

Impact Analysis of Complex on Urban Special Structure in Linyi

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Abstract. Urban complex is a highly effective entity integrating many functions. Based on the analysis of complex development status of Linyi, the growth pole theory is used to explain the mechanism which urban complex exerts on the spatial structure. The development of complex influences the urban spatial structure in land utilization, economic and living space. The key points of the complex development include scientific location, reasonable choice of industrial patterns and correct operation mode.

Introduction

Urban special structure reflects the relationship among physical environment, functional activities and cultural value. It includes land use structure, economic spatial structure, population spatial distribution, employment space structure and living spatial structure, etc.[1,2]. With the rapid urbanization, urban special structure is more and more rich and complex. Its formation and evolution is a result of the interaction between social, economic, technological and other forces.

As a highly effective entity integrating many functions, urban complex is in conformity with the requirement of intensive and sustainable development. Because of its strong integrated ability, urban complex has been regarded as the most effective engine in promoting the regional growth, and it is helpful to maximize the value of modern urban space.

Complex Development Status of Linyi

In 2011, the government of Linyi put forward priority planning of the urban complex. In the old city, comprehensive functional areas are to be constructed in order to effectively decompose the flow of population, traffic and so on. In the North New District, urban complexes would focus on catering, leisure, entertainment, shopping and other functions. In Luozhuang District and Hedong District, the business oriented complexes should be constructed in order to reduce the population flowing into the old city. In the western area, the development of complex should be in accordance with suburban village reconstruction and Trade City Construction. The government also affords policy support, such as optimization of approval procedures, relief of infrastructure facility charges and taxes [3].

Under this background, a large number of new urban complexes are rising rapidly in Linyi, and play a significant role in promoting the area development.

Among the complexes that have been built or under construction, some root in traditional shopping district, such as the Harmony Mall and the Utility City. Some develop in the new real estate circles such as Lushang City Center and Qilu Square which lie in the North New District. These urban complexes contain a variety of industrial form: commerce, office, residence, hotel, leisure square and other elements [4].

Mechanism of the Complex Acting on Urban Spatial Evolution

Urban complex brings about changes not only on urban appearance, but also on spatial structures. The growth pole theory can be used to explain the influence mechanism that complexes exert on the urban spatial structure. Francois Perroux, the French economist, thought that growth pole could not only increase rapidly, but also promote the growth of

other sectors by aggregation and diffusion effects [5].

Aggregation Effect. It has been proved that business development can gather popularity effectively. Urban complex attracts the business activities to itself quickly with its strong capital investment and super functional attraction. All kinds of social resources are concentrated in the complex.

During the process of aggregation, economic activity and economic factors gather to the growth pole firstly. Then, the geographical polarizations come into being and bring about a variety of agglomeration economy. The aggregation effect of complex is further enhanced continually. The complex grows quickly and expands its attracting scope through the rapid transit and information network. Along with its construction and operation, urban complexes quickly become a gathering area of population, wealth and business.

Diffusion Effect. The driving force of the urban complex continues to spread around through a series of linkage mechanism, and larger multiplier effects emerge in the form of income-increasing. The diffusion effect makes a variety of product factors flow from the complex to underdeveloped surrounding areas, and the development difference between those two areas can be gradually eliminated. In the initial stage of development, the aggregation effect is more dominant. However, when the growth pole developed to a certain extent, diffusion effect is strengthened. Urban complex therefore becomes an important engine and driven accelerator to urban development.

Impact of Complex on Urban Spatial Structure of Linyi

The impact of the complex on urban spatial structure is mainly reflected in structure adjustment and spatial density changes. The construction of complex would bring about strong agglomeration and diffusion effect on urban land utilization structure, economic spatial structure and living space, etc.

Structure of Land Utilization. For a long time, because influenced by traditional function zoning thought, urban land is usually arranged separately for different function, such as pure industrial district, residential district and commercial district. Although the thought of district planning is propitious to rational land utilization, the main problem is that the city is an organic wholeness composed of interdependent and complementary functional elements.

Urban complex shortens the distance between each function district. Meanwhile, the developer of complex is usually one united economic entity, and it develops urban land unified, which is useful for land intensive utilization and maximizing investment benefit. Urban land resource is very scarce and it has restricted the urbanization and modernization of Linyi. The urban complex with series of composite functions can make full use of vertical space and maximize the volume rate. Construction of complex can effectively improve the efficiency of urban land use and provide new ideas for urban renewal.

Structure of Economic Space. As the commercial center of a city, urban complex would be the "condensed nucleus" and emits polarization driving effect in many directions. As a relatively independent area with compound activities, urban complex usually become the sub-center of the city. So, with the construction of complexes, urban space is trend to be multi-core. If the overall layout of urban complex is harmonious, the urban spatial structure can be continuously adjusted and optimized. "Urban diseases" caused by concentrated development which focus on single-core will be cured.

In old city of Linyi, typical urban diseases such as traffic jam, population overcrowding and environmental degeneration have been more and more serious. Constructing a certain number of complexes offering combined service among North New District, HeDong District or LuoZhuang District can help develop a number of commercial business centers and reduce the pressure of the old district.

Structure of Living Space. The differentiation of residential location choice caused by the social-economic stratification aggravates the differentiation of residential space. Urban complex makes the city living space compacted and concentrated. Because of higher volume rate and intensity, urban complex is bound to attract more population and function elements. For example,

the QiLu Square, which covers apartment, supermarkets, department store, hotel and residence clubs, can provide various services for the surrounding residents. Its construction and operation can improve the occupancy rate of Qilu Garden, Yizhou Garden and other projects. It is helpful to attract the population migrating from the old city to the new one and ease the population pressure of the old city effectively.

Key Points of Urban Complex Development

Locate Scientifically. Compared to the traditional real estate project, the urban complex is more stringent to the site selection. Scientific location is the prerequisite for the successful operation.

The location of urban complex should be chosen as follows :(1) Lying in the core district of the city. There are large population and consumption. But most of these areas are reconstruction and the facade planning is stricter and the volume rate is higher. (2)Locate in the commercial sub-center. Commercial sub-center is a new urban economic growth point with rich social resources .However, in this area, the cost for municipal planning and transportation organization is high. (3) Locate in the new development zone. Such region is currently lack of transport facilities and consumption basis. Developers who plan to invest in such areas should have long-term vision and can make correct judgments on city function layout.

Determine the Reasonable Industrial Patterns. Office buildings, shopping centers, hotels and serviced apartments are four core formats of the urban complex. The first three are the most common patterns of urban complex and there are strong synergies among them.

For the developers, factors such as location, risk preferences, project size are very important to determine the complex industrial patterns. It is not necessary to contain all kinds of patterns for every complex. Required patterns and the proportion of each part should be determined according to product structure and competition status of the project.

Choose Operation Mode Correctly. The reasonable operation mode is the important condition ensuring the profit of the complex. At present, the operation modes of urban complex include the followings :(1) Decentralize property rights and operate in a unified way. The developer sells all or part of the project, and reaches an agreement with owners about managing uniformly. The owners can charge the stable returns according to the agreement. (2)Rent only and operate in a unified way. Big property developers who do not rush to return the funds manage the complex as an asset to achieve appreciation. (3) First rent and then sale. After the completion of the project, the developer manages the complex by a unified way until the values have increased, and then sell it at high prices [6].

Decentralizing the property rights might lead to decentralized management, which is difficult to maximize the value of the property. So, a large proportion of many successful-operated complexes are sustained by the developer itself, and only a little shops facing street are for sale.

Conclusion

Urban complex is becoming an important representation of contemporary city and integrating into people's daily life gradually. It is closely related with the economic strength of the city, and the quantity increases along with urban expansion and promotion.

To promote the optimization of urban spatial structure, local government should determine the reasonable scale of urban complex according to the actual situation of Linyi and guide the location by planning.

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