



International Symposium on Co-design for Urbanization in China and Asia-Pacific Region

20-23 October, 2015
Xiamen, China

FIRST CIRCULAR

In less than 50 years, the face of the Earth has been transformed drastically. In 1950, only 29% of the global population lived in cities, today over 50% live in cities, and this proportion is expected to reach 70% by 2050. China and Asian-Pacific regions are experiencing the most rapid urbanization, and sustainable urbanization is indeed high on the agenda of the Chinese government at all levels.

Urbanization impacts environmental quality through high intensity discharge of waste, landscape changes and altered biogeochemical cycling of carbon and nutrients. Urban biogeochemical processes occur locally but have global impacts, particularly climate impacts. Climate changes will in turn influence urban sustainability and systems health. Cities also are the centers of knowledge, creativity and collective intelligence, where solutions to problems of urbanization are being developed. However, urban systems are complex and their development is never managed by a single institution or level of government; some aspects are simply emergent properties of the behaviour of many individuals. As a consequence, a sophisticated understanding of multi-layer and multi-sectoral decision making is needed to facilitate the quickest possible moves towards sustainability.

Future Earth is a 10-year international research programme launched in June

2012 that will provide critical knowledge required for societies to face the challenges posed by global environmental and climate changes and to identify opportunities for a transition to global sustainability. Future Earth aims to develop knowledge that is co-designed in deliberative dialogues between the broader science community, governments, business and civil society. Co-design entails that research questions are articulated by various stakeholder groups that are involved in the research process, in order to enhance utility, transparency and saliency of research and not only contribute to the understanding of problems, but also deliver answers and solutions. Overcoming the gaps between science-policy and science-practice by co-design, is also referred to as transdisciplinary research.

The Chinese National Committee for Future Earth (CNC-FE) was formally launched on 21 March, 2014. CNC-FE is sponsored by the China Association for Science and Technology (CAST) and jointly supported by the Chinese Academy of Sciences (CAS), Chinese Academy of Engineering (CAE), Chinese Academy of Social Sciences (CASS), and the National Natural Science Foundation of China (NSFC). In March 2014, CAS funded “Co-design of Implementation Plan for Future Earth in China” under the framework of International Cooperation Program of Bureau of International Cooperation, Chinese Academy of Sciences (CAS).

Since then, CNC-FE has been exploring how to implement Future Earth in China and therefore contribute to sustainability sciences in the region. At the joint workshop with Future Earth Science Committee and interim Engagement Committee in early June 2014, CNC-FE was encouraged to establish international collaboration with Asian-Pacific countries to address the scientific challenges of Future Earth, in particular, dealing with urbanization, air pollution and health problems in the region. After interacting with Future Earth, another ICSU Programme on Urban Health and Wellbeing in the Changing Urban Environment and other partners of CAS, planned an international symposium on “Co-design for Urbanization in China and the Asia-Pacific Region” to be held at the Institute of Urban Environment, CAS, in Xia'men, China, 20-23 October 2015.

Theme

Co-design for Urban Development in China and the Asia-Pacific Region

Scope and Objectives

- Impact of urbanization on climate change and weather extremes: evidence & modeling
- Impact and assessment of climate change on urban health and wellbeing
- Co-design of urbanization by adapting to global climate changes
- Understanding how human behaviour can contribute to urban transitions to sustainability
- Urban biogeochemistry, ecosystem health and environmental quality
- Trade-offs and synergies between sectors and across scales in cities

- Urban development strategy and integrated management
- Solutions: institutional, organizational and technological innovations for sustainable urban development
- How to make the urbanization process low-carbon

Important Dates

- **15 April, 2015: Issue the Second Circular** (including the list of invited speakers, symposium format, registration, and logistics information)
- **10 September, 2015: Online agenda**
- **17 September, 2015: Deadline for online registration**

Scientific Steering Committee

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Madan SHRESTHA, Academician of Nepal Academy of Science and Technology

Michael MANTON, Chair of MAIRS Science Steering Committee, Monash
University

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Hosts:

Institute of Atmospheric Physics (IAP), Chinese Academy of Sciences (CAS)

Institute of Urban Environment (IUE), Chinese Academy of Sciences (CAS)

Institute for Urban and Environmental Studies, Chinese Academy of Social Sciences (CAAS)

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Future Earth--Research for Global Sustainability

International Council for Science (ICSU)

International programme on Urban Health and Wellbeing in a Changing Urban Environment, ICSU

Key Laboratory of Regional Climate–Environment Research for Temperate East Asia (RCE-TEA), Institute of Atmospheric Physics, Chinese Academy of Sciences

Monsoon Asia Integrated Regional Study (MAIRS)

National Natural Science Foundation (NSFC)

Regional Office for Asia and the Pacific (ROAP)/ICSU

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