Changing global risk landscape

Parallel Session 2: Mainstreaming CES in the Post-2030 Agenda for Enhancing Integrated Actions on Climate and Sustainability Goals: Towards Bridging Local-to-Global Feedback Loops

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Academia

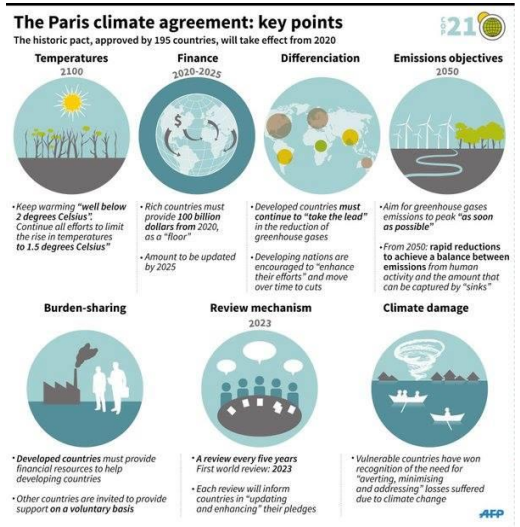
Science Policy interface

Start-up and innovation

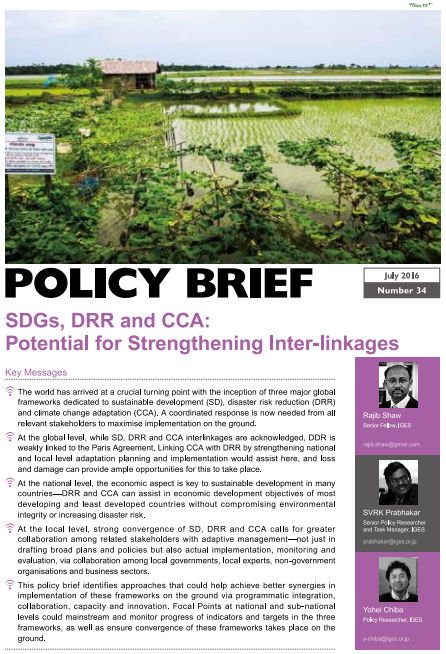
NPO / NGO

Context 1: global and local

2015 to 2030 time horizon



- All of society approach *(inclusive)*
- All of State Institutions involvement
- *Local* implementation


POLICY BRIEF

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SDGs, DRR and CCA:
Potential for Strengthening Inter-linkages

Key Messages

- The world has arrived at a crucial turning point with the inception of three major global frameworks dedicated to sustainable development (SD), disaster risk reduction (DRR) and climate change adaptation (CCA). A coordinated response is now needed from all relevant stakeholders to maximise implementation on the ground.
- At the global level, while SD, DRR and CCA interlinkages are acknowledged, DDR is weakly linked to the Paris Agreement, Linking CCA with DRR by strengthening national and local level adaptation planning and implementation would assist here, and loss and damage can provide ample opportunities for this to take place.
- At the national level, the economic aspect is key to sustainable development in many countries—DRR and CCA can assist in economic development objectives of most developing and least developed countries without compromising environmental integrity or increasing disaster risk.
- At the local level, strong convergence of SD, DRR and CCA calls for greater collaboration among related stakeholders with adaptive management—not just in drafting broad plans and policies but also actual implementation, monitoring and evaluation, via collaboration among local governments, local experts, non-government organisations and business sectors.
- This policy brief identifies approaches that could help achieve better synergies in implementation of these frameworks on the ground via programmatic integration, collaboration, capacity and innovation. Focal Points at national and sub-national levels could mainstream and monitor progress of indicators and targets in the three frameworks, as well as ensure convergence of these frameworks takes place on the ground.

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Inter-relationship of Global Framework

	SDG (UN 2015b)	SFDRR (UN 2015a)	Paris Agreement (UN 2015c)
Sustainable development		20	16
Disaster risk	12		1
Climate change	20	15	

	SDG	SFDRR	Paris Agreement
Use of term "LOCAL"	10	48	9
Number of Pages	35	25	32
Context	Authorities, communities, culture, materials and planning (Goal 6, 8, 11 and 13)	Government, community, knowledge, priority, DRR strategy	Communities and knowledge (in terms of Adaptation)

2015: A landmark year
2020: The pandemic year
2023: An evaluation year

The term LOCAL is used
10 times in SDGs,
48 times in SFDRR and
9 times in Paris Agreement

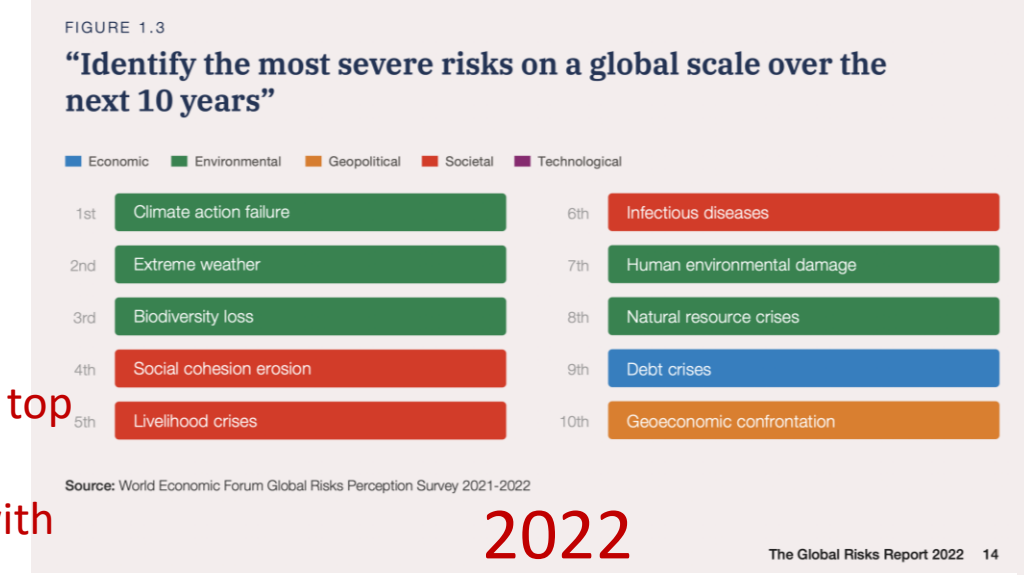
Context 2: Global risk landscape (WEF)

2020

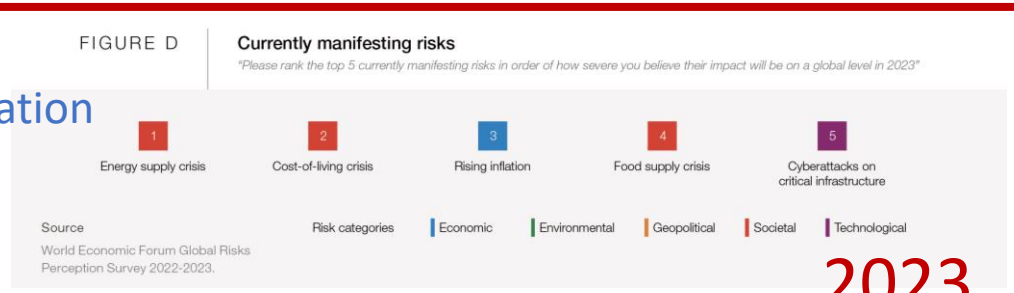
Environmental risk (disaster, climate change, Biodiversity loss) remains top

Complex risk landscape with New risks

- *Digital divide*
- Digital power concentration
- *Energy crisis*
- Food pricing



2022



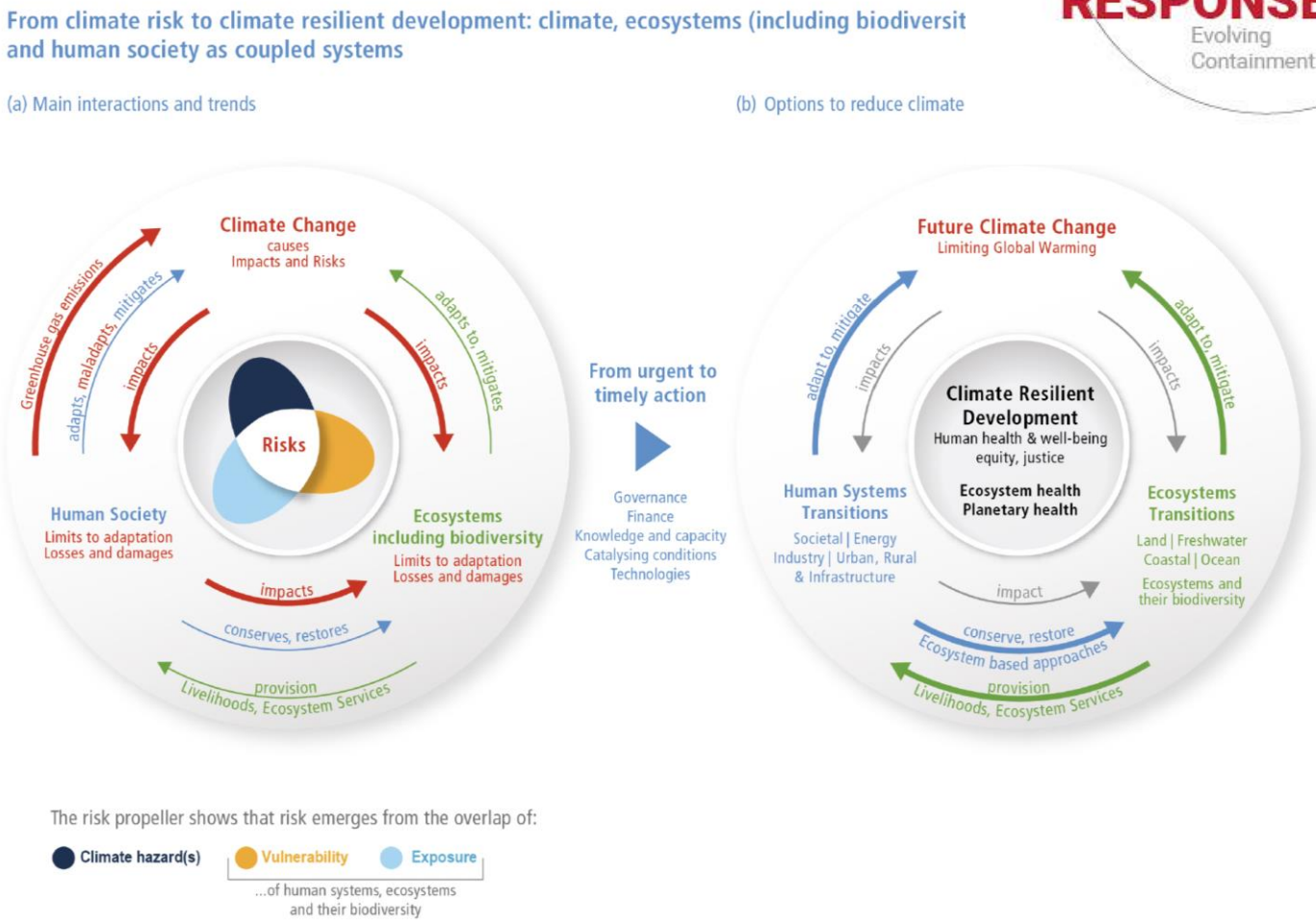
2023

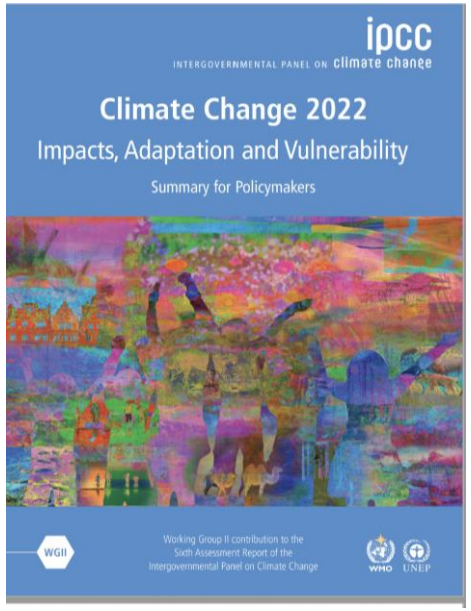
Need for inclusive risk reduction

2021

Context 3: CCA and DRR

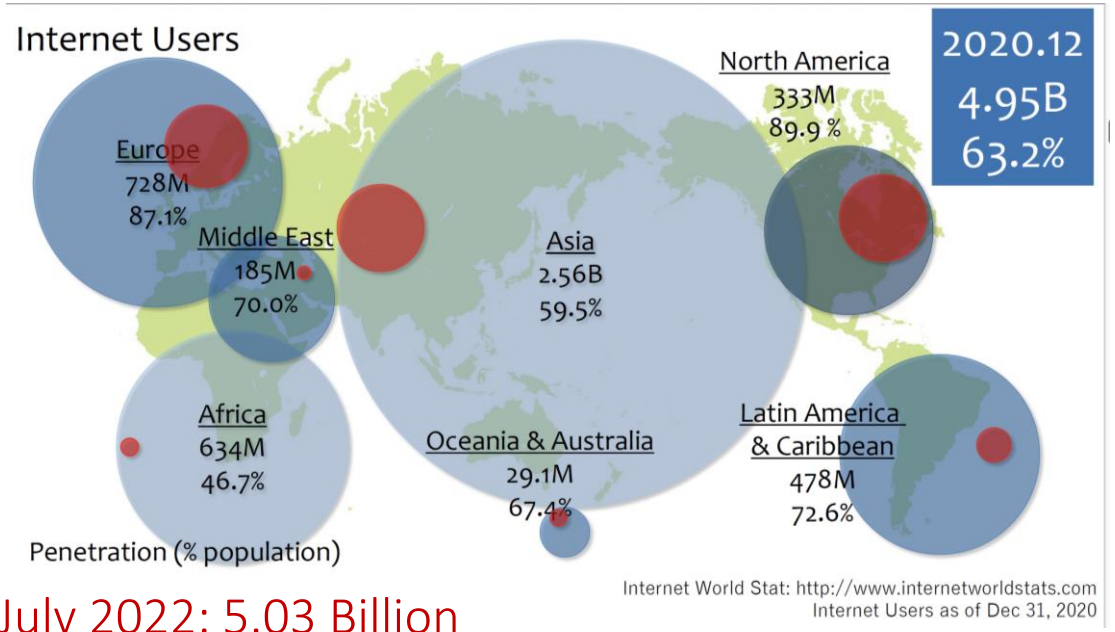
Climate Change Adaptation and Disaster Risk Reduction



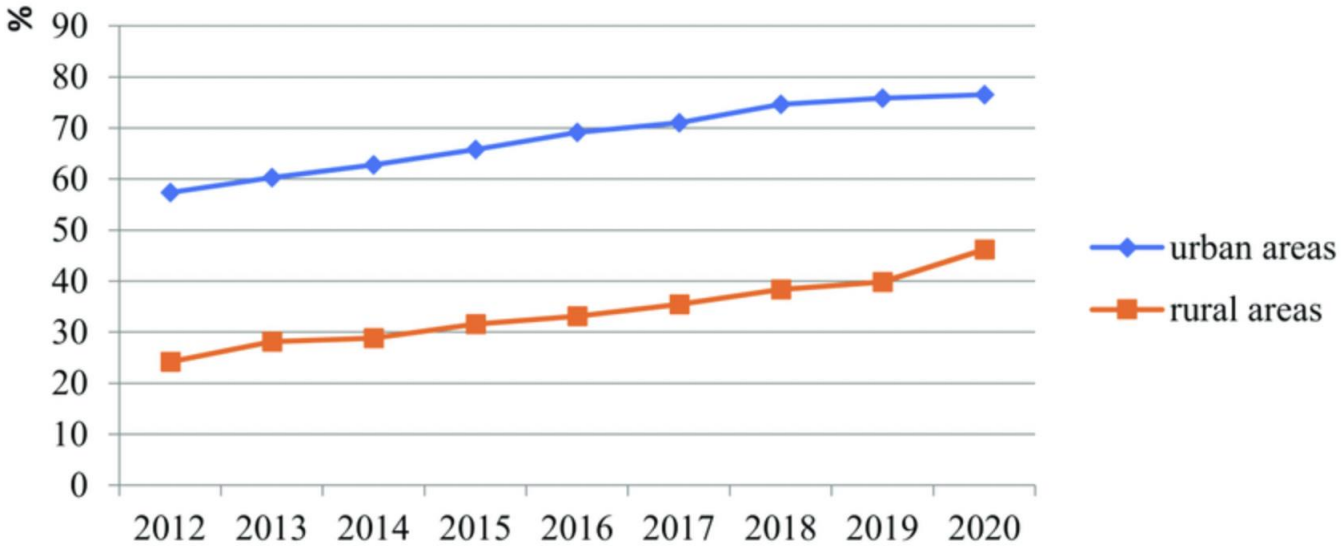


- Complex, cascading and compounded
- Climatic and non climatic stress
- Addressing systemic risk
- Adaptive governance
- Emerging technologies

Context 4: Digital inclusivity



July 2022: 5.03 Billion

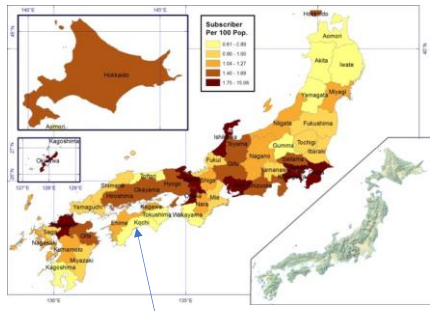


Digital Den-en-toshi

The concept of the Kishida Cabinet, which is launched in 2022.
The objective is "*to promote regional revitalization through digitalization, and furthermore, to realize bottom-up growth from the regions to the entire country*".

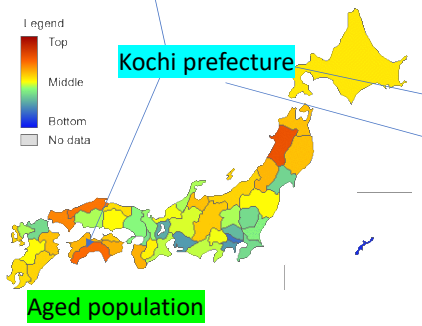
The following **digital human resource development** and securing are listed as important measures.
1. Develop and secure digital human resources in the public sector
2. Implementation of online courses etc.

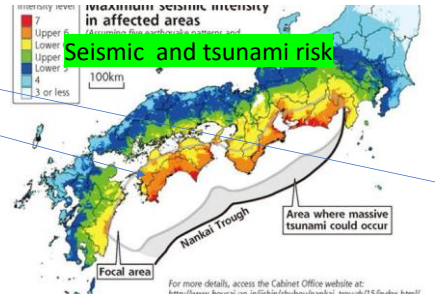
Digital media penetration

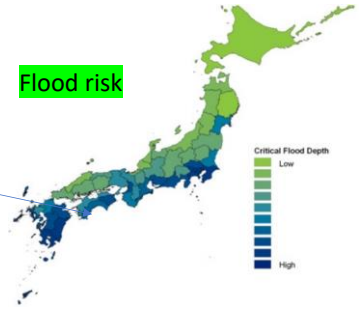


Nishida et al. (2014)

- Countries and socio-economic clusters
  - Infrastructure based divide
  - Policy based divide
  - Urban rural divide
  - Age based divide
  - Gender based divide
  - Physical and mental challenge based divide





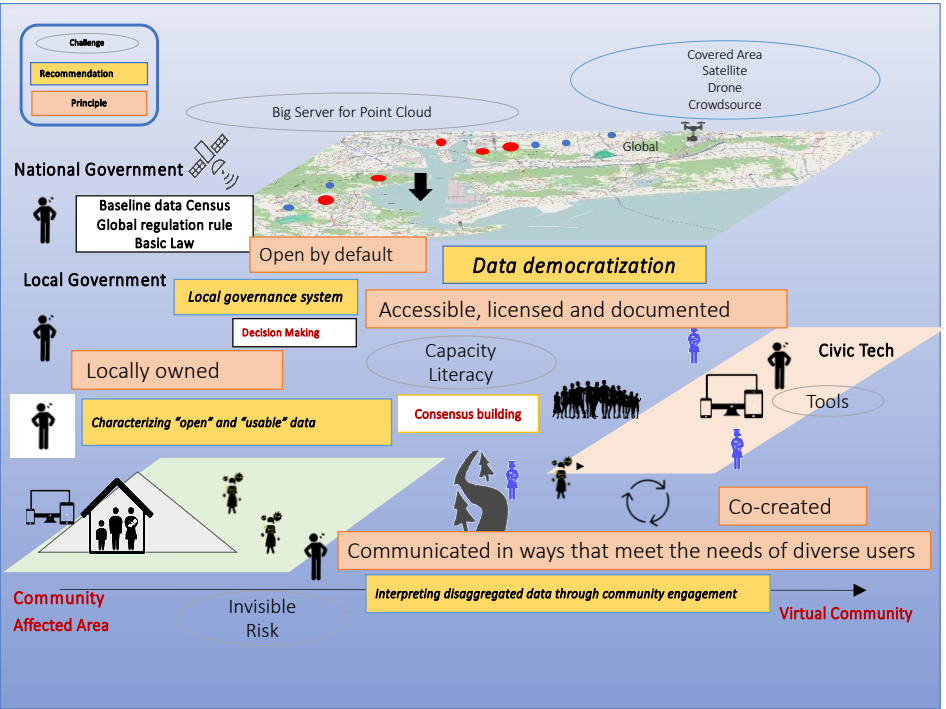


Context 5: Open data, adaptive governance

2018 West Japan Flood

Bousai Data Eye by Data Cradle and Kurashiki City

Participatory citizen interface for disaster information sharing



2020 Kumamoto Flood

Adaptive Governance

- Control the disease spread in the evacuation center
  - Critical health monitoring
  - Separation of spaces / evacuation center management
  - Ensure air circulation etc.
- Volunteer management: specific incentive schemes with local government and business sectors
- Data management: link to contract tracing
  - Cluster approach and early detection

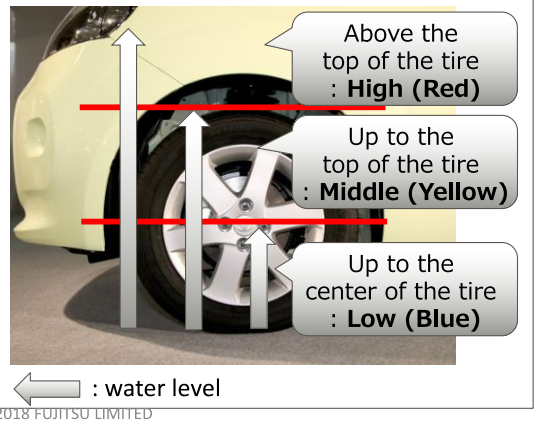
Context 6: Citizen science

Technological intervention for Inundation flooding:

Water Level Measurement

Challenges:

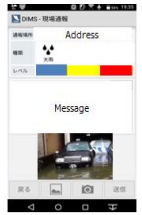
- Short duration heavy rainfall
- Non uniform inundation flooding



Simple smartphone technology

3 types of smartphone apps for measuring water levels.

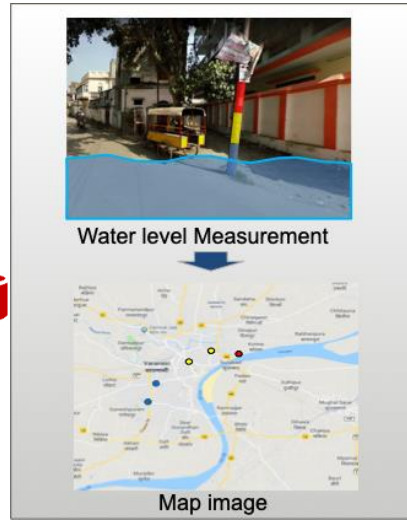
1. Select Type for DDMA



2. Input Type for Climate Schools

3. AR Type for Climate Schools

Processing



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Final comments

- Mainstreaming CES needs governance, technology and resource support
- Need to keep the changing risk landscape in mind, especially focusing on new risks
- Local implementation and local customization is an absolutely need
- Digital divide between urban and rural areas poses a significant challenge
- Emerging technologies, citizen science, open data and open governance becomes critical in the new era of climate and sustainable development