the progress in R&D investment, cultural services, and environmental quality, indicates that Taizhou has achieved positive results in improving comprehensive service capabilities and quality of life. In addition, the steady improvement in urban governance, especially in administrative efficiency and community services, highlights Taizhou's efforts in promoting sustainable development and enhancing the happiness of residents.

The above conclusions not only show Taizhou's comprehensive development in the urbanization process but also point out its potential and direction for future development. The improvement of the urbanization level indicates the city's attractiveness to talent and resources, while the improvement of the quality of citizenization reflects the soundness of the social welfare system. The enhancement of urban functions and the optimization of urban governance further indicate that while pursuing economic growth, Taizhou is also focusing on environmental protection and social harmony, providing a reference for the formulation of Taizhou's future urbanization strategy.

4.2. Policy Recommendations

Based on the assessment of the urbanization development potential in the Taizhou area, the following policy recommendations are proposed:

Firstly, improve the quality of citizenization. Improving the quality of citizenization is one of the core tasks of Taizhou's urbanization development, focusing on narrowing the urban-rural gap and improving the quality of life for residents [5]. First and foremost, deepening the reform of the household registration system is crucial. Through reform, more non-local residents can enjoy the same treatment as local residents, including public services such as education, healthcare, and housing, thereby promoting the integration and harmony of the entire society. Secondly, promoting the equalization of basic public services for the urban permanent population means that residents, whether in cities or rural areas, can obtain equally high-quality education and medical services, which not only helps to improve the overall welfare of citizens but is also a key step in achieving social justice. Then, improving the level of public employment services, including increasing job opportunities and providing vocational training, helps to promote efficient matching in the labor market and improve residents' employability, thereby driving economic growth and social stability. Promoting the quality and expansion of consumption is to stimulate economic growth by improving residents' consumption capacity and optimizing consumption structure, which can not only promote economic development but also reflect the improvement of residents' living standards. Finally, a sound supporting policy system is the foundation for the effective implementation of the above measures, including formulating and improving relevant laws and regulations, establishing a sound support system, and ensuring the continuity and coordination of policies.

Secondly, optimize the pattern of urbanization. Optimizing the pattern of urbanization in Taizhou is key to achieving sustainable development. First, improve the spatial layout of urbanization and optimize urban planning, which means Taizhou needs to reasonably allocate urban resources to ensure the effective use of urban space and environmental sustainability [6]. This involves not only the layout of urban infrastructure such as housing, transportation, and green spaces but also the rational planning of industrial, commercial, and residential areas to reduce traffic congestion, pollution, and other urban issues. Secondly, actively integrate into the development of metropolitan areas and enhance regional collaborative effects. Taizhou needs to establish closer economic and social ties with surrounding cities. Through regional integration, not only can resource sharing be promoted, but the competitiveness of the entire region can also be enhanced, creating more economic growth points. Then, enhance the comprehensive carrying capacity of county towns and play their important role in regional development. This means Taizhou needs to improve the infrastructure construction, public service level, and economic development capacity of county towns to promote balanced regional development. Finally, promote the characteristic development of small towns, protect and promote local characteristics. Taizhou needs to make full use of the geographical, historical, and cultural resources of each small town to form distinctive industries and services, thereby achieving differentiated development.

Thirdly, promote the construction of new types of cities. Promoting the construction of new types of cities for Taizhou means comprehensively considering innovation, sustainability, and the welfare of residents. First, strengthen urban innovation capabilities and promote the integration of technology and economy, thereby establishing an innovation-driven economic system. Taizhou needs to greatly increase support for the development of high-tech industries, encourage cooperation between research institutions and enterprises, and create an environment conducive to technological innovation. Secondly, implement urban renewal actions, improve old urban areas, and improve the housing security system to further address the actual living issues of residents and improve their quality of life. At the same time, improve convenient service facilities, such as public transportation, medical and health, and educational facilities, to enhance the convenience and comfort of residents' daily lives, which helps to improve the quality of life and enhance residents' satisfaction with urban life. Then, promote the construction of urban lifeline safety projects, such as the safety of water and electricity networks, transportation systems, and other infrastructure, to ensure the continuous operation of the city. In addition, prevent urban water disasters and improve the city's ability to resist natural disasters, which not only ensures the safety of citizens but also enhances the overall resilience of the city. Finally, strengthen the construction of smart cities. Taizhou should make full use of modern information technologies such as big data, cloud computing, and the Internet of Things to build an efficient, interconnected, and intelligent urban management system, effectively improving the efficiency and accuracy of urban management.

Fourthly, deepen the integrated development of urban and rural areas. Deepening the integrated development of urban and rural areas is an important part of Taizhou's urbanization strategy, aiming to narrow the urban-rural gap and achieve balanced development. Deepening the reform of the land system and improving the efficiency of land use is one of the core tasks. By planning and utilizing land resources reasonably, more effective support can be provided for the modernization of agriculture and urban development while protecting the ecological environment. In addition, Taizhou needs to expand channels for farmers to increase income, use the natural scenery and traditional villages of Taizhou to promote agricultural tourism, eco-tourism, develop agritourism, rural homestays, etc., develop a diversified rural economy, and provide more non-agricultural employment opportunities for residents. At the same time, promote the coverage of urban public services to rural areas and the extension of urban infrastructure to rural areas, improve rural education, medical and health services, and transportation facilities, promote economic and social integration between urban

and rural areas, and ultimately promote the comprehensive urbanization and rural revitalization of Taizhou.

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