

論文の内容の要旨

Abstract of Dissertation

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Implementation Strategies and Assessment for Urban Growth Management in China

— a Case Study of Beijing

論文題目

中国における都市成長管理政策の実施戦略と評価に関する研究

—北京市をケーススタディとして

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Since the reform and opening-up policies were established in late 1970s, an “economy-first” development has been adopted as a national policy. This policy and the succeeding measures have triggered a comprehensive urban development nationwide. Meanwhile, with the introduction of housing and land reform, the opening up of Chinese cities to foreign investment, and the declining role of state enterprises in urban economy, the state and centrally-planned economy have less significant role in influencing urban development in the traditional ways. Therefore, the Chinese government has been making effort to establish a new market-oriented urban planning and management system, which aims to change the conventional or blue-print urban planning and management system to a more flexible one. This system is expected to allow the spontaneous development with strategic management, and emphasize more on the process rather than an ultimate picture of result. The influence of the government to urban land use issues has become more

indirect. However, the rapid and large-scale urban growth, directed by the slacker government management, has resulted in many serious social and environmental problems, such as the massive loss of cultivated land, serious social antagonism and severe environmental damage.

In 1990s, the central government of China started to make great efforts to diminish the negative impact of urbanization and manage urban growth in a more sustainable and smart way. At the same time, in Beijing Municipality, many measures were adopted to strengthen government's power in order to improve the urban management and to meet the new needs for managing environmental issues. All these efforts and measures are expected to be consistent with the new market-oriented urban planning and management system. Therefore, the term "growth management" has been introduced and applied in the Chinese context to address the problems that arose from the shrunken and poor management before 1990s, as well as the new requirements of managing new issues since 1990s. This research defines the "growth management" in China as the regulation of the *amount*, *timing (sequence)*, *location*, and *character* of development, due to the growth of the need for better management of the existing resources and the awareness of environmental protection and food security. The comprehensive reinforcement of the government's power in urban management is the most significant character of the growth management in China.

Due to the neglect of the fragmentation of the urban growth management objectives of the central government at the national level and the lack of empirical study on urban growth management at the local level, traditional studies are limited in explaining the implementation of urban growth management strategies at both national and local level. Moreover, although growth management focuses more on the process of management rather than a fixed blueprint, little effort has been made to develop correlative indicators to make the quantitative description and assessment. The limited

database, including the inadequate and inconsistent data from different sources, seems to be one of the largest obstacles for the assessment of growth management implementations.

This research discusses the strategies of growth management of both national government and Beijing municipal government in addressing the problems occurred when the governments' power shrunk due to the transition of the planned system to a market-oriented system. Then, it examines the growth management implementation through the two basic indicators: urbanized area density and open space consumption per new resident with a careful analysis and comparison of the updated data.

At the national level, this dissertation analyzes the growth management strategies and their correspondent implementations different policies. Particularly, the strategy of preserving cultivated land and the traditional strategy of facilitating industrialization and economic development are compared and discussed. Consequently, the combined effects of the two strategies are examined by establishing a linkage between existing policies and growth management effort. At the local level, in addition to the examination of the effects of amount management assessed by the urbanized land area density and open space consumption with more detailed and reliable data from the CMPs (City Master Plans), the location management of the CMP boundaries, UGBs and green belts at the central city and the management of the sequence and characters of local sites are discussed to evaluate the growth tools and explain the growth pattern.

The examination of the amount control at the national level suggests that notwithstanding ambitious objectives at both national and local level, the consolidation of the governments' power and strong effort of growth management did not lead to a more impact urban development and the preservation

of open space. The urbanized land area density at the national level has been increasing if measured by urban districts, settlement/ind/mining land, and construction land; while decreased if measured by the urban built-up area. It proves the limited success of the growth management measures in promoting a compact development.

The result of the examination of urbanized land area change and open space consumption in Beijing Municipality confirms a continuous increase of the urbanized land area density, and at the same time, a more rapid loss of all types of open space in Beijing Municipality. It also shows that the LUMP and CMPs have become more ambitious. Although the open space consumption and urbanized land area density change did not go beyond the control of the 1993 CMP and the 1997 LUMP, they seem never able to meet the new requirement that has been established in the 2004 CMP. The limited achievements, if measured by the new planning standard, would be a frustration rather than a success.

The examination of the location management of urban containment tools in the central city of Beijing, including CMP boundaries, UCBs, and green belts, also confirmed that the control was much slacker than it was planned to be, in spite of some achievement in preventing the spontaneous construction outside the CMP boundaries and UCBs, as well as the urban development inside the green belts. The examination of the CMP boundaries and UCBs clearly shows that construction has occurred immediately outside CMP boundaries and the planned urban construction area. This was particularly evident for the 1993 CMP. It proves the limitation of the boundaries in controlling the location of urban growth. A detailed examination of the composition of the actual green space suggests that the increase of reported green space was at the expense of large decrease of farmland and water area. As some of the farmland and water area has been converted to forests and gardens,

a large proportion of the area has also been converted for construction. This also suggests the limitation of the green belt in preserving the open space and control the construction inside it.

The examination of the two urban fringe clusters shows that the urban development in the urban fringe areas of the central cities has been directed as well planned, high-density and non-automobile dependent characters. Different with the results concluded from the CMP data, the results of examination through RDP data suggest a higher density and less open space consumption of the two urban fringe clusters. The decrease of the population density in urban fringe areas was mainly due to the loose way of calculating existing urban built-up areas and the corresponding population. In addition, the land development in the already built areas was characterized by the high proportion of both profitable land use (residential, commercial) and non-profitable land use (road, street, square and municipal utilities), as well as the low proportion of green space. This proves the limited efforts of municipal government in managing the sequence of growth. Meanwhile, the figures of the existing and planned area in both Jiuxianqiao and Qinghe urban fringe clusters suggest an intention to increase the urban development density in the 2005 RDP. The examination of the built-up area shows that the land use density in the built-up area has been developed even higher.

This dissertation confirms that the urban growth management at both national and local level is a limited success in preserving open space and promoting impact urban development. It suggests that a consolidation of governments' power did lead to some improvement; however, it did not result in better achievements according to its objectives.