



SESSION DESCRIPTION

Session description as of 4 May 2012

F2 New approaches to resilient urban planning and design

Presentations

Date: Monday, May 14, 2012

Time: 16:30 - 18:00

Rooms: S34 and S35

Language: English

ICLEI contact: Emily Dowding-Smith/Maarten De Cock

Organized by: ICLEI

OBJECTIVE

Urban planning and design must integrate adaptation on all city scales to enhance the resilience of communities. While the effects of climate change will influence the ability of cities to achieve urban development goals, many regions are also simultaneously vulnerable to other natural disasters (e.g. earthquakes, tsunamis, nuclear disasters). Therefore, local governments need to deal with specific vulnerabilities in a variety of circumstances. It is not enough to only direct general urban planning policies towards increasing resilience: urban planners also need specific design methodologies and tools to deal with vulnerabilities day to day

This session showcases a variety of examples of adaptive urban planning and design methodologies and documents for resilience. It features very specific methods for addressing vulnerabilities such as coastal erosion, flooding, earthquakes, nuclear disasters etc. These methods have been applied in a variety of examples from Japan, Canada, Portugal, the United States, and Philippines.

OUTCOMES

- Through case studies participants will learn new methods for integrating adaptation to specific vulnerabilities into urban planning and design;
- Participants will be able to apply these methods to their own urban planning and design to enhance resilience; and
- Participants will learn about the variety of vulnerabilities that cities face and critically examine their own city in light of this.

METHODOLOGY

- The facilitator will provide an overall introduction to the session topic and contributors. **(5 minutes)**
- Each presentation will be allotted 10 minutes. **(5 x 10 minutes)**
- The facilitator will manage final questions and answers. **(30 minutes)**
- Closing remarks by the facilitator. **(5 minutes)**

CONTRIBUTORS

Facilitator *Bernhard Barth, Human Settlements Officer, UN-Habitat, Nairobi, Kenya*

Bernhard Barth coordinates UN-Habitat's Partner University Initiative. One flagship activity of the initiative is the development of climate change modules for urban planning, urban development and urban management courses. Bernhard also supports the capacity development pillar of UN-Habitat's Cities and Climate Change Initiative (CCCI) which includes tool development and a broad approach of local government support. In collaboration with UN-Habitat's Regional Office for Asia and the Pacific he supports the CCCI pilot cities in this region.

Presenters *Daphne Gondhalekar, Senior Researcher, Center for Development Research (ZEF), University of Bonn, Germany*

Sibylle Kabisch, Project Manager, Adelphi Research Gemeinnützige GmbH, Berlin, Germany

Urban climate change adaptation: Strategies and urban design tools for innovative urban models

This presentation will highlight inter-linkages between crucial environmental and social issues and sustainable building strategies in a changing climate. New methods are needed to support the systematic development of innovative sustainable urban models and facilitate complex multi-stakeholder processes. A process and an urban planning toolkit will be introduced that facilitate the development of more socially inclusive, climate-proof, and efficient urban design models. The presentation touches upon strategies for dialogue building between urban inhabitants, urban planners, decision makers, investors, NGOs, and other stakeholders in order to increase the impact on future urban expansion patterns.

Daphne Gondhalekar is a Senior Researcher at the Center for Development Research (ZEF), Bonn University, Germany and Project manager on 'Health impact of water access in urban Tibet'. She focuses on urban planning, natural resources and energy efficiency, health issues, China, India, and is a Lecturer on urbanization issues. She holds a PhD from the University of Tokyo.

Sibylle Kabisch works as a Project Manager at adelphi, acting as a technical expert, project manager, and trainer in projects on climate change and tourism, climate change adaptation in rural communities and cities, as well as energy efficiency and renewable energies, especially in South and Southeast Asia. She studied Industrial Engineering (MSc), with a civil engineering technical focus, and International Business (MIB).

Presenters *Yoichi Kumagai, Assistant Professor, Shokei Gakuin University, Japan*

Pierre Fillion, Professor, School of Planning, University of Waterloo, Canada

Urban planning and the risk of disasters: A content analysis of planning documents from major urban areas in Japan and Canada

Cities in Japan and Canada offer contrasting conditions for resilience-focused urban planning. The possibility of important disasters is present in the collective consciousness of Japan and thus addressed in planning documents. Such concerns are far less present in Canada, which does not mean Canada is immune to the possibility of disasters. The presentation reports on a content analysis of planning documents from major urban areas in the two countries, which identifies the presence and nature of measures aiming at preventing or reacting to disasters.

Yoichi Kumaga is an Assistant Professor of sustainability and decision making at Shokei Gakuin University, Miyagi, Japan. He has written articles on sustainability governance frameworks with a focus on resilience and its application to urban development.

Pierre Fillion is a Professor of Urban Planning at the University of Waterloo. He has written numerous articles on contemporary trends in metropolitan planning, difficulties in achieving sustainable forms of urban development, and the lack of resilience of present urban forms.

Presenter *Catarina Freitas, Head of Department, City Council of Almada, Portugal*

Reviewing urban plans to accommodate climate change adaptation: Building resilience in the city of Almada, Portugal

The susceptibility of Southern European cities to climate changes is a matter of concern in most planning policies in the area. The coastal city of Almada, Portugal, is addressing this issue through its 'Local Strategy for Climate Change', in a multi-dimension and multi-level approach. It is developing urban plans and reviewing master plans based on adaptive principles. Ecosystem services restoration, flood risk prevention, soil permeability, food security, conservation of local biodiversity, among others, are dimensions fully considered in Almada's territorial planning, increasing its resilience to climate challenges.

Catarina Freitas (MSc in Chemical Engineering and PhD studies on environmental technology) has been the Head Officer for Energy and Environmental issues at the Municipality of Almada since 1997. Catarina is the Head of Sustainable Environment and Planning Department of Almada City Council and the Executive Member of the Board of Local Energy Management Agency of Almada. She coordinates the development of Local Agenda 21 in Almada and the Local Strategy for Climate Change.

Presenter *Brenda Snyder, Master of Urban Design Graduate, University of California Berkeley, USA*

An investigation of the effect of future sea-level rise on urban design: The waterfront of Olympia, Washington, USA

This study explores an alternative urban design strategy for sea-level rise within the coming century for the City of Olympia, Washington, USA. A proactive, planned response by municipalities when faced with a gradual rise in sea-level is recognized as a significant opportunity for establishment of long term economic, social, and environmental resilience. This approach is tested through an applied design proposal using underutilized or easily acquired parcels. An area of land subject to inundation with 1.4 meters of expected sea-level rise is divided into five zones, within which strategies of protection, accommodation, or retreat from the existing shoreline are employed.

Brenda Snyder has an undergraduate in Landscape Architecture from University of Washington and a Master of Urban Design from University of California Berkeley in 2010. She currently takes part in IMAT, a dual German and Japanese Master's program, focusing on resource management with an emphasis on sustainable systems and technologies.

Presenter *Janae Futrell, Urban Planning Consultant, Bonn, Germany*

Joining urban land parcels to reduce disaster risk: Facilitating earthquake-resistant housing in the Philippines

This presentation will explain the concept of land assembly (LA) as a transformative urban planning tool (related terms: land readjustment, pooling and sharing). LA involves joining contiguous lots to form a larger land parcel, ultimately serving a range of complementary purposes including reduced land acquisition/construction cost, asset maximization and increased land efficiency – all of which are particularly important for low income urban communities. The study case of Barangay Rizal in Metro Manila, Philippines, highlights how LA can facilitate earthquake-resistant housing redevelopment through related processes (i.e. stakeholder discussions, project self-finance, and institutional oversight). A series of 'enabling and hindering' data factors have been mapped to pinpoint feasible pilot project locations.

Janae Futrell holds Master degrees in Urban Development (Germany) and Architecture (USA). She works with environmentally-sensitive architecture (LEED Professional Accreditation) and focuses on strengthening emergency and development processes, as a continuum, for effective disaster risk planning. She has worked with Caritas Germany, Earthquakes and Megacities Initiative and the International Federation of the Red Cross and Red Crescent (Asia-Pacific Zone).