





United Nations
Bureau International des Expositions
Shanghai 2010 World Exposition Executive Committee

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Shanghai Manual

A Guide for Sustainable Urban Development of the 21st Century



城市,让生活更美好 Better City, Better Life

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A Guide for Sustainable Urban Development in the 21st Century

FOREWORD - UNITED NATIONS

The Shanghai Manual for Better Cities is a concrete outcome of the World Expo 2010, Shanghai, China - Better City, Better Life. It is a product of fruitful collaboration between the Municipal Government of Shanghai, the Bureau International des Exhibitions and the United Nations. It addresses one of the most pressing challenges of our time – how to foster sustainable, livable and harmonious cities.

The World Expo 2010 Shanghai provided not only a platform for exhibitions and cultural exchanges, but also a forum where broad-ranging discussions on themes central to sustainable development took place and practical solutions to problems explored, based on lessons learned and best practices. I wish to commend United Nations agencies and Chinese partners that collaborated during the Expo in organizing thematic forums on sustainable urban development. At those forums, we received the insights of renowned academics, experts and practitioners, innovative ideas of business leaders, and the visions of mayors for the cities of tomorrow. This wealth of knowledge and experience has been truly enriching. The aim of this Manual is to support mayors and urban managers as they try to foster sustainable urban development in their communities. Through this Manual we seek to place effective policy tools and best practices at their disposal. This support is essential because cities are at the forefront of finding and testing development solutions. Cities are the most vibrant centres of human energy and creativity. They are at the nexus of new ideas, innovation and the knowledge economy. Moreover, cities are at the leading edge of efforts to address the challenges of climate change, and it is in cities that initiatives of the new green economy are being piloted.

Let us work together to implement forward-looking strategies of our cities with our combined dedication and vigour. It is our hope that with feedback and inputs from mayors, urban planners and managers, this Manual will become a living document, to be revised and improved while incorporating new visions, lessons learned and best practices.

Sha Zukang Under-Secretary-General Secretary-General for the Conference on Sustainable Development (Rio+20)

FOREWORD – BUREAU INTERNATIONAL DES EXPOSITIONS

A World Expo has as its ultimate goal the creation of a lasting legacy of education, innovation and cooperation. The success of such an event lies in the significance of the material and the intangible opportunities that are created for both the host city and country and for its ability to resonate beyond borders and people. In this sense, Shanghai 2010 was an outstanding event and this manual is one example of the spirit that drove it.

By selecting a theme such as *Better City, Better Life*, Shanghai 2010 was able to create a powerful virtuous cycle were the theme and of the universal objectives of Expos (i.e. to help create better cities) were one and the same. This choice has produced a powerful effect, where the messages and contents of the theme were amplified by the staging of the Expo itself, and, in turn, the Expo could be better appreciated for its direct contribution to the development of better urban environments.

This manual is an important and novel outcome of the legacy of Shanghai 2010. It fulfils the joint aspiration of the UN, the organizers of Shanghai 2010 and the BIE to work together to distil the lessons and the outcomes developed both within and beyond Expo 2010. With the view to maintain the same inclusive attitude of Shanghai 2010 - which for the first time in the history of Expos has invited cities to participate along national governments - this manual has included best practices that were not presented within the site or the forums of Expo 2010.

For this reason the BIE is indebted to both the UN, the City of Shanghai and the Chinese governments for working together to develop a framework and a set of materials that would foster and promote a better understanding of the objectives and values of Expos in general and of the achievements of Shanghai 2010 in particular.

While the UN has traditionally participated in Expos, in Shanghai 2010, for the first time it played an active role in orchestrating a global dialogue for the construction of better cities. To this end, it joined the Expo organizers and the BIE to co-organize the high profile international forums and to prepare the Shanghai Declaration. The depth of expertise and the reach of the UN were critical assets to help create the foundations for a lasting legacy of cooperation on urban sustainable development connected to Shanghai 2010.

When our organizations first discussed the idea of this manual, there was an agreement that the international community had failed to implement many of the social, environmental and economic goals and objectives that were agreed upon within major international conferences. With this manual, our wish is to provide a concrete and practical contribution to fill a need of better training, knowledge sharing and expertise

and to support urban managers in the decision-making process that helps achieve greater quality of life in their city and beyond.

Vicente González Loscertales Secretary General

FOREWORD - CITY OF SHANGHAI

World Expo 2010 Shanghai China was a magnificent gathering of human civilizations. Built around the theme of *Better City*, *Better Life*, it championed the Expo concept of understanding, communication, gathering and cooperation and created a fascinating kaleidoscope of world civilizations. It will be marked in history as a successful, wonderful and unforgettable World Expo.

Expo Shanghai left behind a rich heritage. Through exhibitions, forums and various activities, participants showcased their achievements, shared urban best practices, disseminated advanced urban management concepts and arrived at important consensus. Eco-friendly, green and low carbon development is gaining new ground after having been put under the spotlight and into practice at the Expo. Meanwhile, technological innovation, sustainable development and the call for making the earth a better place have become our common aspiration, all of which are going to impact cities of the future in greater breadth and depth.

UN agencies, the BIE and Chinese scholars spent over one year putting together intellectual legacies of Expo Shanghai, and their hard work crystallized into this Shanghai Manual. Aiming at promoting Expo values, it details the experiences and practices of cities across the world in addressing common challenges and achieving harmonious development based on a wide selection of Expo cases, and is therefore of great theoretical and practical value. It is my belief that the Manual will pass on the Expo legacies and become a guidebook for city authorities and researchers over the world in their quest for innovative models of urban development, economic efficiency, ecofriendliness as well as social justice and harmony.

Han Zheng Mayor of Shanghai

ACKNOWLEDGEMENTS

This Manual has benefited greatly from the contributions of many people. The idea for the Manual itself was the inspiration of Sha Zukang, Under-Secretary-General of the United Nations Department of Economic and Social Affairs (UNDESA). This initiative was immediately embraced by the Secretary General of the BIE, Vicente González Loscertales, and by the Executive Vice Mayor of Shanghai, Yang Xiong, with the view of establishing a legacy for the theme of the Expo that would directly benefit urban leaders.

The authors benefited from the substantive guidance of Tariq Banuri, former Director of the Division for Sustainable Development of UNDESA. The project leader and editor was Mohan Peck. The support of Juwang Zhu and Tan Jian was instrumental in the completion of the project. We wish to gratefully acknowledge the work of several lead authors in drafting various chapters of the Manual, namely, Federica Busa, Warren Karlenzig, Prasad Modak, Jose Monroy, Carlos Felipe Pardo and Mohan Peck.

The Manual owes much to experts from a number of United Nations offices and agencies who were kind enough to review chapters and provide comments, suggestions and inputs. These include: Arab Hoballah, Rob de Jong, Soraya Smaoun, Maike Christiansen, Patricia Kim of UNEP; Axumite Gebre-Egziabher, Gulelat Kebede and Joseph Hooper of UN Habitat; Sanjay Acharya and Doreen Bogdan of ITU; Matthias Eck, F. Russell-Rivoallan, Hans D'Orville of UNESCO; Anne Miroux, Monji Hamdi and Dong Wu of UNCTAD; and Choudhury Rudra Mohanty of UNCRD.

Grateful acknowledgement goes to the Vice Mayor of the City of Shanghai, Yang Xiong for his unstinting support. We wish to also thank Zhu Yonglei, Deputy Director General of the Bureau of Shanghai World Expo Coordination and his staff from the Shanghai Expo Forum Affairs Department, in particular, Wang Jun, Cheng Jian and Yu Hongyuan. The Expo Bureau also organized seven teams of Chinese experts who reviewed the chapters of the Manual and made noteworthy contributions. They leaders of these teams were: Zhou Zhenhua, Director, Development Research Center, Shanghai Municipal Government; Yang Jiemian, President, Shanghai Institute for International Studies; Wu Jianzhong, President, Shanghai Library; Chen Chao, Vice President, Shanghai Library, Wu Zhiqiang, Assistant President, Professor, Tongji University; Li Guangming, Professor, Tongji University; Zhang Min, Professor, Shanghai University.

Finally we wish to appreciate the constant support provided by the BIE, and in Vicente González Loscertales, Secretary-General, and Federica Busa, Counselor to the BIE Secretary-General. The BIE strongly encouraged the development of a thematic legacy that would promote a better understanding of the theme "Better City, Better Life" through education, cooperation and progress.

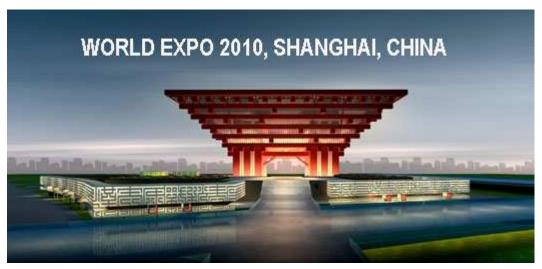
Introduction

PURPOSE

This manual is intended to provide a resource on sustainable urban development to mayors, urban planners and decision-makers of cities around the world. As a leader you want to make your mark and leave some meaningful legacy of your efforts toward building a better city. You may ask yourself: What do you want to do? What is your vision of what you want the city to become? How do you inspire the managers of your administration so that they all pull together in the same direction? How do you build and maintain political momentum with the communities that you govern?

There are many examples of innovative leadership from mayors who have faced the same or similar challenges as you face. In this manual we try to distill the lessons of some of those experiences and provide practical advice on policies and best practices. This manual is not a theoretical discussion; it is based entirely on practical solutions to real world challenges. It does not describe business as usual approaches to urban management; it provides innovative ideas, tactics and solutions that have been successfully applied at the city level.

From the outset, we wish to acknowledge that all cities are different and policies that work in one may not work in another. All cities have different development conditions, infrastructure, institutions, assets, challenges and levels of stakeholder engagement. Mayors are invited to choose from the menus of policy options those measures that may be most relevant to their respective cities.



The iconic China pavilion at Expo 2010 Shanghai.

SHANGHAI WORLD EXPO AND URBAN SUSTAINABILITY

The existence of this manual is indebted to the World Expo 2010 held in Shanghai dedicated to the theme "Better City, Better Life." The Shanghai Expo addressed the urgent need to improve urban planning, management and livability. An innovative dimension of this global event was a series of theme forums that were convened to explore key urban challenges and solutions. The theme forums were organized by the Shanghai 2010 World Exposition Executive Committee, various entities of the United Nations system, a number of national level Chinese government Ministries, and the Bureau International des Expositions (BIE), which is the intergovernmental organization responsible for overseeing World Expos.

Much of the intellectual input to the manual is derived from those theme forums as well as the pavilions at the Expo site. The urban development topics explored at the theme forums included:

- Urban governance: harmonious cities and livable life
- Economic transformation and urban-rural relationships
- Information and communication technologies and urban development
- Cultural heritage, creative cities and urban regeneration
- Science and technology innovation and urban futures
- Environmental protection and urban responsibilities¹

This manual adopts the vision of harmonious cities that was developed at the Expo after much discussion and debate within the theme forums. It is a reflection of the challenges that have been faced by Shanghai and other cities around the world. It covers many themes which can be applied and contextualized depending on the development conditions of a city.

The concept of harmonious cities of the Shanghai Expo acknowledges that we aspire to build cities that establish harmony between diverse people, between development and environment, between cultural legacies and future innovations. A City of Harmony reveals itself when people are in harmony with nature, society, and themselves, and when there is also harmony between generations.

Through Expo 2010, the city of Shanghai offered a platform to catalyze the energies and the visions of the world on how to build future cities with global wisdom. Shanghai was ideally suited for this task because of the combination of its size, its rapid development and the millenary tradition of China, which reflect the different challenges faced by the majority of cities in the world. Furthermore, as the first Expo to take place in the developing world, Shanghai was a perfect venue to bring together diverse experiences and build the necessary bridges that can help improve the cities of tomorrow.

To this end, it dedicated a 25 hectare area to the presentation of urban best practices, which enabled cities to take part in the Expo by presenting a real project that they had successfully implemented to improve quality of life. The Urban Best Practices Area was both a laboratory for learning and exchanging on urban innovation, but also offered cities unique opportunities to know each other better and to plant the seeds of future cooperation.

The Shanghai Expo stands at the cross roads of global efforts to connect both developed and developing worlds, East and West, North and South, rich and poor, urban and rural, and the past with the future.

Better City, Better Life, the guiding theme of Expo Shanghai 2010, reflects a global aspiration that continues to resonate beyond national borders and into the future. Indeed, Better City, Better Life was always meant to be more than an Expo slogan: it is a manifesto for 21st Century sustainable urban development.

THE STRUCTURE OF THE MANUAL

The chapters in this Manual reflect the topics that were analyzed in the depth during the thematic forums that were organized during the Shanghai Expo. Each chapter in this publication focuses on a particular theme. There is a discussion of issues and challenges faced by city leaders followed by a description of policy options and measures that have been successfully employed in cities to address those challenges. This is followed by the presentation of a number of practical case studies outlining the experience of cities in implementing a mix of policy measures. The case studies and best practices compiled in the manual use examples from large cities in both developed and developing nations. Resources for further information are also included.

The case studies and best practices are at the heart of this Manual and we have therefore given great attention to the selection criteria.

- Each case study presents a practical example of how a city faced a development or sustainability challenge and arrived at a successful solution.
- The beginning of the case study provides some context on the relevant history of the city and the development conditions that affected the nature of the challenge.
- The case study describes the policy options & measures that were employed by city leaders to solve the challenge, including how they may have been adapted to local conditions.
- The outcome of the project is outlined how was it successful and what was its impact
 on the sustainable development of the city.
- Measures employed to engage urban stakeholders, either in developing the strategy for the project or in overcoming implementation problems, are explained. Where information is available, we outline how community stakeholders benefited from the project.
- A section entitled "lessons learned" is always included. This section highlights the key takeaway points that one mayor might wish to pass along to another mayor who was planning a similar project.
- Where possible we strive to include successful case studies from rapidly, growing cities
 in developing countries, as mayors in these cities face the greatest challenges. Strong
 case studies from Europe and North America are also included so as to achieve
 regional representation.

A number of case studies were presented from Shanghai Expo 2010, derived either from the Expo Forums, the Urban Best Practices Area or the Expo pavilions. We have included additional case studies in order to make the Manual most relevant to the urgent needs of cities. It is the plan of

the United Nations to continue to improve and enhance this document, so that it becomes a living resource for sustainable urban development.

A chapter on envisioning sustainable and harmonious cities has been added as this is often the first practical step that cities can take toward re-imagining their future. A number of major cities around the globe have recently taken it upon themselves to develop new urban master plans looking out to 2030. This in itself may be an indication of the pressures and rapidly changing economic, social and environmental conditions that cities are currently experiencing.

A separate chapter on mega-events has also been added in recognition of the fact that these events are an additional form of best practice that a city can choose to accelerate urban transformations. Case studies of the 2008 Beijing Olympics, the 2010 Shanghai World Expo, European Capitals of Culture, and major United Nations Conferences are presented as learning experiences.

A number of reports and manuals have been previously produced on some of the topics covered in this publication by other United Nations (UN) agencies and international/national organizations, including UN Habitat, UN Environment Programme, Local Governments for Sustainability (ICLEI), the US Green Building Council, the Organization for Economic Co-operation and Development (OECD), the World Bank, the Asian Development Bank and the UN Centre for Regional Development (UNCRD). We try to include links to these publications for readers' further information.

WORLD EXPO 2010 SHANGHAI CHINA SHANGHAI DECLARATION

31 October 2010

WE, participants and friends from all reaches of the globe, drawn by the theme "Better City, Better Life," have gathered in Shanghai and jointly fashioned the first World Expo in a developing country organized under the auspices of the Bureau International des Expositions. During these 184 days, we have explored, envisioned and simulated the mosaic of urban life through the wonderful exhibitions of the pavilions, the instructive showcases of urban best practices, the indepth intellectual exchanges in the forums and the brilliant cultural events.

WE have come to realize that people's understanding and pursuit of a better life are both the foundations and the engines of urban development.

WE are also convinced that it is necessary to re-examine the relationship between people, cities and our planet.

WE agree that, in tackling the challenges of urban development, innovation offers solutions and the concept of "Cities of Harmony" embodies our dreams.

At present, with more than half of humankind living in cities, our planet has entered the urban age. Rapid urbanization and industrialization have offered to humanity the abundant fruits of modern civilization, but at the same time they have brought unprecedented challenges. Population explosion, traffic congestion, environmental pollution, resource shortages, urban poverty and cultural conflicts are becoming urban problems with a global scope. For historical and current reasons, these phenomena are especially prominent in many developing countries. The Shanghai Expo responded to the times by selecting cities as its theme. It also introduced the first-ever Urban Best Practices Area and Virtual Expo to pursue a ground-breaking exploration of the possible solutions to the common dilemmas faced by humankind.

Today, as this grand gathering comes to a close, we sing high praise for the important value of the World Expo as a platform to confront these challenges and as a vehicle for dynamic exchange and interaction between civilizations. We enthusiastically issue this Shanghai Declaration as a summary of the substantive achievements of the Shanghai Expo and an expression of the shared aspirations of people around the world for a "Better City, Better Life."

We aspire to build cities that establish harmony between diverse people, between development and environment, between cultural legacies and future innovations. A City of Harmony reveals itself when people are in harmony with nature, society, and themselves, and when there is also harmony between generations.

To this end, we join together in proposing:

To Establish an Ecological Civilization Oriented toward the Future

Cities should respect nature, consider the urban ecological environment as an asset, integrate environmental issues into urban planning and administration, and accelerate the transition to sustainable development. They should promote the use of renewable energy sources and build low-carbon eco-cities. They should strongly advocate for conservation of resources and promote environment-friendly manufacturing. Cities and their citizens should join together to create sustainable lifestyles and an ecological civilization in which people and environment co-exist in harmony.

To Pursue Inclusive and Balanced Growth

Cities should balance economic growth and social development; seek to achieve an optimal relationship between social equity and economic efficiency; strive to create an institutional environment of shared rights and interests, equal opportunity, and fair competition; and work to reduce inequities in income. They should enable all residents to share the fruits of urban development and fully realize their personal growth.

To Promote Scientific and Technological Innovation as a Path to Development

Cities should strengthen scientific research and technological innovation, as well as establish and improve systems for using new technologies. They should accelerate the application of scientific findings in order to improve the quality of people's lives and create new industries and jobs. They should leverage scientific research and technological innovation to build up the capacity of cities to prevent and mitigate urban and natural disasters. They should apply principles of openness and mutual benefit in strengthening scientific and technological exchanges and collaboration to promote urban development around the world.

To Build a Smart and Accessible Information Society

Cities should recognize that information and communication technologies are essential to a vibrant social, economic and cultural life of the city. Cities should invest in information and communication technology infrastructure so as to strengthen services across multiple sectors, and to build an intelligent digital nervous system supporting urban operations. They should strengthen the use of information technology in education, reduce the digital divide, and increase the access of residents to information.

To Foster an Open and Sharing Multicultural Society

Cities should endeavor to protect tangible and intangible cultural heritage and encourage the development of multicultural Society. Like the ocean that embraces all rivers, cities should keep an open spirit and actively engage in intercultural exchanges and interactions. Cities should pursue cultural innovation based on respect for cultural traditions and the preservation of cultural diversity, so as to generate lasting momentum for urban and human development.

To Build Friendly and Livable Communities

Cities should promote a harmonious and friendly social environment, and build civil, safe and livable urban neighborhoods through rational planning. They should provide high-quality public services in employment, healthcare, education, housing, social welfare and other areas. They should encourage public participation in urban planning and governance, take into consideration the practical and psychological needs of migrants to the cities, and eliminate social barriers and conflicts.

To Pursue Balanced Urban-Rural Development

Cities should coordinate balanced development with rural regions through the provision of services and infrastructure. Cities should strive to reduce the urban-rural gap, take into consideration the interests of disadvantaged social groups, and encourage and aid the integration of rural populations into the city. More efforts should be taken to improve and optimize urban-rural linkages as well as regional networks. Cities should actively initiate urban-rural dialogue to achieve harmony in their interactions.

WE THEREFORE call upon the world to pursue the efforts we have undertaken in the Shanghai Expo: to promote sustainable urban development, to foster cooperation and exchanges among cities and regions, and to share experiences and lessons in urbanization.

WE propose to undertake initiatives for knowledge sharing and capacity building for cities around the world as they tackle the economic, social and environmental challenges of the 21st

century. One such initiative will create educational materials for future city planners and managers by compiling the intellectual contributions of the Shanghai Expo.

WE propose that October 31st, the day of the closing ceremony of World Expo 2010 Shanghai China, should be nominated as World Better Cities Day, so that the ideas and practices of the Shanghai Expo will be recalled, renewed and advanced in the future, inspiring humankind in its enduring pursuit of urban innovation and harmonious development!