



United Cities and Local Governments
Asia-Pacific

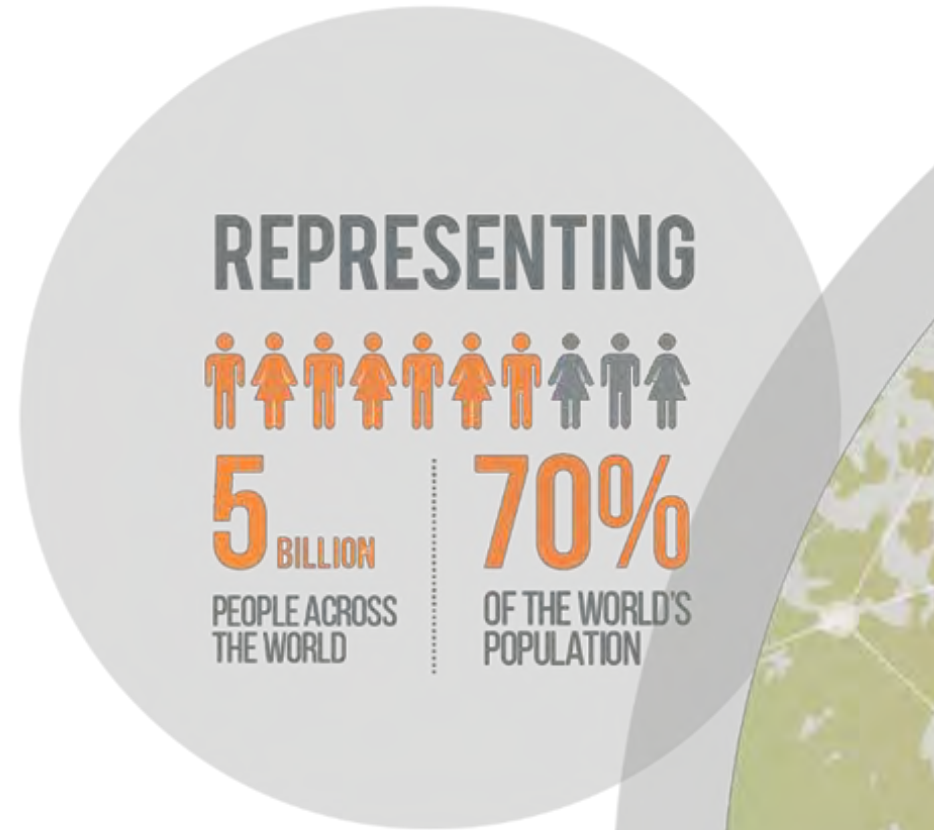
ENABLING CONDITIONS for the DEVELOPMENT & IMPLEMENTATION of LOCAL DRR STRATEGIES: SMART PRACTICES FROM ASIA-PACIFIC CITIES

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UCLG ASPAC Secretary general



A STRONG AND
UNITED VOICE
BEFORE THE
INTERNATIONAL
COMMUNITY

Who We Are



+175
LOCAL AND REGIONAL
GOVERNMENT
ASSOCIATIONS

+240,000
TOWNS, CITIES, REGIONS
AND METROPOLISES

9
SECTIONS
7 REGIONAL
1 METROPOLITAN
1 FORUM OF REGIONS

18
COMMITTEES &
WORKING GROUPS

2004 – UCLG was established as a merger of IULA (1913), UTO (1960th), and Metropolis (1980th)



United Cities and Local Governments
Asia-Pacific

+7,000

Local

Governments

+50%

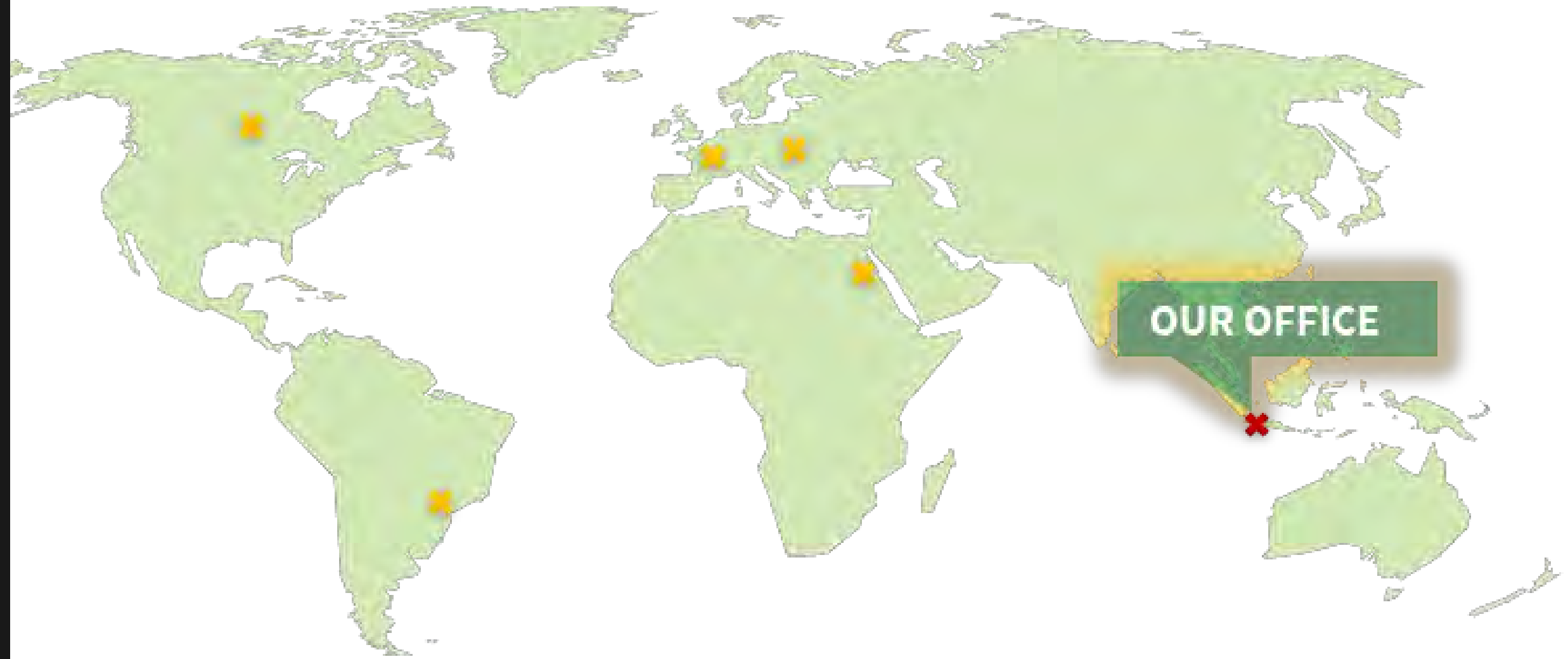
+4.3

World's
Population

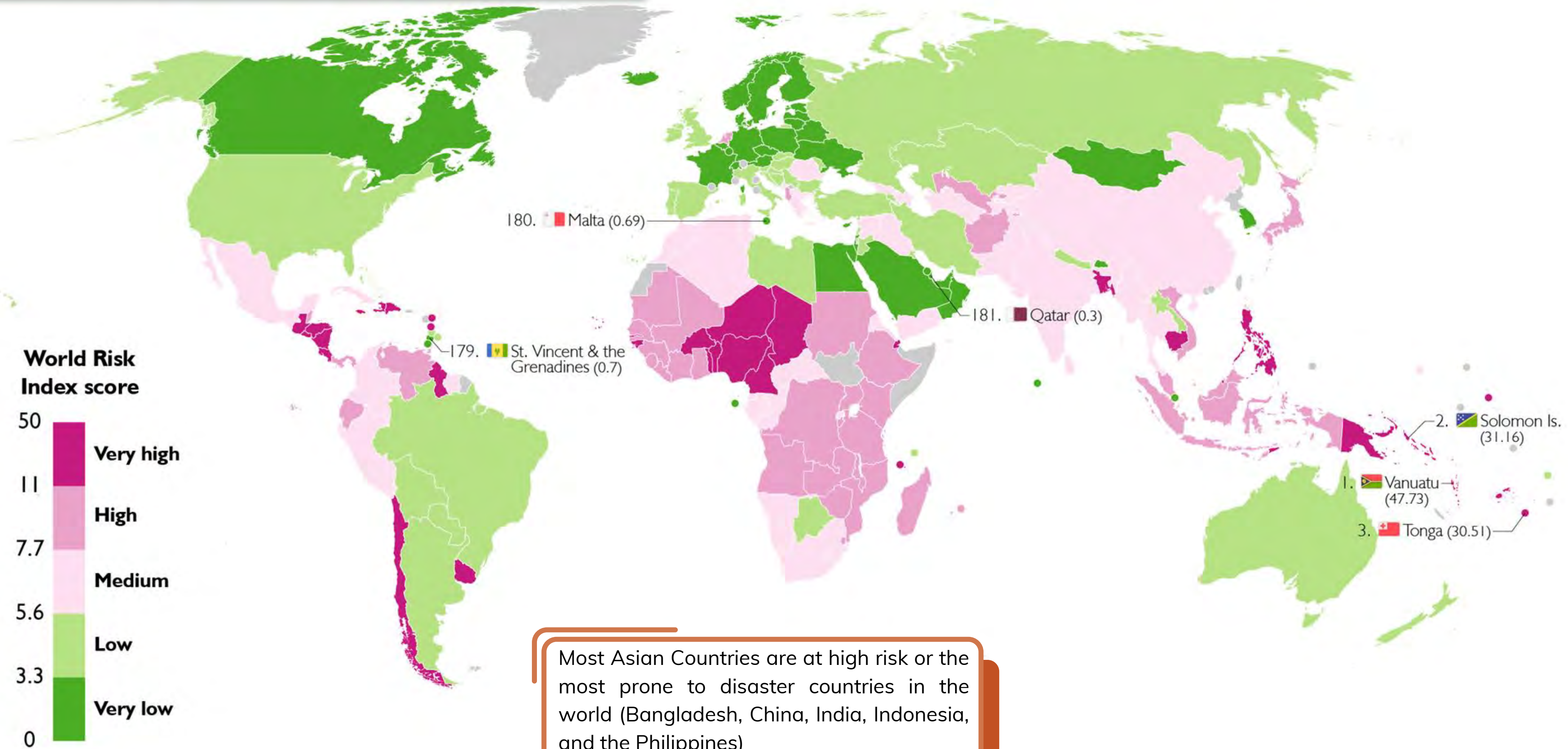
Billion
People

UCLG ASPAC is the host of:

- ASEAN Mayors Forum
- GCoM SEA 2018~



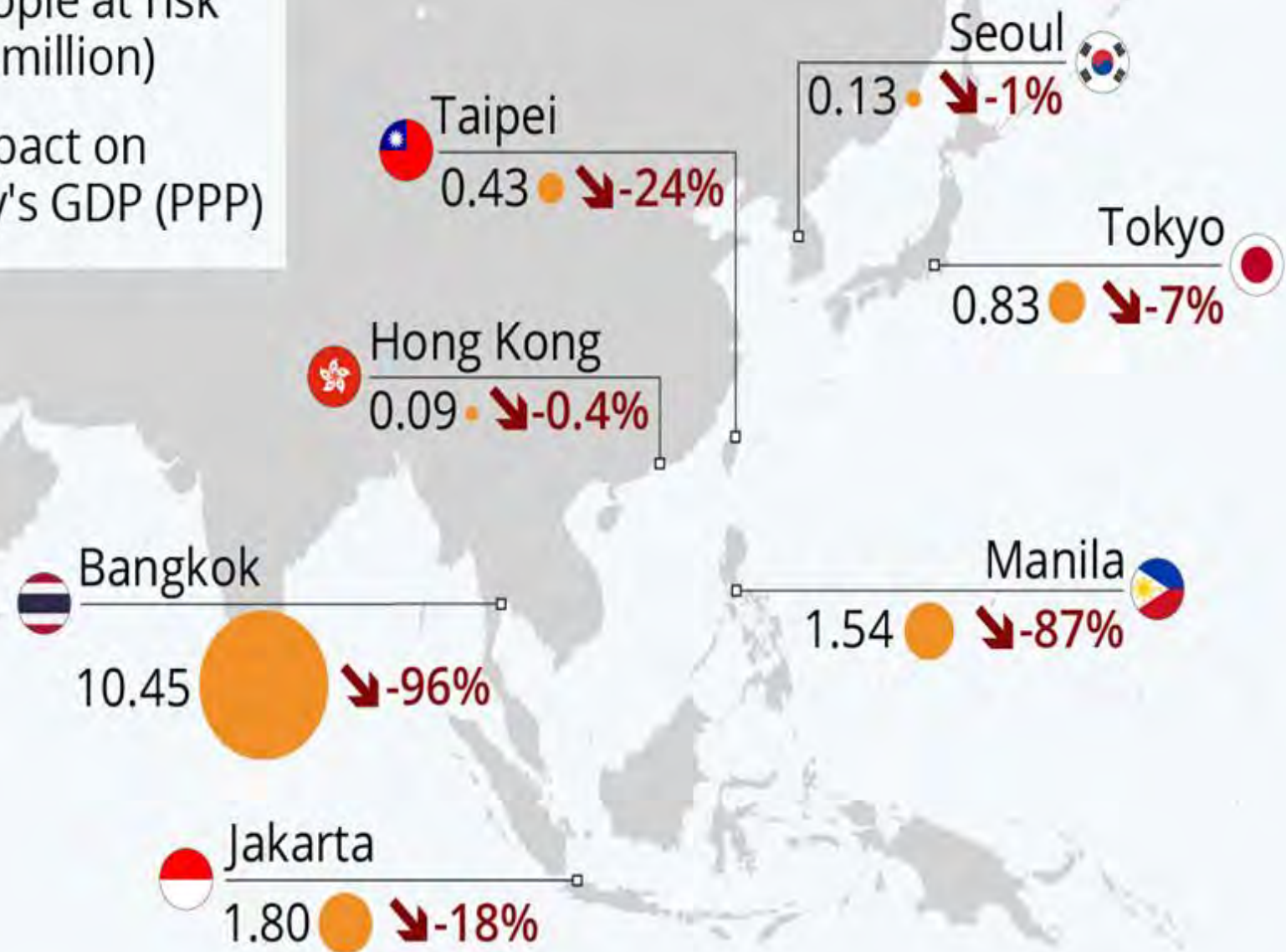
Natural disaster risk



Asia's Sinking Cities

Risk to Asian cities due to rising sea levels and flooding* by 2030

● People at risk (in million)
 ▼ Impact on city's GDP (PPP)



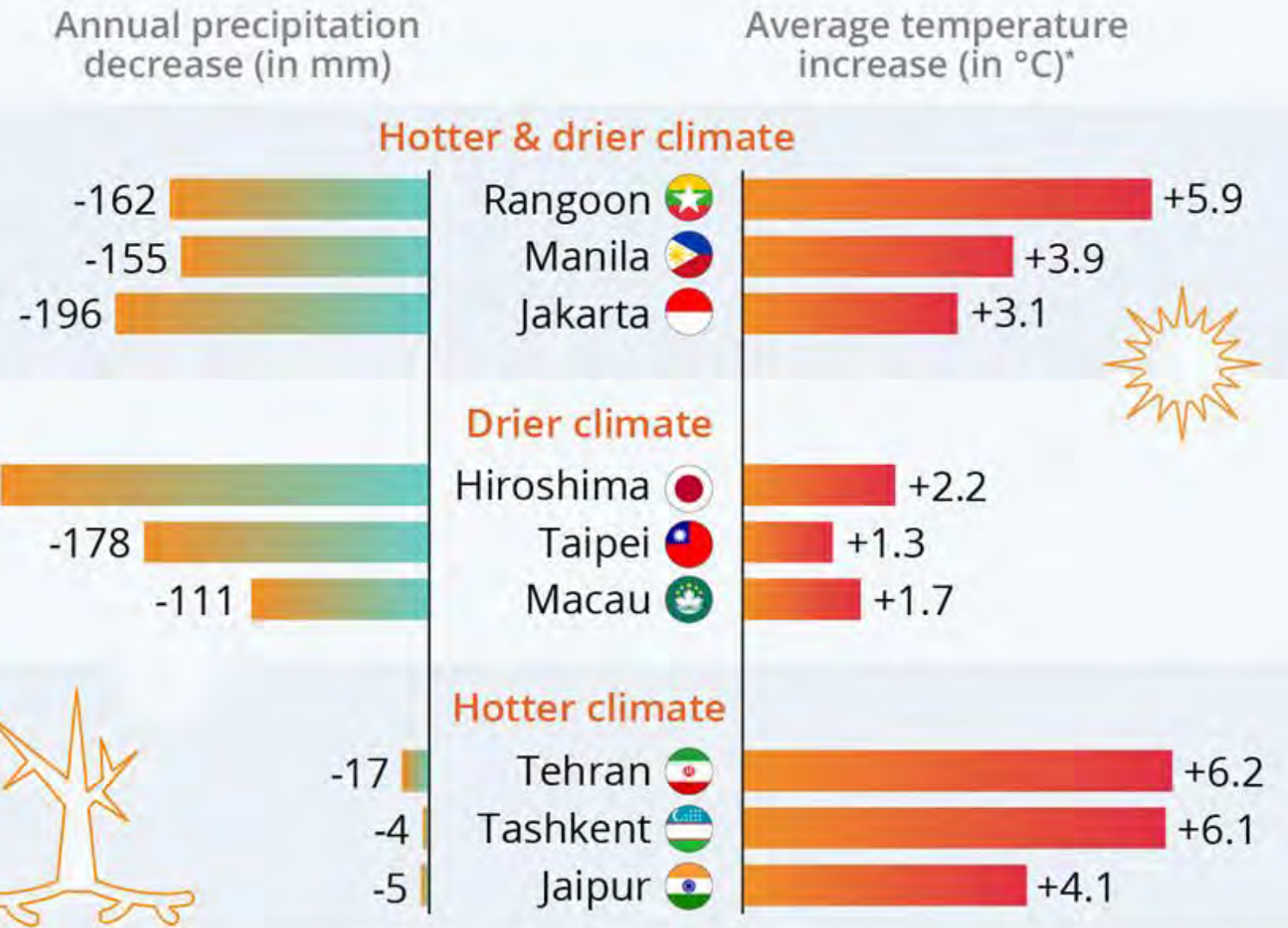
* in the event of a 10-year flood (1:10 change of occurring in any given year)

Source: Greenpeace East Asia



Asian Cities to Experience Climates Extremes

Projected average temperature increase/precipitation decrease in selected Asian cities until 2050

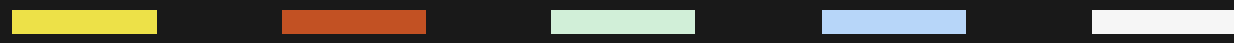


* in warmest month of the year

Source: Jean-Francois Bastin et al. Understanding climate change from a global analysis of city analogues, Plos One journals



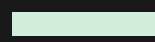
Common Challenges faced by cities



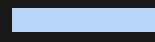
Home Nearly 60% of world population



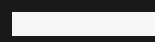
Access to basic services



Environmental Challenges



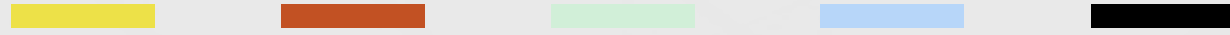
Climate Change



Disaster Prone



Common Strategy Agenda 2030



IMPLEMENTING
THE NEW
URBAN AGENDA



Paris **Climate** Agreement

Sendai Framework for Disaster Risk Reduction

2015 - 2030

IF NOT

NOW,

WHEN?

There is no PLANET B

Local Government must understand local needs and be able to target resources effectively, foster participation, and increase accountability. Legal and fiscal decentralisation, according to the principle of subsidiarity, is required to carry out these tasks.



Local Government shall have a leadership role in developing and implementing a DRR local strategies to implement SFDRR.



Local Governments and their Associations are to drive national development from the bottom up by building resilience in cities.



Local Government shall engage different stakeholders and provide a platform for them.



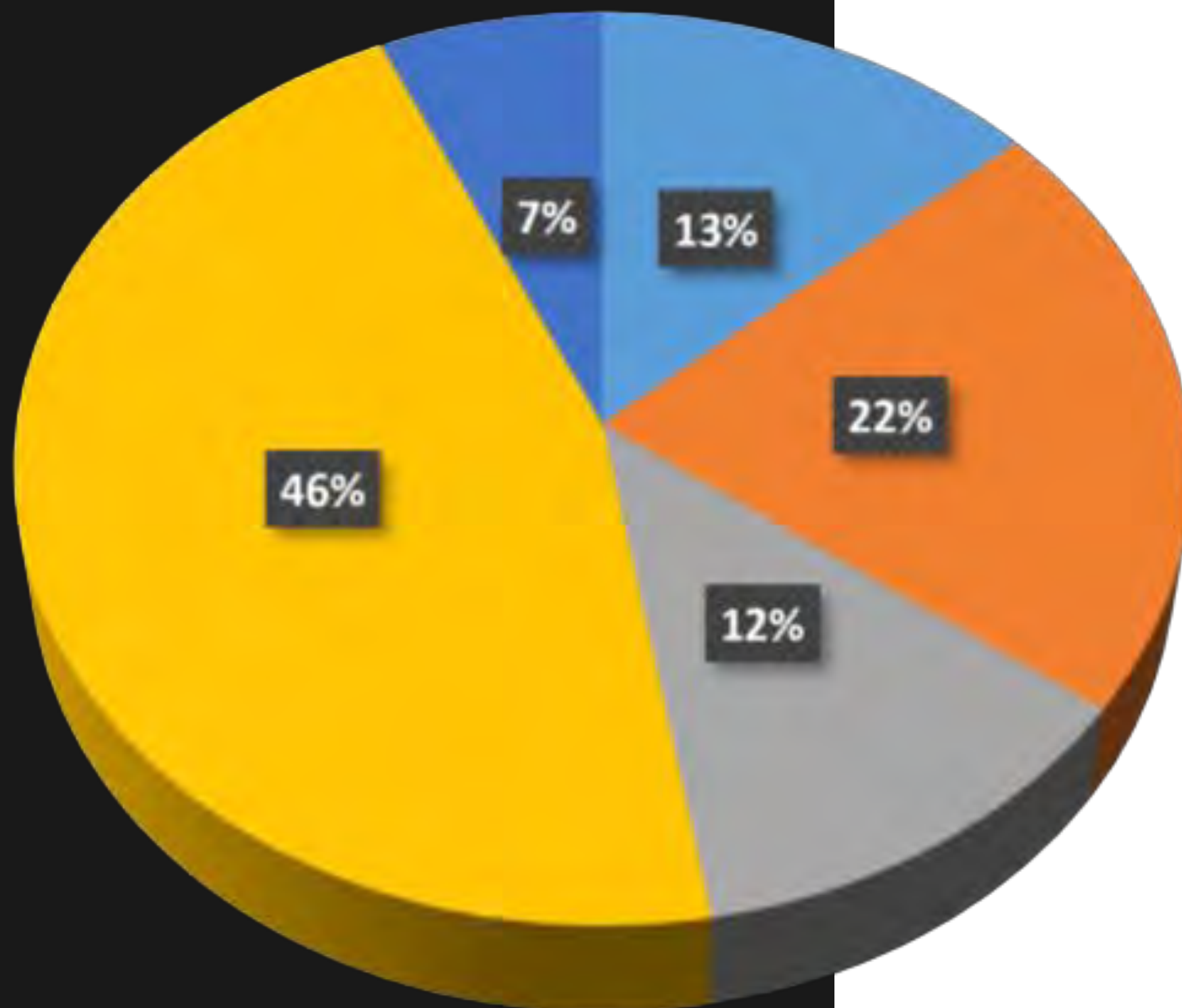
Local Governments act locally to address global challenges and manage the impact of global phenomena at local level (climate change mitigation and adaptation, DRR).



“ LGs can contribute to more effective and accountable international governance if LGs are recognised as a sphere of government and given a seat at the global table ”

- Lack of political Interest or engagement
- Change in the government and priority
- No dedicated focal agency for DRR
- Lack of financial resources

Challenges in DRR



Resilience Learning Module I:

Fundamentals of Resilient Governance & Development

Localizing the Sendai Framework for Disaster Risk Reduction to ensure resilience-based sustainable and inclusive development

Resilience Learning Module II:

Strategies and Actions

Enabling Condition for Developing the Local DRR Strategy



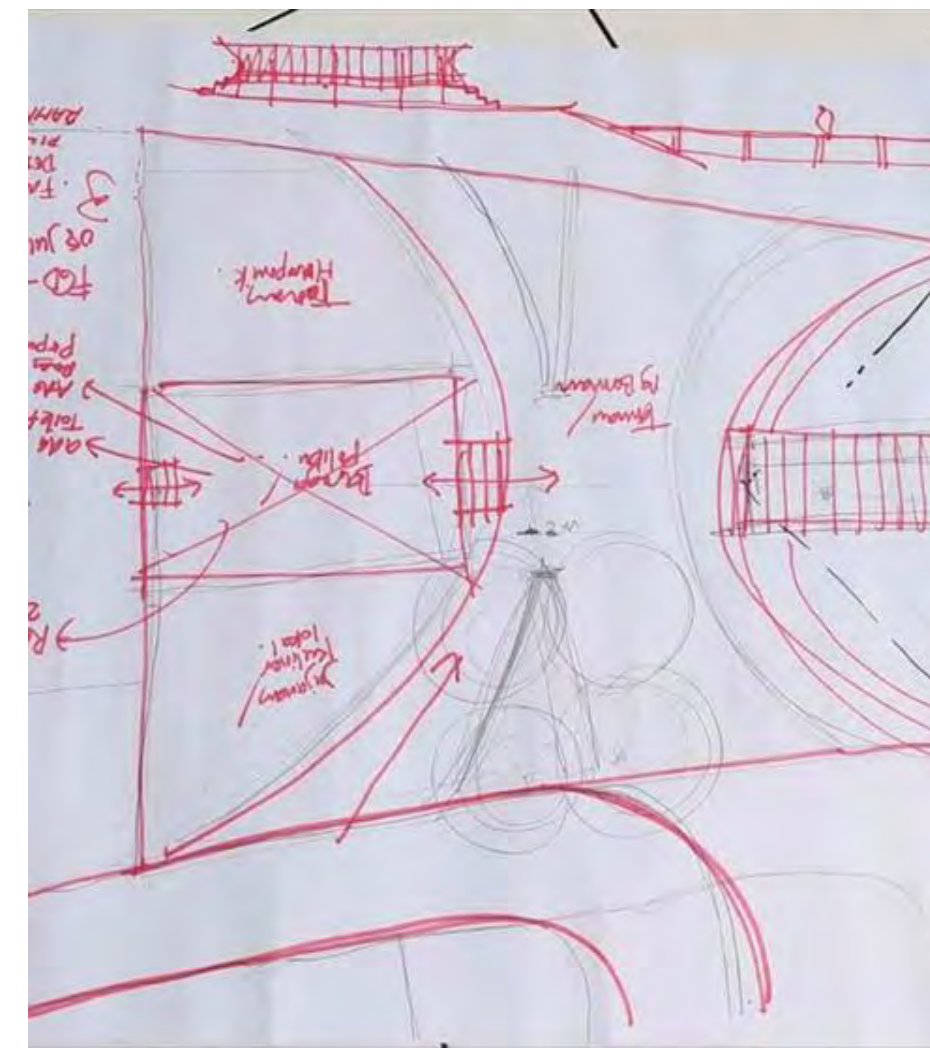
- 1 Develop local governments capacity by promoting new tools to measure city's resilience
- 2 Provide platform for knowledge sharing among cities with similar challenges
- 3 Push commitment at regional level to achieve Target E of Sendai Framework

UCLG ASPAC Scales up its Public Space Programme in Seberang Perai, Malaysia to Prevent Urban Flooding

BEFORE

AFTER





Participative and Inclusive

The participatory approach in the development of Public Space ensure the involvement of various stakeholders (including women, children, elderly, and vulnerable groups) in the aspects of planning, constructing, and evaluating.

This ensure the needs of the stakeholders to be identified and reflected in the public space design.

The stakeholders might also be involved in the budgeting of the development of public space. Making the development more transparent and inclusive.

Public Space and Lesson Learned Through Memorial Wall

Ex: Liquefaction and Earthquake



Empowering People in Disaster Risk Reduction in Semarang

Type of disaster: Urban Flooding

Disaster Management response: Information center established – Good Early Warning System

Establishment of resilient villages





Simulation of evacuating victims of varied disasters





Challenge	High risk of floods for the lowlands close to the sea and especially during the annual rainy sessions
Strategy	Establishment of a disaster risk information center that raises awareness monitors the river level and can issue warnings in case of an anticipated flooding.
Lesson	Due to the forecast and early warning mechanisms the local governments and the citizens can take adequate measure to be better prepared for flooding.
Transfer	The establishment of a local center for information and early warning on river flooding's can improve the preparedness and the reaction in case of an event.





Jakarta's Effort to be Resilient

Various efforts have been made by Jakarta to reduce disaster risks and the impacts of climate change. Some examples of activities carried out are as follows:



	Climate <i>Kampung</i> Initiatives/PROKLIM
	Infiltration Wells/ <i>Sumur Resapan</i>
	Air Pollution Control
	Urban Farming

	River Naturalisation and Normalization
	Rain Water Harvesting
	Waste Bank/ <i>Bank Sampah</i>
	Intermediate Treatment Facility (ITF)

	TransJakarta
	MRT
	Electric Bus
	Jakarta Smart City

Jakarta has taken the right steps to become a resilient city. These steps need to be improved in every possible methods, including implementing the City Resilience Strategy.

Puttalam, Sri Lanka

The Challenges

Flooding in urban settlement areas causes: Destruction of crops, Damage to property, Loss of human lives and livestock, Disruption of infrastructure facilities, and Increased susceptibility to waterborne diseases which affect the social vulnerability



The Solution

Relocating people who live in the most affected areas by flood.

Making the city more inclusive, safe, resilient, and sustainable with Socio-Economic Aspects of Water-Related Disaster Responses that are planned ahead.

Community-led resilient: Adaptation-based approach for community response including local early warning system (special task force lead by community).

Smart Solution: Adapt to Flood Risk under Climate Change

To reduction of flood losses could potentially be tackled quite dramatically in the short to medium term via the reduction of exposure and vulnerability of populations to flood risk (The WB, 2011).

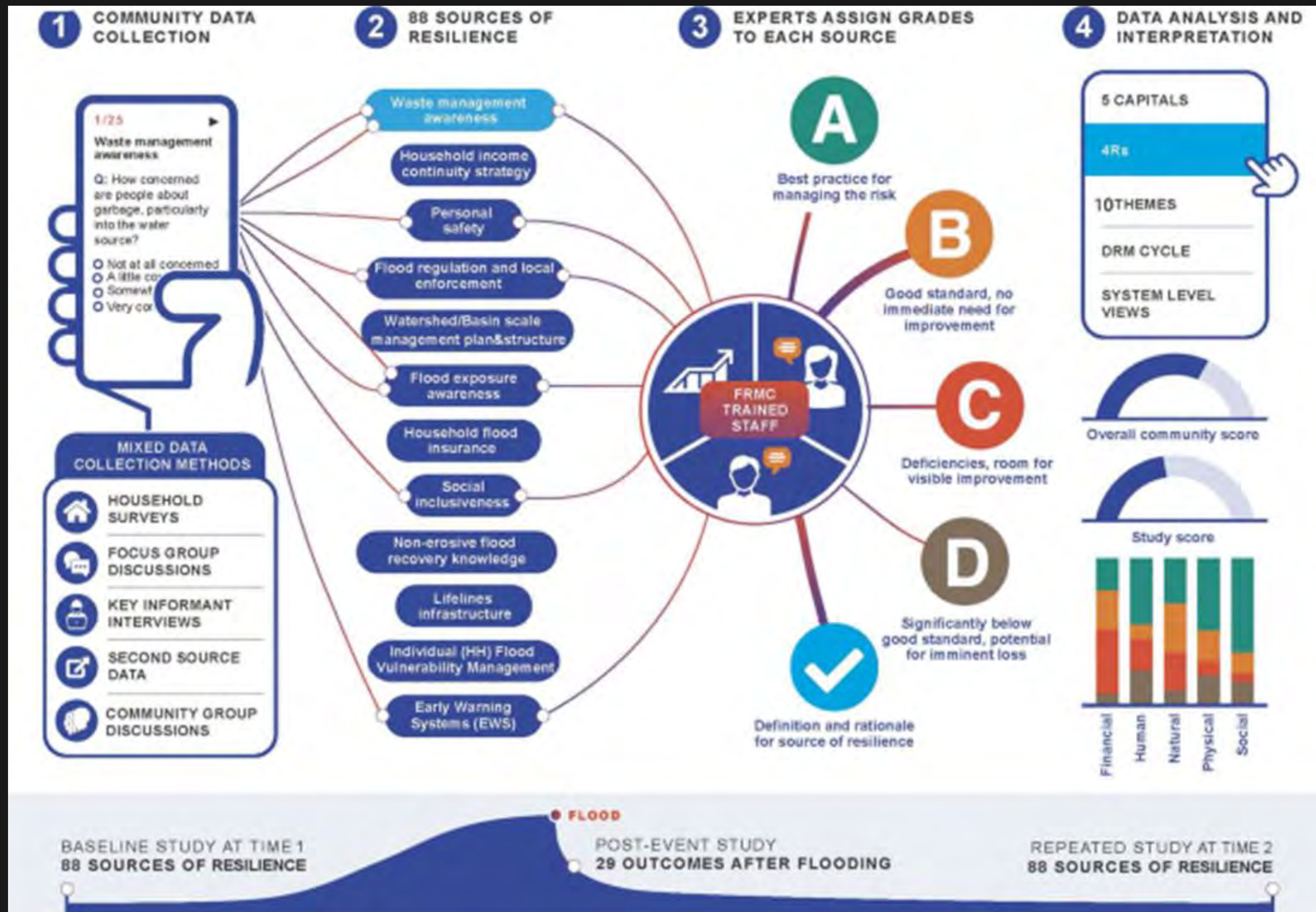
The Actions need to be considered and taken:
Integrating the Climate Weather and Information
Systems

Urban waste management to improve the river flows



EWS: Climate and Weather Information Systems

Community-based flood resilience



4 elements that should be met:

- Community-scale
- Local Specificity, which will determine the type of EWS to be developed
- The disaster or hazard kinetic
- Culture, to see people's preparedness in facing flood risks.

7 subsystems in the flood EWS:

- Risk assessment
- Dissemination and communication on disaster knowledge
- Establishment of disaster preparedness team
- Drafting evacuation operational procedure
- Drafting of permanent procedure
- Monitoring technology, early warning and evacuation
- Commitment building from local authority and community operating and maintaining the system

Transforming Waste to Energy



Integrated Resource Recovery Center (IRRC)

Step 1: Sorting and screening area, composting area

Step 2: Shedding area, pre-treatment area

Step 3: Anaerobic digester

Step 4: Sludge drying bed

Step 5: Trickling filter

Step 6: Generator room

Step 7: Facilities for office, toilets, washroom, equipment storage, etc.

By reducing **ONE** ton of waste :

Create **2** new jobs for the waste pickers

Produce **0.25** tons of good quality compost

Produce **40-80** cubic meter of biogas

Save **1.1** cubic meter of landfill area

Reduce **0.5** tons of green house gas emissions

Provide door to door service to **2k-3k** households

IRRC Result Practice

JAMBI FACTS



Inaugurated on
29 January 2018



Physical investment:
USD 77,000



Land: 1,200m²



All 4 biodigesters are fully
operational producing total
80m³ methane/day



Total equivalent electricity
produced from the
methane is 15,000watt/day



Recovered waste in the
form of organic soil
fertilizer is 450kg/day



The facility could reduced
up to 90% waste from
Talang Banjar Baru
Market transported to the
city landfill

MALANG FACTS



Inaugurated on
26 April 2018



Physical investment:
USD 70,000



Land: 1,400m²



All 5 biodigesters are fully
operational producing
@84m³ methane/day



Total equivalent electricity
produced from the
methane is
30,000watt/day



Recovered waste in the
form of organic soil
fertilizer is 250kg/day



The facility could reduced
100% waste from Mantung
Market transported to the
city landfill

Conclusion and Way Forward

- Cities can support raising the country's Sendai Framework Targets by identifying cities' DRR actions to reduce potential risks, which can be done through partnerships with external actors to provide technical assistance and financing access.
- The national government should strengthen the national policies to provide clear mandates and ownership to city governments and provide clear technical and/or policy guidance.
- City & LGs networks/associations such as UCLG ASPAC can promote the innovative knowledge platform to share the best practices/tools/methodology among cities and LGs with similar issues.





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Local Governments
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Thank You

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