

RESEARCH ON THE DEVELOPMENT STRATEGY AND CHARACTERISTICS OF THE 100 URBAN COMPLEXES IN HANGZHOU

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ABSTRACT : Merged with Xiao Shan and Yu Hang in 2001, Hangzhou worked out a new metropolitan urban structure. In order to evolve the construction of new urban form orderly and effectively, a significant solution, so-called 21 new towns and 100 urban complexes, was launched. Based on the theories about urban complex, the paper expatiated on the necessities of urban complex. All the 100 urban complexes could be divided into four types: commercial-service urban complex, traffic hub urban complex, multi-functional tourism urban complex and university service urban complex. Ultimately, characteristics of the four types were researched respectively.

KEYWORDS: Hangzhou, Urban Complex, Type, Characteristic

1 BACKGROUND

Merged with Xiao Shan and Yu Hang in April 2001, Hangzhou achieved a significant change of administrative regionalization, with the area expanded from 668 km² to 3068 km². The constraints of land availability had been completely removed. According to "The Master Plan of Hangzhou City(2001-2020)", Hangzhou would worked out a new metropolitan urban structure – “three satellite towns around downtown area with double cores and double axes, six clusters joining into the open spaces which named six ecologic zones”. This conception would be the guidance for Hangzhou to realize Eco-Group-Type cosmologies. Challenges followed the opportunities. In order to evolve the construction of new urban form orderly and effectively, a significant solution, so-called 21 new towns and 100 urban complexes, was launched in region of Hangzhou in July 2008. It was said that the strategy of building 100 urban complexes would be used as an engine for the new town construction and the overall development of town cluster in region of Hangzhou. The 100 urban complexes would cover an area of 93,240,000 square meters.

2 THE DEVELOPMENT STRATEGY OF THE URBAN COMPLEX IN HANGZHOU

Urban complex (HOPSCA) is a highly intensive complex that combines residency office, commerce, traffic, shopping and entertainment. The necessities of developing urban complex in Hangzhou were as following:

2.1 Human needs – to improve living quality.

Living a high-income, fast-paced life in modern city, people was inclined to choose a convenient, fast and economic space which combined a variety of functions. Assembled shopping, entertainment, repast and leisure, urban complex could meet the needs of the one-stop consumption.

2.2 The industry needs – to development modern urban industry.

The industrial upgrade has emerged in Hangzhou. Commerce and service would be the mainstream. On one hand, the clusters of space could offer the crowds to the business services; on the other hand, the variety of industries could enhance the vitality of space. Therefore, it was the urban complex that could match both space efficiency and compound industries.

2.3 The city needs – to implement the urban form of city planning.

As we know, Hangzhou needs to change the single-center urban mode, as the flat expansion could not keep the operating efficiency. Although the land bottleneck had been removed, we should make a rational use of the resources. Urban complex is the spatial organization which is conformable to the compact city. The strategy of building 100 urban complexes would be used as an engine for the new town construction.

3 THE TYPE OF THE 100 URBAN COMPLEXES [1]

3.1 Commercial-service urban complex

In 2008, per-capita GDP had exceeded 10,000 U.S. dollars in Hangzhou. Modern service industry became a new competitive high ground, while the tertiary industry became the main driving force of urban development. Meanwhile, commercial-service urban complex was probably the best choice which was suitable for the city's service industry and intensive estate. Therefore, half of the 100 urban complexes belonged to this type.

3.2 Traffic hub urban complex

The Chinese city was going through the transformation which led to the track traffic and public traffic priority. Such a traffic hub urban complex which could associate traffic function to others was the solution to solve the new traffic problems. As the track traffic and tourist distribution center developed, traffic hub urban complex is going to be one of the principal urban complex types in Hangzhou.

3.3 Multi-functional tourism urban complex

Hangzhou is blessed with unsurpassed natural and cultural resources. There are Qiantang River and the West Lake, making Hangzhou endowed with both beautiful scenery and green open space; while a tremendous long rich history makes Hangzhou be well known for its civilization and ritual. Therefore, on the premise of environment protection, Multi-functional tourism urban complex would be the most unique urban complex type of Hangzhou.

3.4 University service urban complex

Driven by technology innovation and industrial development, situation of combining learning with research and production was born. Meanwhile, after the blossom of University Town, as an important complement, incubators, such as software parks, university technology parks or innovation venture parks for students flourished. University service urban complex could cover commercial and residential function to the new born University Town.

4 THE CHARACTERISTICS OF THE 100 URBAN COMPLEXES

4.1 Commercial-Service Urban Complex

Geographical distribution: As is shown in the Fig. 1, four-fifths of commercial-service urban complexes were inside of main city of Hangzhou. The reason might be the particularity of commercial-service urban complex: where there were a high flow of customer, funds and resources, there might be a commercial-service urban complex. Only the region with a high level of urbanization could support the development of commercial-service urban complex.

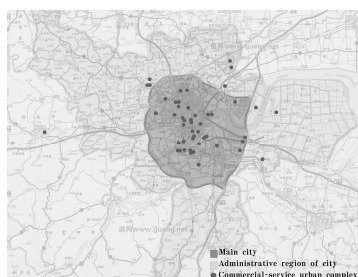


Figure 1 Geographical distribution

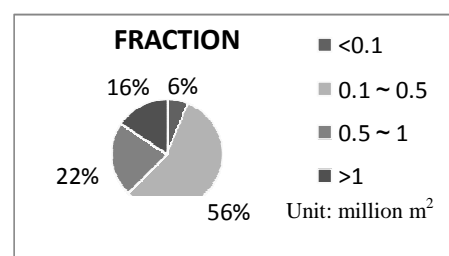


Figure 2 Area distribution (unit: million m²)

Scale: Commercial-service urban complex was characterized by large scale, high plot ratio and huge investment. According to Fig. 2, for almost 50% of commercial-service urban complex, the area range from 100,000 to 500,000 square meters. According to statistics, the average investment was 4.6 billion RMB.

Function: The functions of commercial-service urban complex were as follows: creative design, training,

commercial, residence, shopping, catering, hotels, financial, office, logistics and exhibition.

4.2 Traffic Hub Urban Complex

Classification and Geographical Distribution: Obviously, Traffic hub urban complex and transport lines are highly interrelated. There were 12 Traffic hub urban complexes in Hangzhou, which could be divided into three categories: MTR Property complex, Railway Station complex and Canal Terminal complex.

Table 1 the Category of Traffic Hub Urban Complex

Category	Amount	Example
MTR Property complex	10	Jiu Bao Metro Station complex
Railway Station complex	1	Hangzhou Eastern Railway Station complex
Canal Terminal complex	1	Yu Hang Port Logistics complex

In Hangzhou, all the MTR Properties would be built as urban complexes. As a result, the MTR Property complex was the main part of traffic hub urban complex. Figure 3 shows the relationship between Metro Line 1 and traffic hub urban complexes.

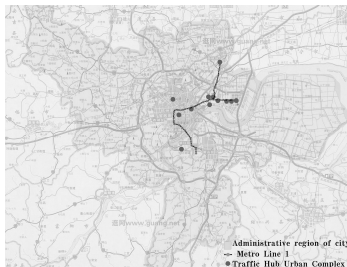


Figure 3 Geographical distribution

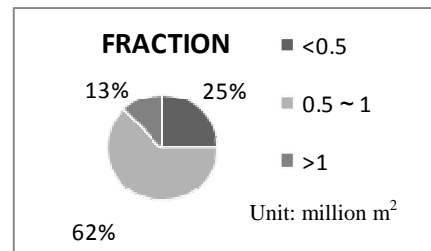


Figure 4 Area distribution (unit: million m²)

Scale: As is shown in fig. 4, compared with Commercial-service urban complexes, most of the traffic hub urban complexes have a bigger scale, with the area ranging from 500,000 to 1,000,000 square meters.

Function: There were some main functions in traffic hub urban complex: Interchange, transport services, commercial, office, hotel, residence and so on. Earnings from other functions could balance the Metro construction funds.

4.3 Multi-Functional Tourism Urban Complex

Geographical Distribution: Hangzhou was famous of the West Lake for centuries. Therefore, the geographical distribution of tourism urban complex appeared to centre on the West Lake, as in fig. 5.

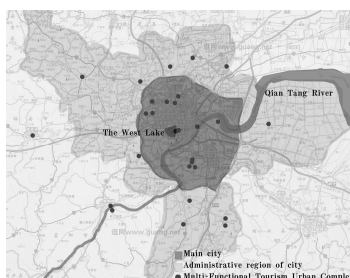


Figure 5 Geographical distribution

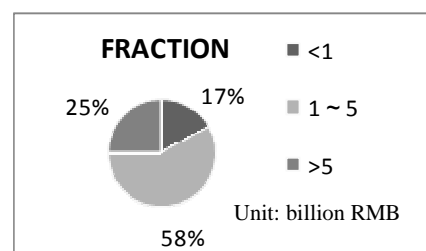


Figure 6 Investment (unit: billion RMB)

Investment: From the fig. 6, we can see over 80% of the tourism urban complex had their investment above 1 billion RMB.

Types: According to the theme, Multi-Functional Tourism Urban Complexes can be divided into three categories: Cultural Heritage Tour, which benefited from the long history of Hangzhou; Sightseeing Tour, leading to ecotourism with natural resources protection; Leisure Tour, which was to meet the pursuit of high-quality leisure and vacation tour. According to Table 2, leisure tour had become the mainstream instead of traditional sightseeing tour.

Table 2 the Category of Multi-Functional Tourism Urban Complex

Category	Amount	Example
Cultural Heritage Tour	5	Ancient streets complex of Zhong Shan Road
Sightseeing Tour	8	Tian Mu mountain ecotourism complex
Leisure Tour,	20	Hangzhou Leisure Expo Garden complex

4.4 University Service Urban Complex

Geographical Distribution: University Service Urban Complex was born with the University Town. The accumulated talent in science and technology promoted the development of surrounding areas. University Service Urban Complex could provide commercial, residential and other requirements, which made a pure university town grown up to a fully functional satellite city.

Function: The main functions of the University Service Urban Complexes were as following: higher education, research, software R & D, service outsourcing and incubator, business and office.

Scale: According to statistics, the average area of university service urban complex was 1.2 million m².

5 CONCLUSIONS

So far, over 20% of the urban complexes has been completed the design and continued with the construction. The characteristics for actual construction will be researched later, and the problems discovered along with actual use will be recorded for future solution.

REFERENCES

- [1] Yang Jianjun, "A Study of the Urban Development of Hangzhou," Journal of Zhejiang University (Humanities and Social Sciences), Vol.30, No.1 (2000), pp.143-150.