

Workshop on Tools and Indicators for Assessing Urban Resilience

7-10 December, 2015

The University of Tokyo

Organized by Global Carbon Project-Tsukuba International Office

In collaboration with NIES, APN, UGEC, WUDAPT and IR3S

Background

The workshop on Tools and Indicators for Assessing Urban Resilience aims to utilize resilience thinking as a guiding principle and bring together scholars from different disciplines to develop an integrated framework for assessing urban community resilience in Asia-Pacific cities. The ultimate objective of this four-day workshop is to develop a resilience assessment toolkit that can be used by planners and decision makers to lead them to more informed decisions. The workshop will consist of presentations and practical hands-on sessions, allowing the participants to actively engage in the development of the resilience assessment tool. In addition, there will be sessions on resilient urban form that will elaborate on metrics that should be used for assessing resilience of urban form and data that are needed for this purpose.

Day 1, December 7, 2015

Morning: Measuring Urban Resilience

The morning sessions provide background information and set the context for the workshop. General issues of assessing urban resilience will be discussed during this session.

<i>Morning (Chairs: Ayyoob Sharifi and Yoshiki Yamagata)</i>		
9:00-9:10	Opening remarks by the hosts	Yoshiki Yamagata, Kensuke Fukushi
	Workshop outline/rationale	Ayyoob Sharifi
9:10-9:35	An overview of existing tools for assessing urban resilience	Ayyoob Sharifi
9:35-10:00	Climate Disaster Resilience Indexing of Asian Cities: An Action Based Approach	Rajib Shaw
10:00-10:25	Urban Resilience: Methodological Foundations and Resilience Matrix Approach	Cate Fox-Lent and Igor Linkov
10:25-10:45	<i>Coffee break</i>	
10:45-11:10	Towards the development of an integrated Sustainability and Resilience Benefits Assessment (SRBA) framework of urban interventions	Grafakos Stelios et al.
11:10-11:35	Urban Resilience and Transformation: Implications for assessment indicators	Marta Olazabal
11:35-12:00	What's under the city resilience umbrella? Aligning Resilience and the Urban 2030 Agenda	Lorenzo Chelleri
12:00-12:15	Discussion and wrap up	All

Afternoon: Resilience planning in the Asia-Pacific region

This session will be focused on studies that have used tools and indicators for measuring resilience in the cities of the Asia-Pacific Region.

Afternoon (Chairs: Rajib Shaw, Darryn McEvoy)		
13:30-13:50	A System for Evaluating the Resilience Value of Disaster Recovery Projects: The Case of Hurricane Sandy and Irene in New York	Judd Schechtman
13:50-14:10	Building urban climate resilience – lessons learned from Thailand and the Mekong region	Pakamas Thinphanga
14:10-14:30	Resilient institutions=vulnerable people? A longitudinal case study of flood management institutions in marginalized settlements in Russia.	Lilia Yumagulova
14:30-14:50	Approach to mainstreaming climate change resilience in urban planning and development: Case of Ahmedabad, India	Minal Pathak
14:50-15:10	Enhancing urban resilience through energy efficiency measures in the residential buildings of Dhaka city	Md. Humayun Kabir
15:10-15:20	<i>Coffee break</i>	
15:20-15:40	Coastal urban climate resilience planning in Quy Nhon, Vietnam	Vu Kim Chi
15:40-16:10	Assessment of vulnerabilities and adaptation actions in the Solomon Islands.	Jamal Namu
16:10-16:30	Identification of Human & Economic Resilience Indicators in Climate Resilience Review	Fanni Harliani
16:30-16:50	Framework and indicators for climate compatible urban development	Ashish Shrestha
16:50-17:15	Discussion and wrap up	All

Day 2, December 8, 2015

Morning: Resilience planning in the Asia-Pacific region (continued)

Discussions from last session will be continued and scholars from Japan will present their work on assessing urban resilience in Japan.

Morning (Chairs: Yoshiki Yamagata, Susie Moloney)		
9:00-9:25	Empowering Communities: Visualization Tools for Building Climate Change Awareness and Resilience	Stephen Sheppard
9:25-09:50	Monitoring and evaluating progress towards becoming a more adaptive and resilient region: lessons from Melbourne	Susie Moloney
09:50-10:15	Vulnerability and resilience of cities in developing countries on health risk caused by climate change and urbanization	Kensuke Fukushi
10:15-10:45	<i>Coffee break</i>	
10:45-11:10	Systems Resilience: Taxonomy and General Strategies	Hiroshi Maruyama, Kazuhiro Minami
11:10-11:35	Urban Morphology: Applications, Issues and Prospects for Resiliency Assessment	Paul Stangl
11:35-12:00	Development and Application of Web-based Geographical Information System to Assess Urban Resilience: Land Use and Infrastructure Planning for the Greater Nagoya Region, Japan	Akito Murayama et al.
12:00-12:15	Discussion and wrap up	All

Afternoon: Hands-on session on assigning weights to a set of criteria contributing to resilience of urban form

Participants will be divided into several working groups in order to discuss different criteria contributing to resilience of urban form. The main purpose of this session is to prepare a list of important criteria that can contribute to resilience of urban form and categorize these criteria into several main groups. The possibility of using these groups of criteria for developing an AHP analysis will also be discussed.

Day 3, December 9, 2015

Morning: Concluding session on Urban Resilience indicators

The morning session will wrap up the presentation sessions on assessing urban resilience. A timeframe will be developed for completing workshop tasks and discussions will be made on the possible outputs to be published in scholarly journals.

Morning (Chairs: Perry Yang, Yoshiki Yamagata)		
9:00-9:25	Land Use Scenarios for Assessing Urban Resilience	Yoshiki Yamagata
9:25-9:50	Energy Resilient Urban Systems: A Design Perspective	Perry P. J. Yang
9:50-10:15	Future Urbanization and the Management of Urban Heat Risk	Peter Marcotullio
10:15-10:40	Linking Knowledge to Action — Urban Resilience, Social Innovations, and Community Energy	Christian Dimmer
10:40-11:00	<i>Coffee break</i>	
11:00-12:00	Discussion and wrap up	All

Afternoon: WUDAPT project development in collaboration with URCM

WUDAPT group will present about their work in this session and the organizer is planning to utilize a selected number of criteria from the toolkit for assessing resilience of different urban forms. In addition, the necessity, benefits, and challenges of developing a global city database would be discussed.

Afternoon (Chairs: Linda See, Johannes Feddema)		
13:30-13:50	The Urban Knowledge Network (UKAN)	Xuemei Bai
13:50-14:30	The WUDAPT initiative: overview, data collection and progress to date	Linda See
14:30-15:20	Applications of WUDAPT	Johannes Feddema
15:20-15:45	<i>Coffee break</i>	
15:45-16:00	The WUDAPT agenda	Johannes Feddema / Linda See
16:00-16:20	Possible Support of Geospatial Data Provision to the WUDAPT and UKAN	Hiroyuki Miyazaki et al.
16:20-16:40	Panel discussion	All
16:40-17:00	Wrap up	

Day 4, December 10, 2015

Morning (9:00-12:00):

Participants will be divided into two groups. A selected number of participants (GCP and WUDAPT) will meet to discuss strategies for future collaboration on developing a global city database initiative and possible contribution of both groups to the Urban Knowledge Action Network of Future Earth. The second group of participants will get involved in another hands-on practice focused on addressing several major research questions related to the topic of measuring urban resilience. Participants will be divided into several groups and the Structured Interview Matrix technique will be used to engage participants in this activity.

Afternoon (13:30-17:00):

The session on addressing questions related to measuring urban resilience will be continued. All workshop participants will attend this session. Before the coffee break, each group will synthesize their work to be reported to all participants. The session will close by listing main themes drawn from the discussions, reaching consensus on a list of priority research questions, and preparing a list of action items for post-workshop tasks and activities.

Workshop organizers

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Yoshiki Yamagata, *NIES*

Kensuke Fukushi, *IR3S*

Linda See, *WUDAPT*

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