

Enhancing Capacities for Building Climate and Disaster Resilient Cities: Lessons Learned from Four Asian Cities

ISAP 2015, 29 July in Yokohama
PL-7: Approaches by Asian Cities to Build Resilient Cities

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Introduction: planning resilient cities

- Rapid urban growth, climate change and natural disasters pose a huge risk to quality of life, economic and social stability of cities, especially in developing countries where one out of seven people are living in informal urban settlements (IPCC, 2012; Mitlin and Satterthwaite, 2013).
- Understanding risks and building resilient cities is therefore critical than ever before and international development community is negotiating important frameworks and agreements to address them (e.g. the Sustainable Development Goals (SDGs), the new United Nations Framework Convention on Climate Change (UNFCCC) and the post 2015 framework for Disaster Risk Reduction (DRR) .



Indian Ocean Tsunami in Sri Lanka, 2004



Typhoon Yolanda in Philippine, 2013



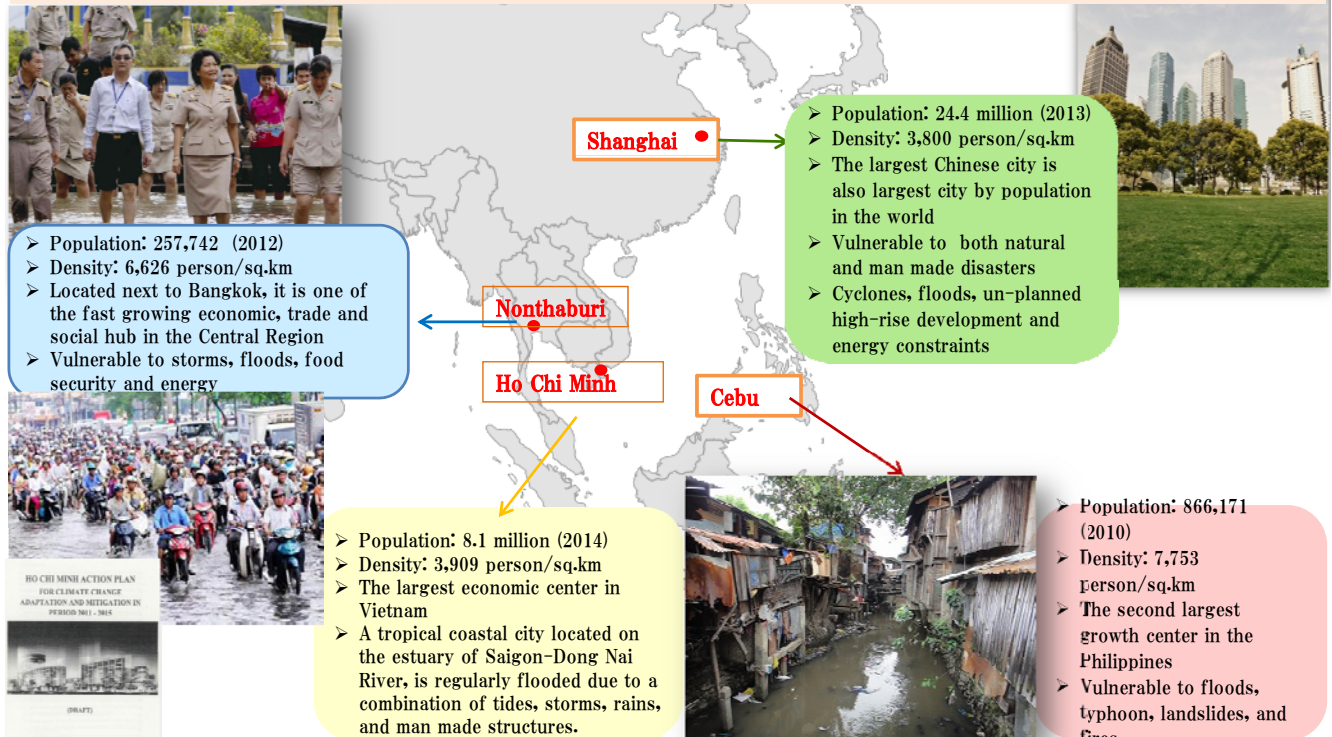
Floods in Thailand, 2011



Earthquake in Nepal, 2015

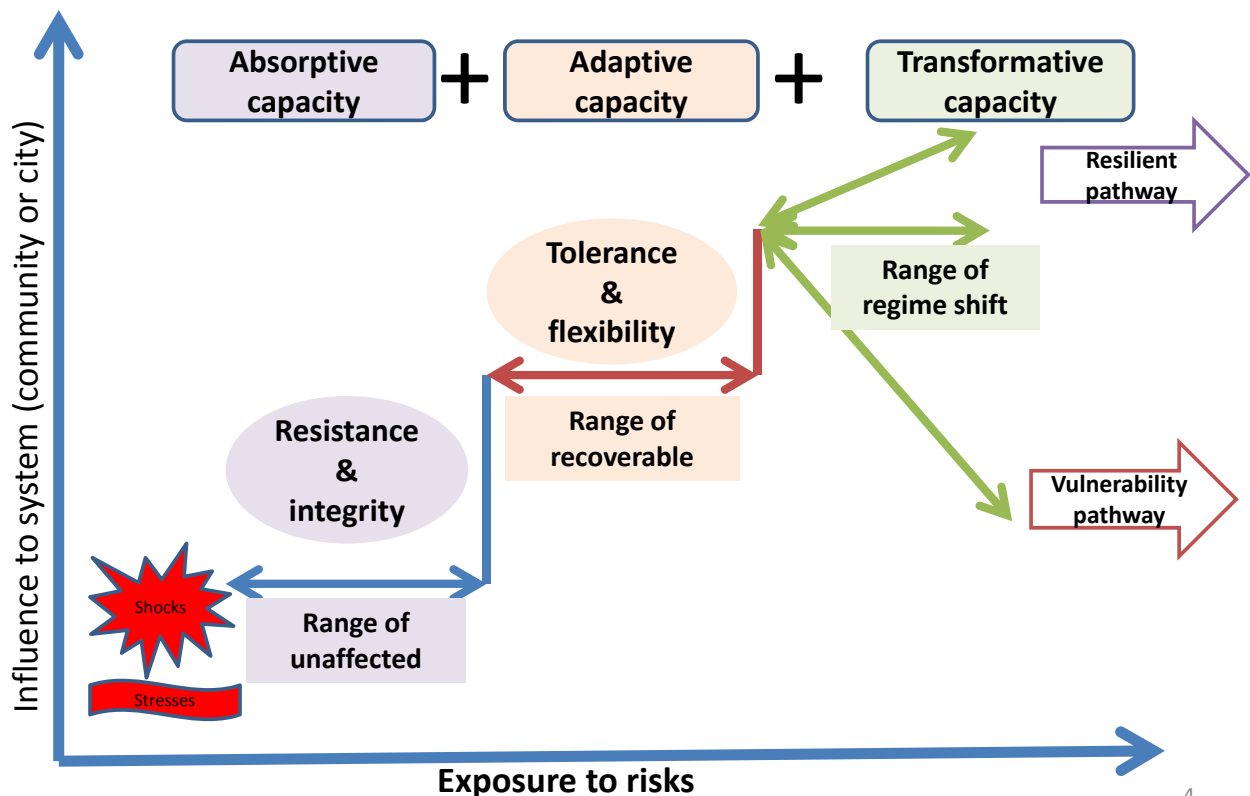
Aims of the study

IGES is involved in reviewing the experience of four Asian Cities (**Cebu, Nonthaburi, Ho Chi Minh, Shanghai**) and identify progress, challenges and key recommendations in planning and implementation of resilient cities.



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Analytical framework: resilient city building



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Source: Adopted from Baba and Tanaka, 2014; Frankenberger, et al. 2012.

Research methodology

Phase 1 (2013-2014): Risks and capacity assessment

- Engaging the city (select case study city, briefing local leaders/stakeholders, and formation of technical group)
- Conduct the climate/ disaster risk and capacity analysis (*focus group discussion and key informant interviews*)



Phase 2 (2014-2015): Formulation of resilient measures

- Development of measures and strategies for building resilient city (*focus group discussions and city consultation*)
- Organise training and capacity building for city officials



Phase 3 (2015-2016): Evaluate, lessons learned and policy adaptation

- Ensure political support to integrate resilient measures into local policies and development plans
- Networking and knowledge sharing with other cities and international platforms



Focus group discussions for risk assessment in Cebu, Jan 2015



Focus group discussions for risk assessment in Shanghai, Jan 2014



Handover the flood resilient plant to Mayor in Nonthaburi, Dec 2014



A session organised at the ISAP International Forum in Yokohama, 23-24 June 2014

Case study city analysis

Absorptive capacity

ability to minimize exposure to shocks and stresses where possible and to recover quickly when exposed (Frankenberger et al., 2012).

• (Disaster Risk Reduction Measures)

- Early warning system
- Information and education campaign
- Organisation of community-based disaster response (volunteers and training)
- Procurement of emergency equipment

Cebu (Philippines) Nonthaburi (Thailand)



Adaptive capacity

making proactive and informed choices about alternative strategies based on changing conditions (Frankenberger et al., 2012).

• (Climate Change Adaptation)

- Plan and preserve eco-systems
- Building regulations, housing codes
- Planning green infrastructure
- Improve human capital and diverse livelihood options
- Social protection system

Ho Chi Minh (Vietnam) Shanghai (China)



Transformative capacity

system-level changes that enable more lasting resilience and often challenge the status quo in a substantial way (Béné et al., 2012).

• (Governance)

- Institutional capacity
- Strengthen governance mechanisms (partnership and transparent)
- Regulatory and financial allocation

All case study cities



Thank you