SDU University of Southern Denmark
UNESCO Chair on Urban Resilience

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Training Course on Urban Resilience

Course Introductory Note

2- 10 November 2023
Bangkok, Thailand

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1. Background and rationale

Asia is urbanizing at a rapid pace. The data show that the region is now home to 17 of the 33 megacities in the world and its urbanization rate is projected to reach 64 percent by 2050. This rapid pace of urbanization has contributed substantially towards regional economic growth. However, it has also created many challenges for the Asian cities/ urban centers. Few of the major challenges are provision of essential infrastructure and services, environmental and disaster risk management. Cities and their populations are vulnerable and increasingly exposed to rapid and slow on-setting climate and environmental disasters, which frequency and intensity are growing exponentially as a result of climate change. Moreover, cities at present are also struggling in decision making between the global pandemic, maintaining public health and the need for the economic progress.

These challenges are making urban resilience practitioners to reconsider how urban centers/ cities would function. There is a need to enhance the urban resilience and explore innovative avenues where urban centers/ cities can become drivers of economic growth as well as hubs for sustainability amidst the listed challenges.

Understanding this knowledge gap in the region, Asian Disaster Preparedness Center (ADPC) joined hands with the International Urban Resilience Academy (IURA) of SDU.Resilience research group of the University of Southern Denmark (SDU) to initiate a regional training course on Urban Resilience.

The training is aimed to build the core skills and competencies for urban resilient transition, including fundamentals of urban resilience in research, climate science, international and national policies, and resilience in action. Participants will be introduced to the **Process Design Methodology**, a guiding framework for developing strategic and action plans for urban resilient transition in their own local contexts. This methodology consists of four main steps: (1) System analysis and stakeholders' mapping (2) Forecasting of trends and drivers (3) Visioning & strategy (4) Developing an Action Plan.

2. Objectives of the training

Urban resilience tackle both causes and effects of climate change, empowering together low-carbon transition and climate adaptation of cities, in conjunction with other urban challenges from urbanization to disaster risk reduction.

The training will address the high complexity and wicked problems of urban development through a system thinking approach, going beyond sectorial solutions, through a process design methodology that will introduce the participants to the development of strategic and action plans for urban resilient transition.

The training will be strongly based on peer-to-peer learning, enabling the participants to share their challenges and experience in tackling climate change action at local level.

The participants will learn about:

- the **Process Design** for the development of strategic and action planning for urban resilient transition.
- the use of system approach to understand current challenges and opportunities for urban resilient transition.
- current tools and methods to address climate change adaptation and disaster risk reduction.
- best and next practices relevant for the implementation of resilient cities plan.

At the end of the training participants will be familiar with the key steps for the development of a draft resilience action plan for a city.

3. Training structure

The training will be conducted in a blended modality. The onboarding for the training course will be conducted online (4 Hours spread over two days). The onboarding will cover fundamentals that are prerequisites for joining the course. This will be followed by a five day in-person training. During the in-person training, different thematic areas related to urban resilience will be discussed in the morning sessions via lectures and presentations. The afternoon sessions will be mainly dedicated to group exercises with different tools and discussions on case studies. An exposure visit will be organized for the participants to gain first-hand experience of different actions implemented in the city of Bangkok, Thailand (one of the Megacities in Asia) for enhancing urban resilience.

****Refer to Section 3.5 for the tentative program**

3.1 Main themes

Urban resilience and process design for urban resilient transition

This theme will first speak about the urbanization globally and in Asia. Emphasis will be made upon the challenges experienced by the urban areas with the increasing impact of the climate change.

Afterwards the "Process design Methodology" will be introduced. This methodology allows for the development of strategic and action planning for urban resilient transition in an urban context. The process consists of 4 steps: 1) Diagnosis, 2) Trends and drivers, 3) Visioning, 4) Strategy and Action Planning. Diagnosis phase allows for defining the system based on the challenges, understand the key elements that make up the system and their relationship, as well as defining the stakeholders. Next steps consist of understanding trends and drivers that have an impact on the urban system and in which ways. Further, the process includes the step of defining the vision of the target future considering the constraints and limitations posed by trends and drivers in the long term. The final step consists of identifying the strategy and actions to achieve the vision, specifying the type of actions and the stakeholders involved.

Nature-based Solutions for Urban Resilience

This lecture will elaborate how nature-based solutions will be utilized to resolve the challenges experienced by the Urban areas. For instance, restoring, managing, and conserving ecosystem can strengthen resilience of the urban areas to flood, drought, extreme weather events. Furthermore, NbS in urban areas will increase green space and can also provide health benefits to residents.

Low Carbon Cities

At present, urban areas are seen as hubs where large amounts of CO_2 emissions are released into the atmosphere especially from the key sectors such as buildings, transport and waste. This theme will highlight the importance of low carbon and climate resilient development in urban areas. It will also elaborate common challenges & gaps observed in low carbon strategy planning.

Gender equality and social inclusion for urban resilience

This theme will address the aspects of gender equality and social inclusion in the urban context. It will elaborate the difference between gender equality, equity vis a vis reality and liberation and will discuss the importance of social inclusion for building urban resilience.

Urban Resilience Initiatives in the Asian region

This theme will highlight information on the urban resilience initiatives adapted in Asia.

3.2 Group assignments

The group work is carried out based on Process Design Methodology, including the specific phases, for developing a draft resilience action plan for a city/ an urban area. Participants will be divided into groups and will be asked to select a city/ an urban area where the group members are most familiar with its challenges and key problems (Case Study). Afterwards, the groups will work during the five days and will come up with the draft resilience action plan for the selected city/ urban area on the fifth day with the assistance of the trainers. Group work will be carried out on the Miro Platform (online whiteboard). Participants are advised to bring their laptops during group assignment session.

The group work will be divided into four main assignments as follows:

(A1) Identification of key urban risks and challenges, system mapping

In this first step of this assignment, for a good overview of the case study, it is required to extract and elaborate the case study information into interactive descriptions with text, images, maps, etc. The lecture on system thinking and system dynamics will provide a basis for defining the urban system and its limits and challenges. These will help the participants understand the elements and trends that make up and affects the system, the relations among the elements and the stakeholders involved.

(A2) Trends and drivers

The second assignment requires understanding and analysing trends and drivers in the system pertinent to climate change, sustainable urban development, etc. This exercise focuses on how these trends and drivers are linked to the system, what are their impacts to the systems and how they will affect the system in future.

(A3) Development of a vision and strategic plan for resilience transition
A short theoretical lecture on future scenarios, visioning, forecasting and backcasting will support completing this assignment, which will require to develop descriptions for the case study: (i) a vision of a realistic future based on the trends and drivers defined previously, (ii) a vision for a desirable future, including desirable and undesirable visions and (iii) a target future vision (combined one). Once the target future is defined, the step is to outline the milestones in time to reach the target future, describing the system's state starting from the future to the present.

(A4) Development of a strategic plan and action plan for resilience transition
In the fourth and final assignment, it is required to identify strategy lines and actions to achieve the target future for the urban system. The action plan requires defining the types of action (physical/spatial, governance/management, etc.), the types of stakeholders involved, the duration of each action, and a detailed timeline considering the sequence of the activities.

3.3 Peer-to-peer session

Peer-to-peer session aims to share knowledge and experiences among the participants based on the projects and programmes undertaken by them related to different aspects of urban resilience.

3.4 Exposure visit

An exposure visit will be organized for the participants to gain first-hand experience of different actions implemented in the city of Bangkok, Thailand (one of the Megacities in Asia) for enhancing urban resilience. The exposure visit can be institutional or an urban community visit. The specific details of the exposure visit will be made available in the due course.

3.5. Tentative Program

Day	Time in Bangkok, Thailand (GMT+7)	Duration	Content
2 Nov 2023 Online Session	15:00 – 17:00	02 hr	- Introduction to Urban Resilience Course - Urban resilience and process design for urban resilient transition (ADPC & SDU)
3 Nov 2023 Online Session	15:00 – 17:00	02 hr	**-** Understanding Climate and Disaster Risks in an Urban Context **Understanding basic terminology on climate and disaster risk reduction in an urban context and urban resilience.* (ADPC)

06 Nov 2023	08.45 – 09.00	15 min	Registration of Participants
	09.00 – 10.00	60 min	Inauguration ceremony • Welcome Remarks *Asian Disaster Preparedness Center (SDU)* • Opening Remarks and Course Overview *University of Southern Denmark (SDU)* • Introduction of Participants • Setting the Learning Norms • Group Photo
	10.00 – 10.15	15 min	Tea/Coffee Break
	10.15 – 12.30	2 h 15 min (including short breaks)	Recap of learnings from the online sessions. Overview of Group Assignments Group Assignment (A1): Identification of key urban risks and challenges, system mapping
	12.30 – 13.30	60 min	Lunch break
	13.30 – 16.30	3 h (including breaks)	Group Assignment (A2): Trends and drivers
07 Nov 2023	09.00 – 09.15	15 min	Recap of Previous Day Learning
	09.15 – 10.15	60 min	Nature-based Solutions for urban resilience
	10.15 – 10.30	15 min	Tea/Coffee break
	10.30 – 12.00	90 min	Low Carbon Cities
	12.00 – 12.30	60 min	Peer-to-peer
	12.30 – 13.30	60 min	Lunch break
	13.30 – 16.30	3 h (including breaks)	Short presentation by the Groups on the progress of A1+A2 Group Assignment (A3+A4) Development of a vision and strategic plan for resilience transition
08 Nov 2023	09:00 – 16:00	04 to 05 h	Exposure Visit

09 Nov 2023	09.00 – 09.15	15 min	Recap of Previous Day Learning
	09.15 – 10.45	90 min	Gender equality and social inclusion for urban resilience
	10.45 – 11.00	15 min	Tea/Coffee break
	11.00 – 12.30	90 min	Urban Resilience Initiatives in Asia
	12.30 – 13.30	60 min	Lunch break
	13.30 – 16.30	3 h (including breaks)	Continuation of Group Assignments by the participants Short presentation by the Groups on the progress of A3+A4
10 Nov 2023	09.00 – 12.30	3 h 30 min (including breaks)	(A1+A1+A3+A4) Finalization of the Assignments
	12.30 – 13.30	60 min	Lunch Break
	13.30 – 15.30	120 min (including breaks)	Output presentations by groups Final Day Discussion
	15.30 – 15.45	15 min	Post Training Survey