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 Chinese Cities in 2008

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Jingzhu Zhao
Chinese Academy of Sciences
Institute of Urban Environment
1799 Jimei Road
Xiamen 361021
China
jzhao@rcees.ac.cn

ISBN 978-1-4419-8242-1 e-ISBN 978-1-4419-8243-8
DOI 10.1007/ 978-1-4419-8243-8
Springer New York Dordrecht Heidelberg London

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 aboard. 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

Jingzhu Zhao
Research Group of Sustainable City
Institute of Urban Environment
Chinese Academy of Sciences

Contents