

A Study on the Development Plan of New City in the Metropolitan Area of China

Wang Hao

1. Overview

In the 80's, there are seven high-tech development districts are constructed in Chinese metropolitan area. They become to be the first new cities in metropolitan area of China. But, various problems as the social trouble, environmental problems, the job opportunity, the development chance inequitable, and price of land, etc. were expressed with the increasing of population. At the same time, the development district is insufficient with economic growth. The Chinese government made the development plan of the Beijing urban development to solve those problems in 2004. The development of new city is an important one.

The new city development takes the latest planning techniques. In China and other developing countries, developed countries are the new city development became the focus of attention. 11 new cities this planning has its own characteristics, can be very good as the other new city development planning template. Trends in economic development, the new city development is in various countries and regions the only way, in this study the various new methods of urban planning to conduct a detailed analysis, summed up the characteristics and methods of planning, with its make up for China other major cities, urban development surrounding the new problems arising. And human development in the growth process, especially in other developing countries of the metropolitan area, surrounding cities, present or future need of new city development as a learning example for reference.

In this study, from Beijing to begin the overall planning, analysis of new city development in Beijing's share of the planning position and proportion. Significance of the development of

various cities are not the same, apart from the deployment of the population outside of Beijing, but also in green, industrial, commercial, tourism and other aspects of the development of urban functions simultaneously. This study discusses how to allocate the new city functions as well as the development focus through each new city where the Region is and the planning background. Proceeds with a detailed analysis of this comparison, summarized the new city planning program and to sum up the essence of the planning.

2. The Summary of the New City in Metropolitan Area

Beijing domain, build a "two axles - two zones - multi-center" of urban spatial structure. (Fig 2-1)

Two axles: means along the Chang'an street and the east-west axis and the traditional axis of the north-south axis.

Two zones: it means including districts of Tongzhou, Shunyi, Yizhuang, Huairou, Miyun, Pinggu the "eastern development zone" and include the districts of Daxing, Fangshan, Changping, Yanqing, Mentougou's "western development zone".

Multi-Center: refers to the scope of City services to the construction of a number of National, the world center of the city functions, improve the city's core functions and comprehensive competitiveness.

The urban structure of Center City - New City - the Towns is builded in the basis of the formation of "two axles - two zones - multi-center" of urban spatial structure.

Center City is the political, cultural and other core functions and an important economic

function of a concentrated expression of the region of Beijing. Its scope is on the version of the overall plan for urban areas and together with the Huilongguan Beiyuan North region, an area of about 1085 km².

New city is in the original satellite, based on commitment to central city population of ease and functionality, gather new industries and regional development of large-scale urban areas, with relative independence. It plan 11 New city they are Tongzhou, Shunyi, Yizhuang, Daxing, Fangshan, Changping, Huairou, Miyun, Pinggu, Yanqing, Mentougou. The Tongzhou, Shunyi, Yizhuang are the most important develop new cities.

In accordance with the "two axles - two zones - multi centers" of urban spatial structure, in order to co-ordinate economic and social resources and the ecological environment of the coordinated and sustainable development in different regions according to the status of the development of features, resource endowment and ecological carrying capacity of the environment delineated times region, through restrictions on the sub-regional conditions, the development of strength, development model and management model guidance, the implementation of sub-regional urban development strategy. (Fig 2-2)

The east part development zone is an important district where Beijing will report the conserve city in Tienchin and Hebei, etc. in the district in the city emphatically developed toward the district in the future. Tongzhou, Shunyi, Yizhuang districts are the main districts that receive the population of a center city, reconciled functions and new industry. Support and security are still offered to the district like public service, the residence, and the promotion training etc. of the education in the district where industry that positively centers on a high-technology industry and modern production industry is led, and the development district where the industry of Beijing is concentrated is formed. The district of Miyun, Huairou, and Pinggu in the plain is

constructed the base of important diplomatic clerical work to serve international exchange in the capital, develops the travel, leisure, the conference center, and agriculture, and cities type industry of low pollution develops appropriately.



Fig 2-1 two axles - two zones - multi-center



Fig 2-2 The location of districts and new city in metropolitan area of China

The west development zone is developed with the research of the high technology defending ecology and the environment, and positively as an important development district of the future. It get together the industry that there is no influence in the ecology of distribution and the education, etc. of leisure and commerce that centers on the service industry in this district. Daxing, Fangshan, and Changping develop the development of the travel and distribution as an industrial center with a peculiar geography position and the traffic circumstance. Mentougou and Yanqing Districts construct leisure and an educational center of the service industry etc. at the same time as technique industrial base. (Table2-1)

3. The Development Plan of New City in Metropolitan Area

| | | |
|------|-----------------------------|--|
| East | Tongzhou, Shunyi, Yizhuang | receive of center city population and function |
| | Miyun, Huairou, Pinggu | leisure and low pollution city type industry |
| West | Daxing, Fangshan, Changping | industry, distribution, and travel industry |
| | Mentougou, Yanqing | High-technology industry, leisure, education |

Table2-1 Functions of new cities

According to 2002 statistics, the western development zone in the total population, GDP volume and the total amount of land for construction purposes must be over the eastern part of the development zone (roughly the ratio of 1.2:1), but relatively high western mountains, relatively narrow scope for development, ecological protection is facing greater mission, and especially in the eastern part of south-eastern part of the space has the potential for urban development, urban development, regional cooperation in the main direction, it will be the eastern part of the development zone as the city's main space for development is in line with the city of the future development needs. According to planning studies, the eastern part of the development of future planning to bring the total population, GDP and the total scale of urban construction land development must be more than the western zone. new city has six located in the eastern part of the development zone, in the planning of the urban population and the total amount of urban construction land, the development of western and eastern development belt ratio is about 4:6, new city's planned population and land-use pattern of the functions of the city as the center population transfer and the transfer of space ready to prepare.

(1) Population plan

Each new city's population has been showing diminishing status, but with the new city center development and ease the city's population policy, all new city's population will be increasing year after year. In particular,

Tongzhou, Shunyi, Yizhuang three new cities for predominantly residential areas are particularly. And rational allocation of urban and rural areas and the proportion of the population and the population structure, in accordance with the different functions of the deployment of city population in work, education and life. (Table 3-1)

| | | |
|------|-----------------------------|---------|
| East | Tongzhou, Shunyi, Yizhuang | 700-900 |
| | Miyun, Huairou, Pinggu | 300-400 |
| West | Daxing, Fangshan, Changping | 500-600 |
| | Mentougou, Yanqing | 150-300 |

Table 3-1 Population plan of new cities (thousand)

(2) Land Use

Under the Town's own conditions, functions and population, restrictions on urban and suburban land, is not simply the pursuit of land area, but the rational use of limited land, and space layout echoes. Development in the western mountains to bring most of the new city, new cities, and urban planning area is relatively small; the relative industrial development zones have become an important part of planning. While the eastern part of the development of relatively new cities bring the larger, suitable for planning a residential area.

(3) Spatial distribution

The urban spatial layout and adapted to adjust the industrial structure, and gradually form a reasonable division of labor, efficient and orderly network-like spatial structure. Strengthen the integration of rural settlements, to improve the ecological environment, improve public facilities and infrastructure service level, to promote industrial-scale operation to focus on the industrial park to focus on farmers to the cities or towns. And it followed the division of urban functions, and rational planning.

We can see that each new specific city planning - city zoning pattern is the basis for planning and spatial structure and urban functions complement each other. All new city center

area (core area) are mainly of business and administration, and follow the work, life, learning, leisure, environmental protection, industry and so on balance, a full range of zoning. While the eastern and western district of New city also has a different way. With the development of western regions are mountainous and the eastern part of the development zone is a plain, located in the west of New city in a specific zoning by industrial and tourist areas mostly in the east are mostly residential areas and agricultural zones as the main body. The eastern part of the development zone is located in plain areas is not, and is located in Beijing and Tianjin, two cities, the relative development of the west with the mountain, this is at the same time the new airport is located near the port of Tanggu in traffic has certain advantages, and Tongzhou, Shunyi, Yizhuang three focuses on the development of the new city are all located in the eastern development belt, is not difficult to see the eastern part of the development zone will be the focus of future development.

4. The Development Implementation of New City in the Metropolitan Area

In the implementation, we found the new city as a result of the initial stage in the building, although the original satellite cities with basic services, but for the developed cities in the expansion of the scale, as well as the sudden population growth should be at an early stage to the basis of facilities to build focused, and try to innovation and with the new city building its own characteristics.

In the early stage of implementation, the new city in the near future should adhere to basic infrastructure and public services facilities ahead of the principle of moderation, with a focus on road transport, energy supply, environment, education, health care, cultural and other public facilities, and actively guide new city's industrial development and human home environment, to attract the population transfer to the new city, new city industries to gather

and promote the capital city of the overall spatial structure adjustment and optimization. Experimental work to strengthen the village planning. Farmer will and spirit of respect for the principle of land conservation to improve rural infrastructure and living standard of services and facilities with emphasis on practical exploration of the village planning methods to improve the living conditions of peasant production. Improving the regional road network system, enhance the region as well as the group's external Changping new city traffic carrying capacity, and form with the Center City as well as other convenient new city links. The full implementation of bus priority development strategy, vigorously develop rail transit, construction of bus priority transfer hub and station facilities such as the scope of the first in the new city Bus to build a sound transfer system. Increase of municipal infrastructure, and improve municipal infrastructure construction standards and level of coordination and orderly development of new city to provide strong protection.

5. Conclusion

In this paper, through the metropolitan area of China's 11 New city planning and the implementation of the program were analyzed. First of all proceed from the overall planning of Beijing, analysis of new city planning in the development of object and background, as well as in the overall planning of Beijing what role. And then introduce each new city where the Administrative Region of China, the new cities to learn more about the functions. This paper summed up the characteristics of the planning and experience through the new city development plan comparison. Finally, in the development of the implementation of relevant laws and regulations adopted by the introduction and management methods, as well as in the development of the problems arising from this meeting to explain the characteristics of planning and experience.