### **Session 5**

## Urban Sustainability and Safety

# Chairpersons: Prof. Takashi Onishi, Prof. Shigeru FukushimaKeynote Speaker : Dr. Won-Bae KimSpeakers: Dr. Srikantha Herath, Dr. Yoshiteru Murosaki, Dr. Ling Giok Ooi

#### Theme of the Session and Keynote Lecture

Session 5 entitled "Urban Sustainability and Safety" mainly focused on (1) urban sustainability in East Asian mega-cities' contexts and (2) safety from natural disaster. In the keynote lecture, Prof. W. Kim presented his paper on "Sustainability of mega-city regions (MCRs) in East Asia" and discussed about conceptual framework for sustainability of MCRs, approaches to sustainable development, and policy research agenda. Sustainability of MCRs can be achieved through collaborative governance with state, civil society and private sector. He pointed out we need to introduce goals for the sustainable development, which includes three dimensions; livable life-space, social justice and economic competitiveness, to clearly understand the process the resources we have, and adapt criteria to assess the progress, and clarify what is bottleneck to realize the goals through case studies.

#### **Panel Presentation and Discussion**

#### (1) Urban Sustainability

Dr. Ooi also reported about the needs for assessing the progress towards sustainable development for cities. Finding a sustainable path to development has challenged government, both national and local, with its translation into action plans and hence, indicators as well as values for assessing the policy and program options selected. As every city has diverse socio-economical and environmental backgrounds, a single definition of sustainability cannot be relevant, and so that every city must understand their own sustainable form and formulate indicators to assess its progress.

#### (2) Urban Safety

Another discussion addressed urban safety from natural disaster. Dr. Herath reported on heavy rainfall disaster of mega-cities and its counter measures, while Dr. Murosaki reported the lessons learnt from the Great Hanshin-Awagi Earthquake.

Mega-cities have included hazards risk zone in their expansion process of territory due to rapid urbanization. New urban development took place completely oblivious to underlying risks as their existence has been too short to experience the natural disaster, so that local governments and its community have not prepared well yet for future disasters. Vulnerability of an area is determined by the capacity of its social, physical and economic structures to withstand and respond to natural hazard events. In particularly, urban poor who used to live in informal settlements in marginal areas, where are often subjected to natural hazard, do not have enough capacity to withstand to the disaster. It is important to 'prepare for the unfore-seen' through prior risk assessment. Development of appropriate methodologies and tools to incorporate risk assessment into urban planning is therefore a priority task to reduce vulnerability of mega cities (S. Herath).

The experience of the Great Hanshin-Awagi Earthquake provides us many valuable lessons in terms of disaster prevention and its rehabilitation. The earthquake revealed the vulnerability of Japanese cities against earthquake disasters. As such vulnerability includes not only physical aspects; high density urban structure and poor open space, lack of redundancy of network infrastructure, but also insufficient rescue and care system for the victims and weak cohesion of urban community. Under the rehabilitation process from the disaster, importance of community is well recognized among the society and community participation becomes more active. Safety city requires an integrated approach with appropriate hardware, software and human (community)-ware against natural disasters (Y. Murosaki).

#### (3) Towards More Safety and Sustainable Cities

As mentioned above, the keynote lecture and panel presentations reported that mega-cities in East Asia must challenge in many aspects for ensuring sustainable development and safety of society. Although it is said in generally that well-balanced economic, social, and environmental development is a key to achieve sustainability of cities, there is no uniform the model. We must find proper sustainable urban forms and the approaches to realize it under the given policy contexts of individual East Asia mega-cities. East Asia mega-cities share some common contexts, which include (1) rapid economic development with articulating the global economy, (2) improving living standards and widening social disparity, (3) shifting from centralized government to decentralized government, (4) emerging new middle class and civil society, (5) increasing vulnerability in terms of economy and disasters, and (6) environmental degradation. Thus, Prof. Kim's proposal to establish a regional association to exchange the experience challenging towards sustainable city among East Asia mega-cities is very meaningful. Regional cooperation in disaster prevention also must be an urgent agenda. Restoration of community is required in order to create both safe and sustainable city. Indicating the concept of human security as a new development paradigm, empowerment of individuals and community is essential to enhance social justice, economy and environment and to create safety and patient society against disasters.