

Asia-Pacific Urban Forum 7



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***Leaders Dialogue session 'Urban Resilience:
Safeguarding and accelerating the achievement of
the SDGs'***

Wednesday, 16 October 2019 (09:00 to 10:30), the Ballroom

Urban resilience: Challenges and future pathways in Asia

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Contents

- What are the current and emerging risks that cities face in the region?
- Why should we be concerned about urban resilience?
- What have been our past approaches to build urban resilience?
- What could be the future pathways to build urban resilience?



<https://www.bbc.com/news/world-asia-50037907>

GETTY IMAGES

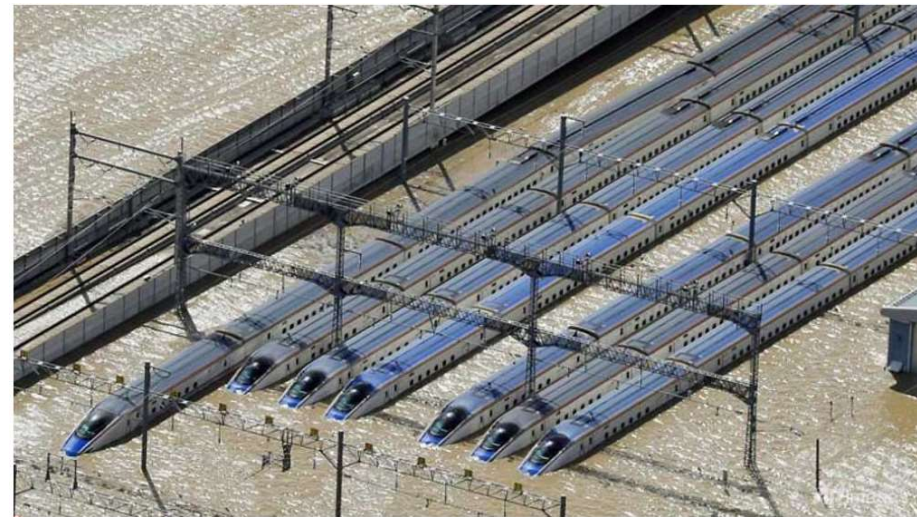
Typhoon Hagibis (12-14 Oct 2019)

- 72 death, 13,000 houses submerged, 900 damaged
- 40 percent of yearly rainfall occurred in only a day or two in many areas



<https://www.bbc.com/news/world-asia-50037907>

GETTY IMAGES



Rows of Japan's bullet trains, parked in a facility, sit in a pool of water in Nagano, central Japan, after Typhoon Hagibis hit the city.

(Yohei Kanasashi/Kyodo News via AP), Read more at <https://www.channelnewsasia.com/news/asia/japan-typhoon-hagibis-dead-injured-troops-floods-11997244>



Rescue workers in the aftermath of Typhoon Hagibis, which caused severe floods at the Chikuma River in Nagano, Japan, Oct 14, 2019.

(Photo: Reuters/Kim Kyung-hoon), Read more at <https://www.channelnewsasia.com/news/asia/japan-typhoon-hagibis-dead-injured-troops-floods-11997244>

REUTERS

Tokyo survived unscathed but not the other smaller cities and towns

- Tokyo's extraordinary flood control system: Tokyo's flood system is designed to withstand a once-in-a-hundred-years event
- Fukushima Prefecture is hard hit with at least 26 deaths
- “Japan has probably the best flood defenses of any country in Asia, if not the world” <https://www.bbc.com/news/world-asia-50037907>
- Imagine what happens if such typhoon (Hagibis’s max gust speed was 270 km/hr) hits other cities in Asia?

“In June 2019 the city of Chennai faced a severe water crisis as its largest reservoir, Chembarambakkam Lake, went bone dry in the middle of what should have been the rainy season. In July, trains carrying millions of litres of water had to come to Chennai’s rescue”

“In December 2018, Palu, Indonesia, suffered a triple threat of natural disasters: a 7.5-magnitude earthquake followed by a volcanic collapse, which triggered a deadly tsunami”

“In February 2016, Tropical Cyclone Winston affected 350,000 people in majority urban Fiji and left 32,000 houses destroyed”

Current and emerging risks cities face in the region

Economic

- E.g. Over-dependency of cities to vulnerable economic base; cascading economic effects of global events and supply-chain

Environmental

- E.g. Climate change, floods, drought and disaster, earthquake, landslide

Social

- E.g. Prevailing inequality, informal sector, vulnerable groups

Risks and resilience

Multi-facet risks

- Stresses – slow onset building over time
- Shocks – sudden and abrupt

Building resilience is a crucial counterbalance to these risks

- Resilience is “the capacity for urban systems and settlements to absorb, utilise or even benefit from perturbations, shocks and stresses” (Meerow, Newell, and Stults, 2016)
- Resilience enables the emergence of a more evolved understanding of cities in its natural contexts – not reactive but pro-active
- Resilience as an essential tool in urban governance

Characteristics of resilience cities



Reflective

Using past experience to inform future decisions



Resourceful

Recognizing alternative ways to use resources



Inclusive

Prioritize broad consultation to create a sense of shared ownership in decision making



Integrated

Bring together a range of distinct systems and institutions



Robust

Well-conceived, constructed, and managed systems



Redundant

Spare capacity purposefully created to accommodate disruption



Flexible

Willingness, ability to adopt alternative strategies in response to changing circumstances

Source: 100 Resilient Cities, 2019a.


Have we done enough?

Regions' resilience-building paradigms

We have done lots of things autonomously or as planned !!

- Communities building their own resilience
- Informal economy and informal settlement are stories of resilience itself
- Urban poor movements and networks
- Experimentations with low-tech, low cost and nature-based- approaches
- Silo-busting approaches for multi-level urban governance
- 113 NDCs to Paris Agreement have urban priorities highlighted
- National public investments/expenditure in climate resilience more at local level
- Guidance from Global agreement such as Sendai Framework for DRR and others

- ✓ Communities
- ✓ National governments
- ✓ Civil societies and city networks
- ✓ Global frameworks



The crucial underlying challenge for building urban resilience remain

- Finding the right scale of action; harmonizing the boundaries of authorities and the resources
- Bridging gaps between national urban policies and urban resilience
- Smaller cities needing more support
- Sustainability of community-driven approaches and scaling up challenges
- Tendency to over-rely on grey or hard infrastructure
- Less focus on political economy and social aspects of urbanization
- Lack of private-sector driven paradigms

Future will be different from the past: Risk 4.0 in Asian cities

- **Urbanization and climate change intersect** to create and exacerbate other shocks and stresses in env, economic and social fronts
- **The region's economic model** exposes cities to multiple shocks and stresses
- **Technological disruptors**: automation, digitalization, IR4.0 and the knowledge economy
- **Social changes** and resilience: migration, ageing and changing gender roles
- **Which means**
 - Current and newly emerging stresses and shocks affect urban governance
 - Addressing built-in stressors from within urban governance structures needed

Imperatives for action

Asian cities are global hotspots for environmental, economic and social risks

Resilience building is a key tool to deal with Risk 4.0 – old risks and newly emerging and difficult-to-predict risks come together

Our experiences of resilience building and urban resilience governance are incremental and occurred in many fragmented bits-and-pieces

Era of climate change asks for speed of action, avoid lock-in into an improper infrastructure and quickly identify climate-resilient development pathways, and **ACT now !!**

Key messages: Future policy pathways for urban resilience



- Embrace **integrated planning** taking into account climate change, find and upscale **nature-based solutions**, and devise **resilient infrastructure** → must embrace resilience as an underlying development philosophy
- **Build partnerships** that break siloes of policies and actors- be inclusive including **mobilize private sector** for urban resilience- financing- make decentralization work
- Support and use **informal economy and the poor and vulnerable as the change agents** for resilient actions
- Take new measures to **learn and benefit from growing digitalization of economy** and big-data.

Thank you !!

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Examples of urban nature-based solutions



Constructed wetlands for
contaminant remediation and
maintaining ecosystem services



Urban agroforestry to
address challenges of land
tenure, health, food security
and unemployment



Rehabilitating mangroves
to protect coastlines and
island biodiversity



Combined natural and
engineered infrastructure
for water management