

SPRINGERBRIEFS IN ENVIRONMENTAL SCIENCE

Jingzhu Zhao

Towards
Sustainable Cities
in China Analysis
and Assessment of
Some Chinese Cities
in 2008

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Analysis and Assessment of Some
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Preface

The year of 2008 is of special importance in human history, when for the first time the world's urban population exceeded the rural population (United Nations Population Fund 2008), and marking the breakthrough of humankind into an urban-dominated society. In a moment of such importance, it is necessary for us to review, research, and assess the urban development process and development model evolution.

The birth of the world's earliest city is generally deemed to have occurred around 3500 BC. For various reasons, the early urbanization process was quite slow for a long period, and by 1800 the world's urban population only accounted for about 10% of the total population, with this proportion increasing to about 15% in 1900. Along with city generation and development, people have kept asking the question: following which theory or model should the cities be built and developed? Especially, in the last 100 years, along with the accelerating urbanization process and its emerging issues, many people have put forward a variety of urbanization development theories or models from different angles, and the Sustainable City is one that has achieved a profound influence.

People have made quite a few interpretations of Sustainable City from different perspectives. It is generally considered that Sustainable City refers to urban life quality improvement in terms of ecology, culture, politics, mechanism, society, and economy, while leaving no burden to future generations. In short, a sustainable city is one that can provide and ensure sustainable welfare for its residents with the capacity of maintaining and improving its ecosystem services.

Since the policy of reform and opening up in early 1980s, China's urbanization has developed rapidly, with the urbanization rate increasing from 17.4% in 1978 to 44.9% in 2008. The constant urban expansion has led to a number of economic, social, urban construction and management issues, and the conflict between the environment and development has become increasingly conspicuous. The environmental problems experienced in developed countries in the last century have now collectively occurred in China during the last 30 years of rapid economic growth. The severe reality and potential future problems tell us that the construction of sustainable cities is more important and urgent in China than anywhere else in the world.

To promote China's sustainable city construction and development, this book has preliminarily constructed the assessment indicator system and development index of a sustainable city, based on a summary and analysis of the existing Sustainable City theories and practices both at home and abroad. Meanwhile, mainly based on the data from 2008, this book has made a tentative assessment of the development level of Sustainable City in some major Chinese cities in 2008.

Assessment and research on sustainable city construction are work of great significance. With the support, help and encouragement of many colleagues and friends, we have completed this book after more than 2 years' study. Although our work is far from perfect, we hope this book will arouse concerns from all social circles and receive guidance and help from more experts, scholars, and administrators, because Sustainable City construction theories and practices can only be constantly improved through their wide participations and joint efforts.

During the research and preparation process of this book, a number of experts, scholars, colleagues, and friends have provided many constructive comments and suggestions, and we would like to express our sincere gratitude here. Meanwhile, gratitude is also extended to the authors of the references. The research for this book has gained financial support from the One Hundred Talents Project of the Chinese Academy of Sciences, Academy-Locality Cooperation Project of the Chinese Academy of Sciences, CAS/SAFEA International Partnership Program for Creative Research Teams, and other relevant projects, and we express our thanks here. Sincere thanks also go to the support and help of Science Press in the process of editing and publishing.

Finally, it should be noted that the construction or development of sustainable cities includes many different aspects and sustainable city assessment involves theoretical system, indicator system, data acquisition, data processing, calculation methods, and other issues. Thus, it is a difficult job to carry out an assessment of the development level of Sustainable City. Therefore, there are inevitably omissions and errors in this book, and your criticism and correction will be highly appreciated.

May 22, 2010

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Contents

1	Brief Review of Sustainable City	1
1.1	Characteristics of the Sustainable City Concept	1
1.2	Related Theories to Sustainable City	4
1.3	Sustainable City and Related Urban Development Models and Actions	7
2	Exploration and Practices of China’s Urban Development Models	15
2.1	Evolution of China’s Urban Development Model During the Last 30 Years	15
2.2	Practices of China’s Sustainable Cities	32
3	An Assessment Indicator System and a Comprehensive Index for Sustainable City	37
3.1	Functions of Assessment Indicator System for Sustainable City	37
3.1.1	Significance and Functions of Sustainable City Assessment	37
3.1.2	Principles of Designing the Assessment Indicator System for Sustainable City	44
3.1.3	Issues to be Considered in Establishing an Assessment Indicator System for Sustainable City	44
3.2	Establishment of an Assessment Indicator System for Sustainable City	45
3.2.1	An Assessment Indicator System for Sustainable City	45
3.2.2	A Comprehensive Assessment Index for Sustainable City and Its Calculation Method	46