



# **Resilient Urbanism in the Anthropocene –** *The Rise of Progressive City Regions in Asia's Urban Transition*

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Workshop on Resilience in Asian Urbanism

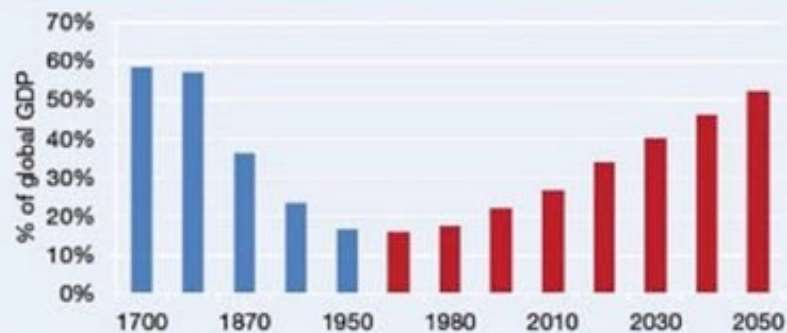
University of Washington Center for Asian Urbanisms

College of Built Environment | Jackson School of International Studies

28-30 March 2016

# Accelerated Urban Transition into the “Asian Century”?

Asia's Share of Global GDP, 1700-2050



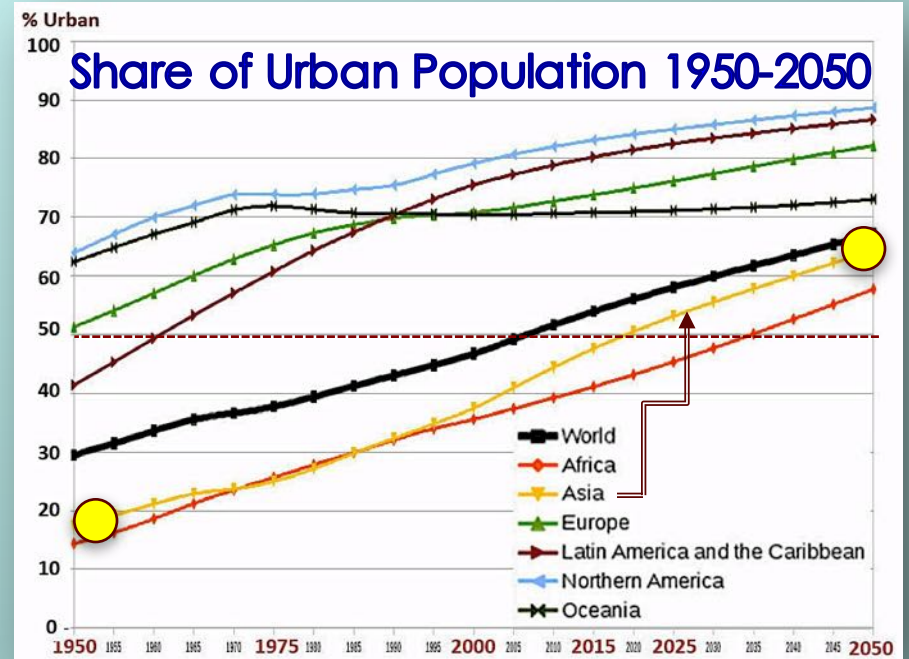
Source: Maddison (1700–1950) (2007); Centennial Group International estimates (1951–2050) (2011). Data for 1750–1790 are PPP and data for 1991–2050 are in market prices.

2000 - 2050: Asia urban population will increase by nearly 2 billion people.

Global Middle Class 2009 and 2030

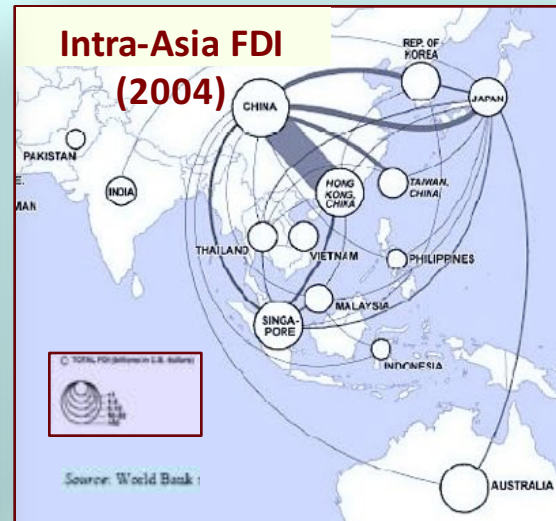
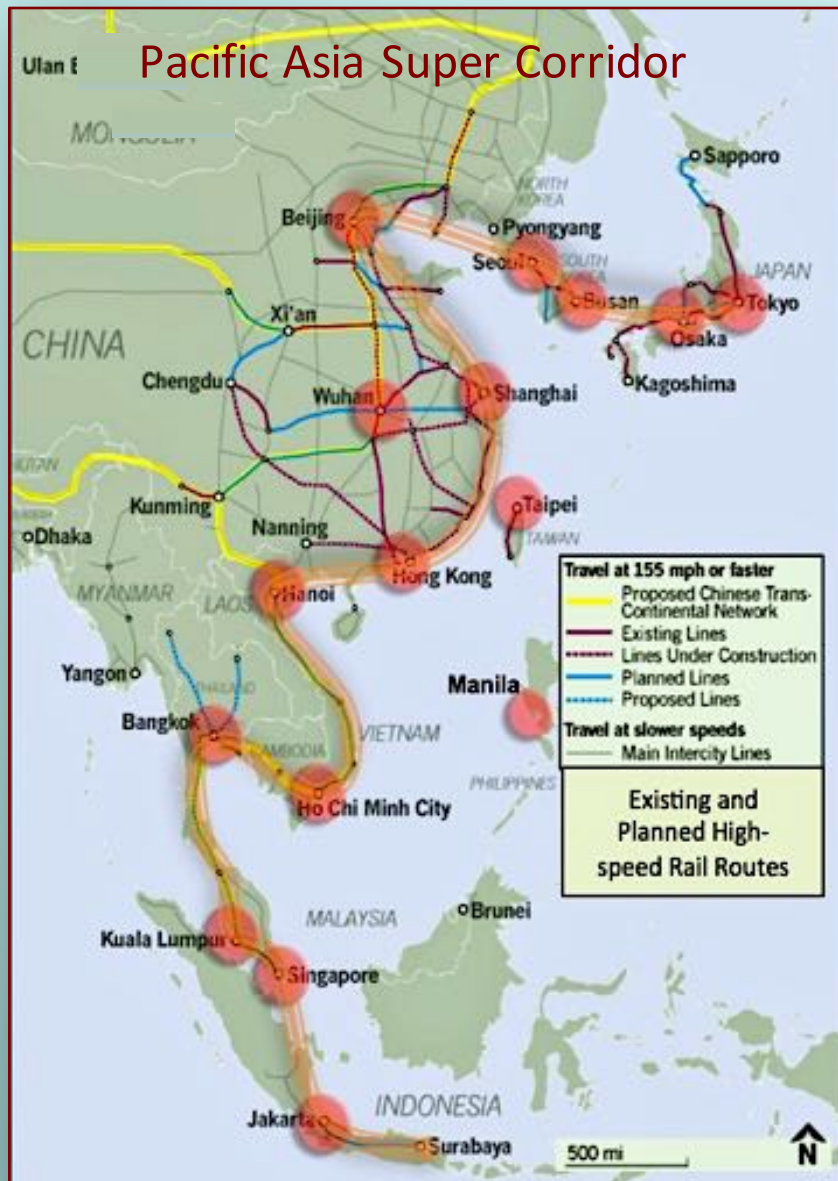


Sources: OECD, Standard Chartered Research



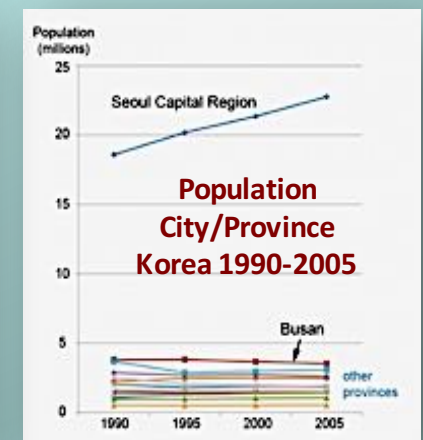
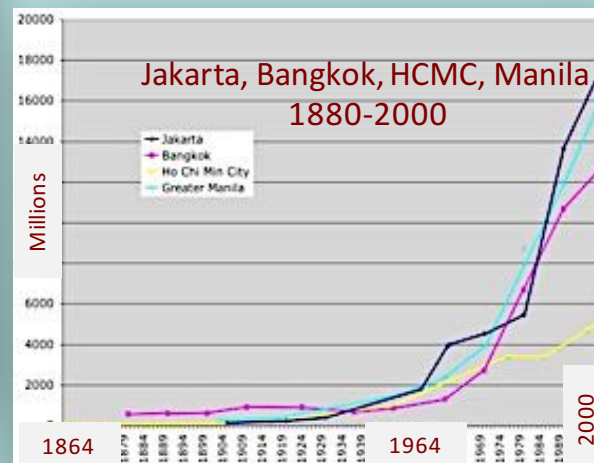


# Emerging Pacific Asia Super Urban Corridor



600 cities worldwide will account for two-thirds of global economic growth 2010-2025.

(McKinsey Global Institute)

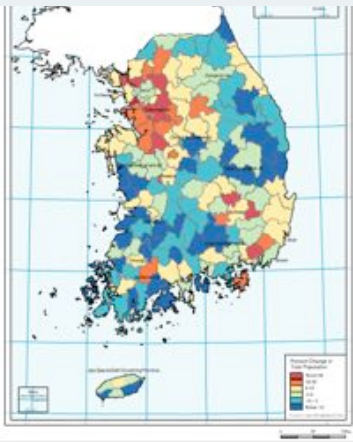


# Shrinking Countryside and City Populations

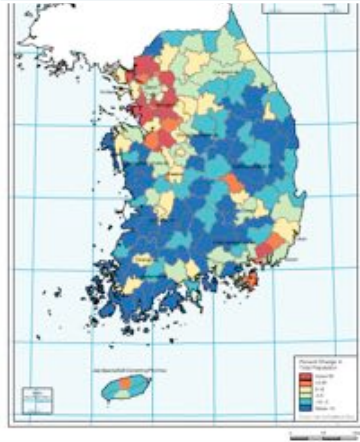
## Korea's Continuing Polarization

## Japan's Absolute Population Decline

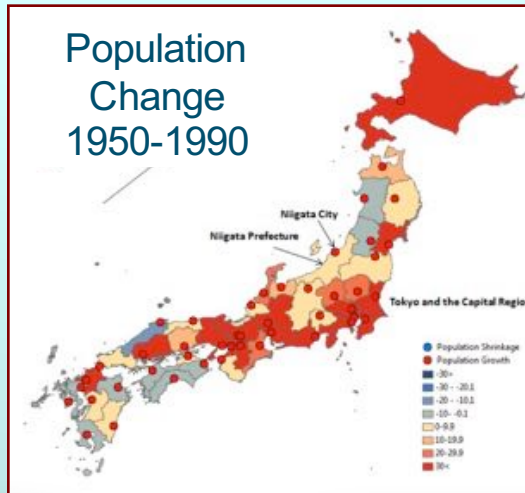
Population 1995-2000



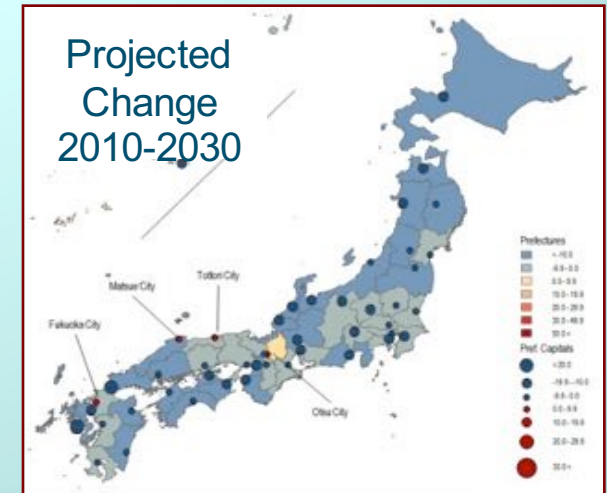
Population 2000-2005



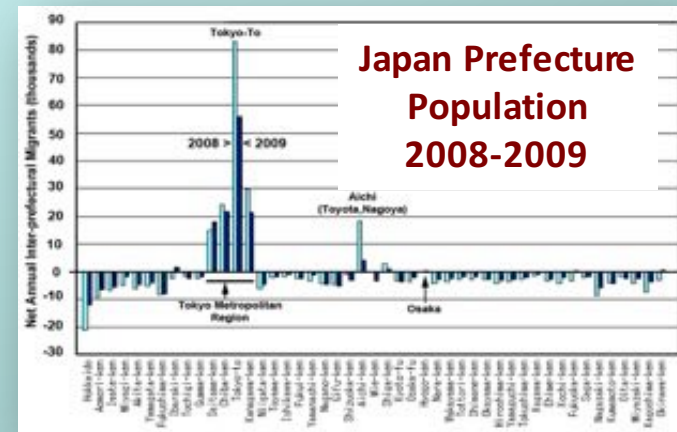
Population Change 1950-1990



Projected Change 2010-2030



shrinking cities



- ❖ “In the last 30 years, more cities in the developed world shrank than grew.”
- ❖ “In Japan, hundreds of small and midsize cities are shrinking”

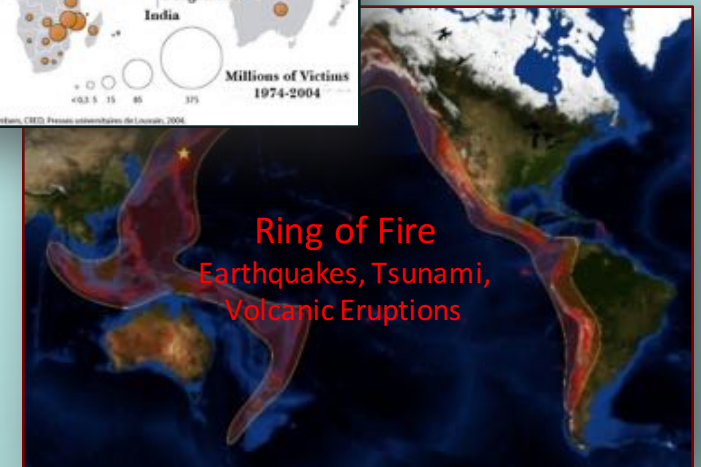
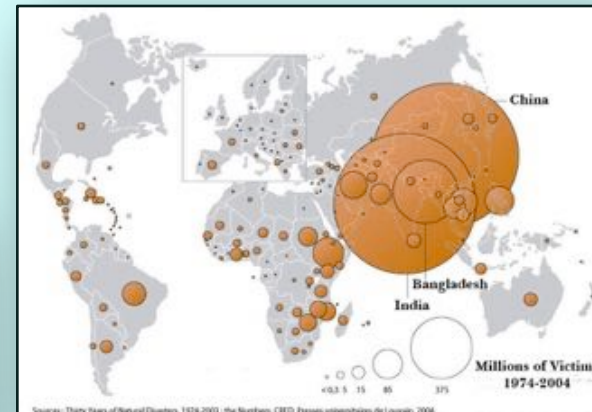
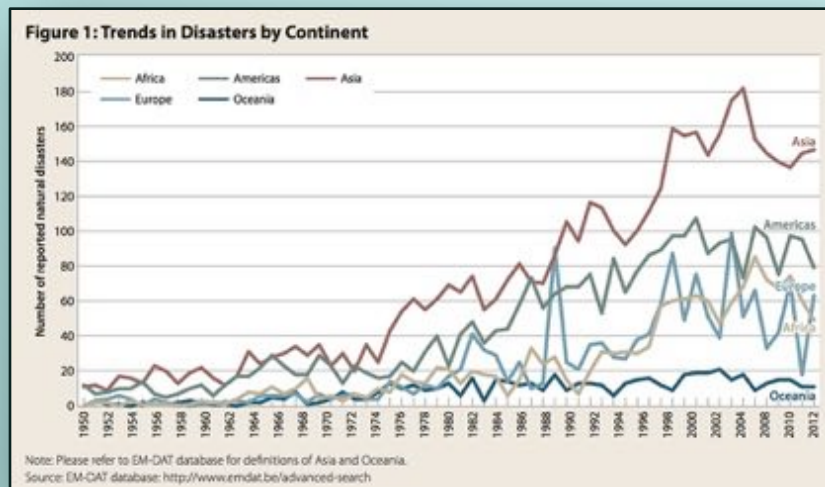


# Asia's Urban Transition and Increasing Disasters

- ❖ Exposure to hazards multiplies as urban centers grow.
- ❖ Rapid urbanization expands exposure to hazards
- ❖ it also increases people's vulnerability, especially among the poor (UNESCAP 2012).

## Asia 2000 – 2012

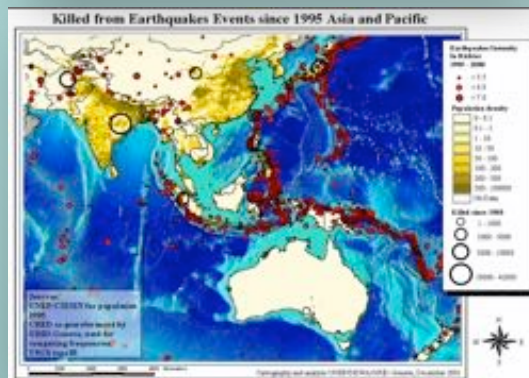
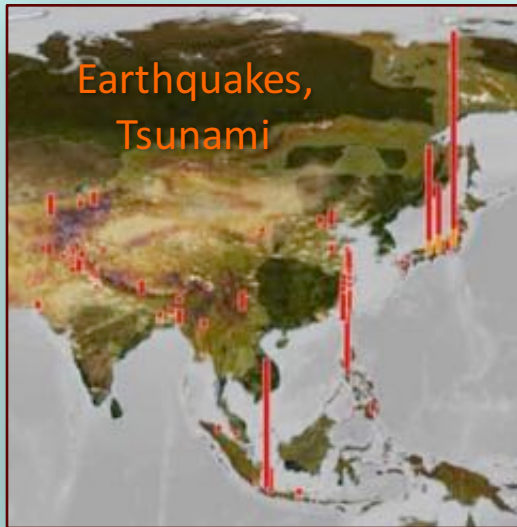
- ✧ 1.6 billion people impacted by disasters
- ✧ 40% of all disasters in the world are in Asia
- ✧ 88% of people affected live in Asia



*The increase in concentrations of people and growth of assets in hazardous areas is the single largest driver of disaster risk and greatest challenge for managing disaster risks. (Jha and Stanton-Geddes 2013:17)*



# Disaster Preparedness in the Largest City Regions (2013)



Deaths from Earthquakes

City	Population	Risk of Flooding
Tokyo	32	Very well prepared
Seoul	26	Could be better prepared
Jakarta	23	Critically unprepared
Delhi	22	Critically unprepared
Mumbai	21	Critically unprepared
Mexico City	20	Could be better prepared
São Paulo	20	Could be better prepared
New York	20	Could be better prepared
Osaka	17	Very well prepared
Shanghai	17	Critically unprepared
Manila	16	Critically unprepared
Hong Kong- Shenzhen	16	Critically unprepared
Los Angeles	15	Could be better prepared
Kolkata	15	Critically unprepared
London	15	Could be better prepared
Moscow	15	No high risk
Cairo	14	Critically unprepared
Buenos Aires	13	Could be better prepared
Dhaka	13	Critically unprepared
Beijing	13	Critically unprepared
Karachi	12	Critically unprepared
Rio de Janeiro	12	Could be better prepared
Paris	10	Could be better prepared

Source: GreenAsh (2013), Natural Disaster Risk Levels of the World's Largest Cities.

Most Asian cities are poorly equipped to manage:

- ❖ environmental disasters
- ❖ climate change
- ❖ contaminated or unstable land
- ❖ health pandemics

Many will need massive investments in infrastructure, public services, institutional capacity and environmental programmes.

- ❖ 1970 - 2010 people exposed to flooding in Asia grew from 30 to 64 mn.
- ❖ The population living in cyclone-prone areas grew from 71.8 to 120.7 mn.
- ❖ Exposure to disaster risk is growing faster than the ability to build resilience

The 11 Critically Unprepared Cities = 182 mn. people at risk



# Compound Disasters

Compound disasters are a series of component disasters that continuously overwhelm existing abilities to respond in changing configurations. Their sources are incubated long before a disaster and can continue long after a disaster through cascading effects.

## Type 1: Neighborhood community

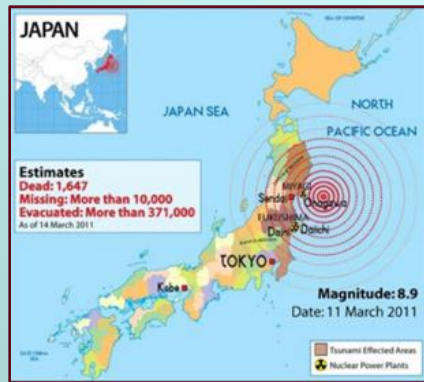
Flood → eviction → loss of social support & livelihoods → destitution



# (Compound Disasters)

## Type 2: Cascading “natural disasters”

Earthquake → tsunami → nuclear disaster → long-term devastations



## Type 3: Network effects → global supply chains



Tianjin July 2015



Christmas Product Shortage 2015



# *Resilience*

When Does a Disaster Begin?

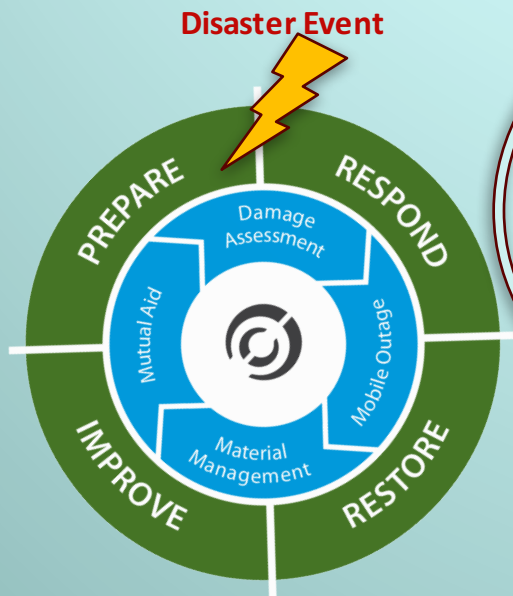
When Does a Disaster End?

## **7 Propositions**

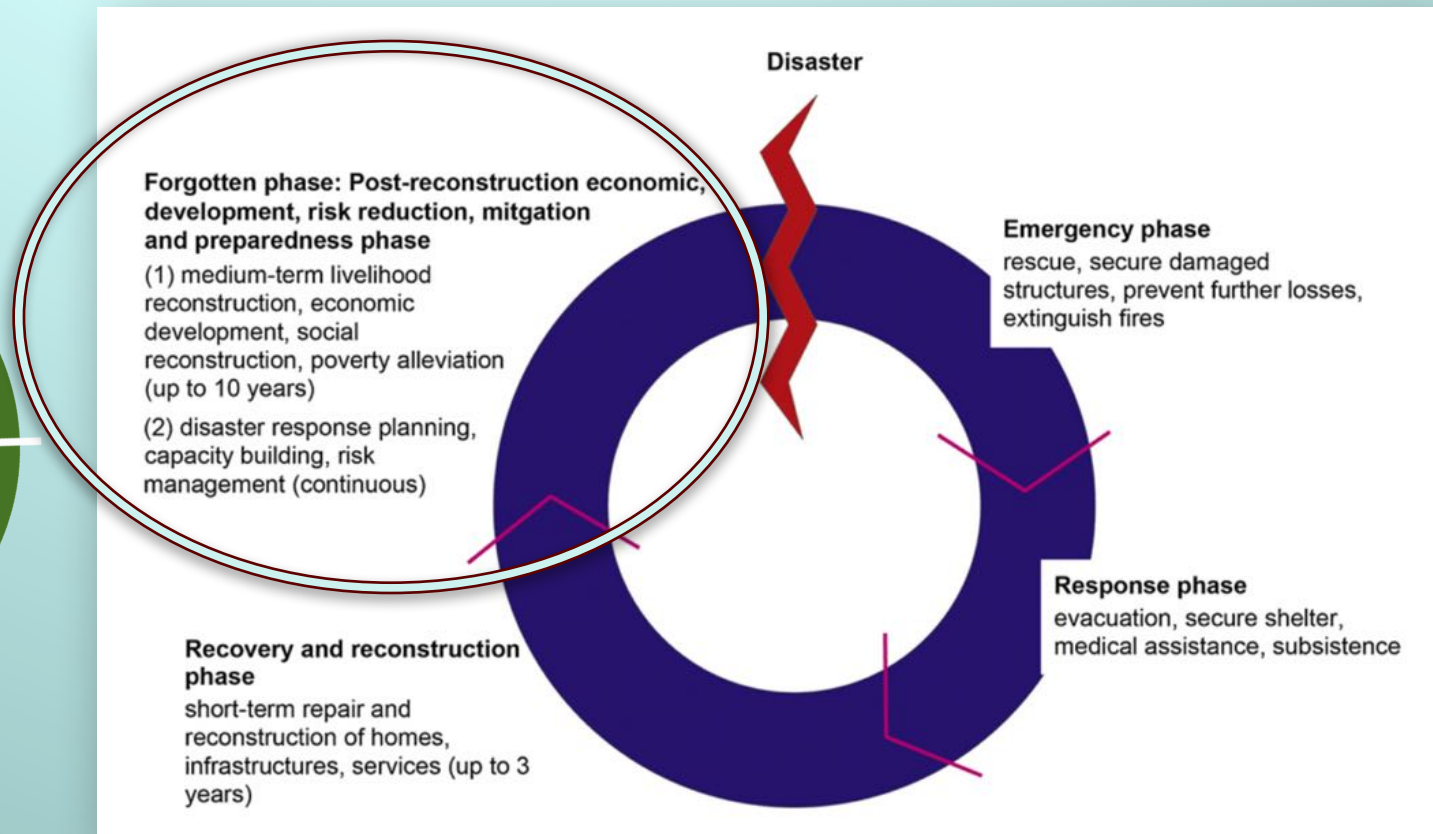
1. In the Anthropocene, disasters are increasingly “incubated” by human interventions in nature well before a “natural” disaster event occurs.
2. Post-disaster resilience has greater possibilities if pre-disaster resilience is high.
3. Disasters occur in political space; whose voice is heard determines what will be done and who will benefit. Marginalized populations tend to remain marginalized when disasters occur.
4. Disaster resilience is significantly impacted by megatrends that intersect in specific settings and moments – context matters.
5. Disasters have compound disasters effects, which are difficult to anticipate.
6. Disaster Resilience is a social learning process, not the sole application of expert knowledge.
7. Most of disaster resilience rests on actions not directly related to a disaster event, but is instead embedded in progressive city region governance.

# Models of Post-disaster Resilience

## The Disaster Wheel of Resilience



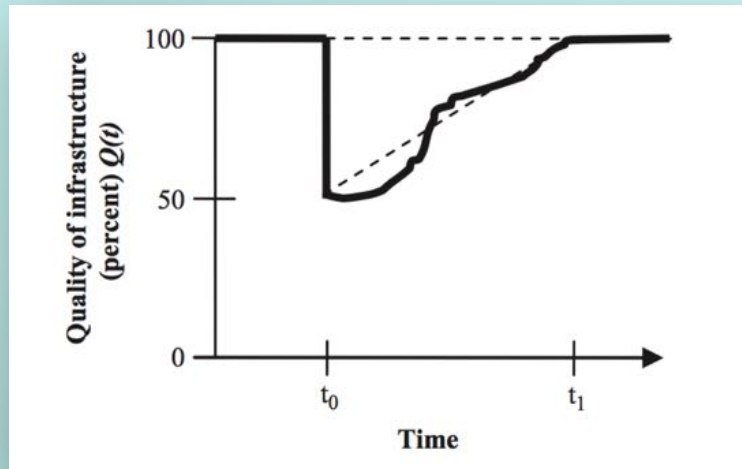
## The “Forgotten Phase”



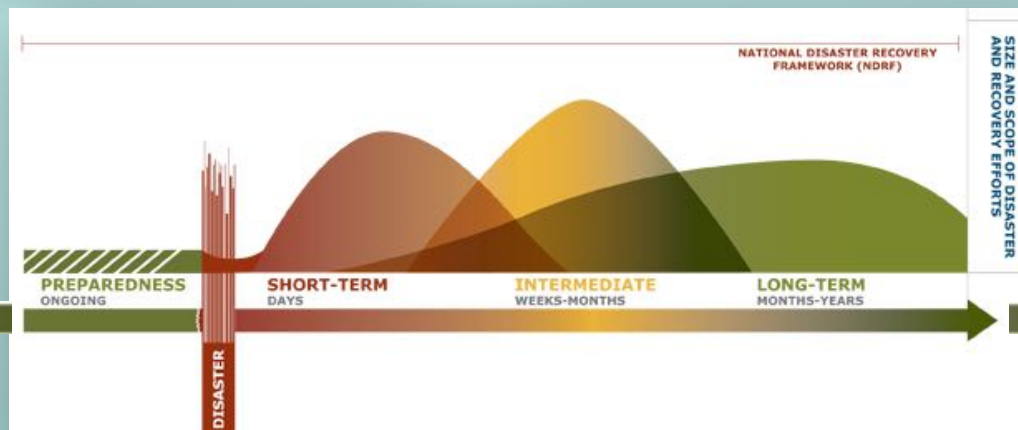
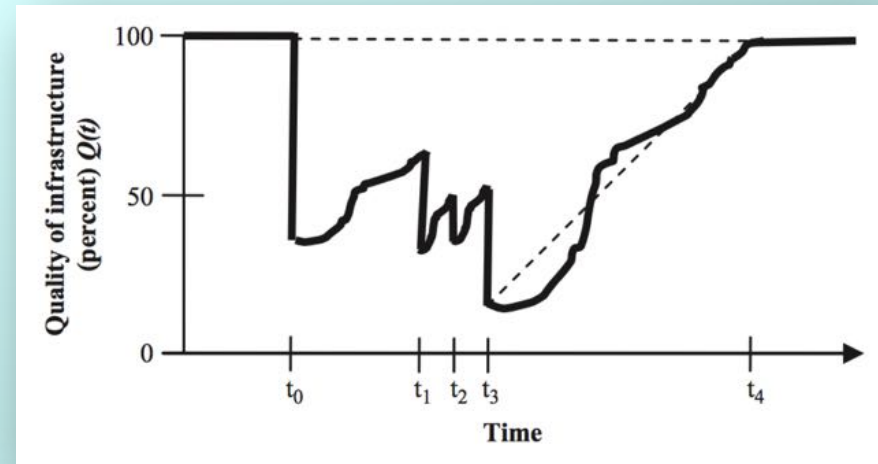


# Single vs. Compound Disaster Hypothesis

Single-event resilience Path

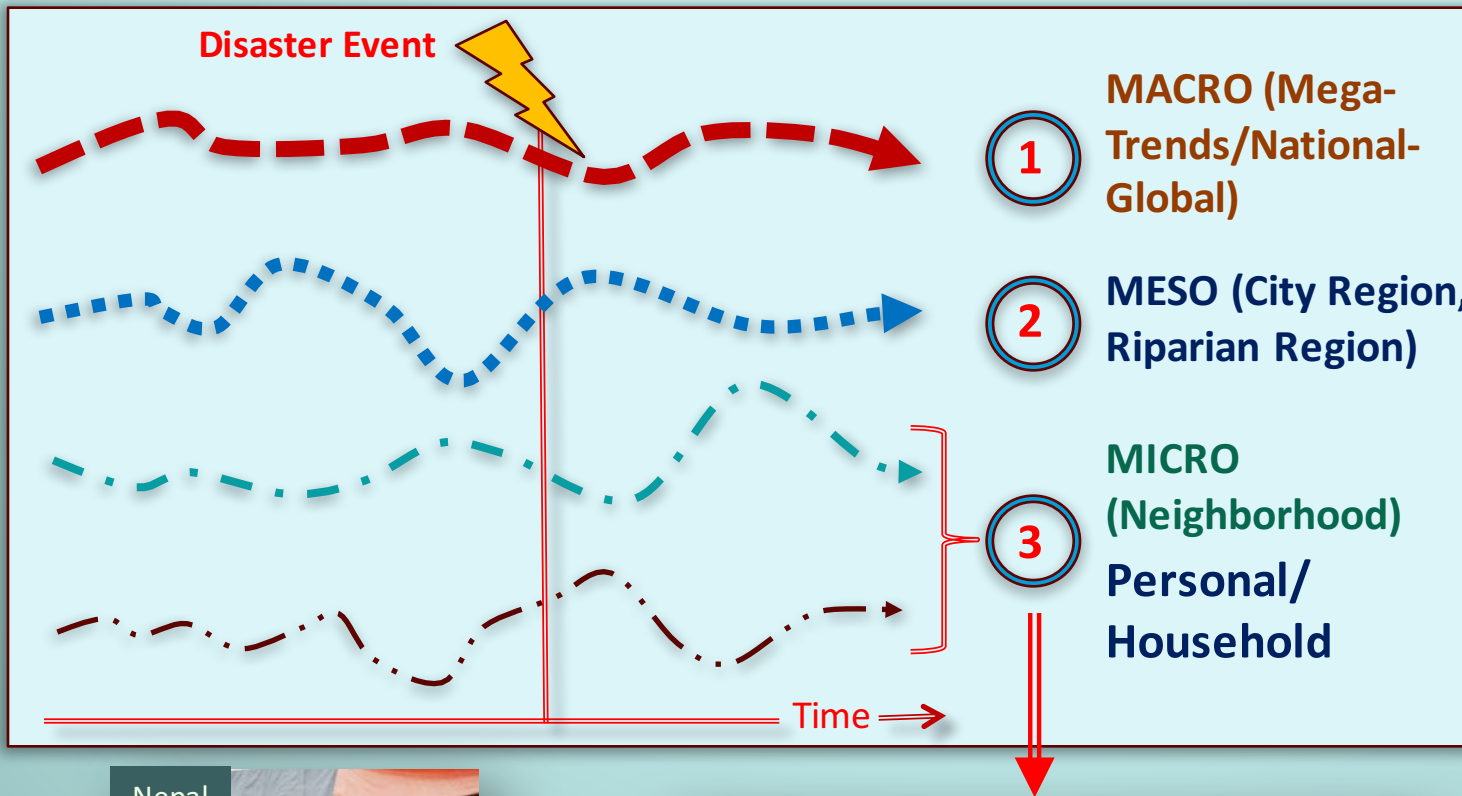


Compound Disaster resilience Path

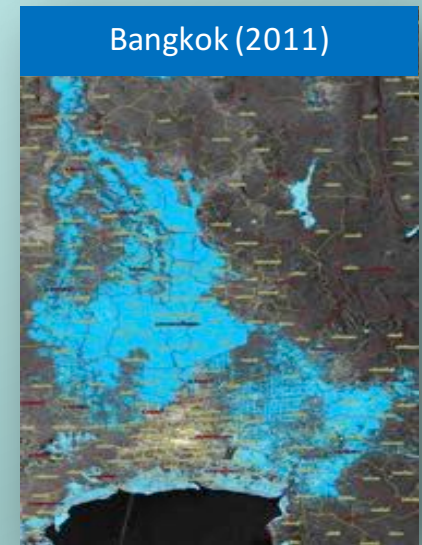
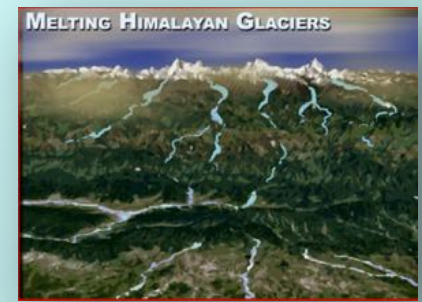


Implications: the need to do policy research well before and long after a disaster event.

# The Search for Multi-Scalar Resilience



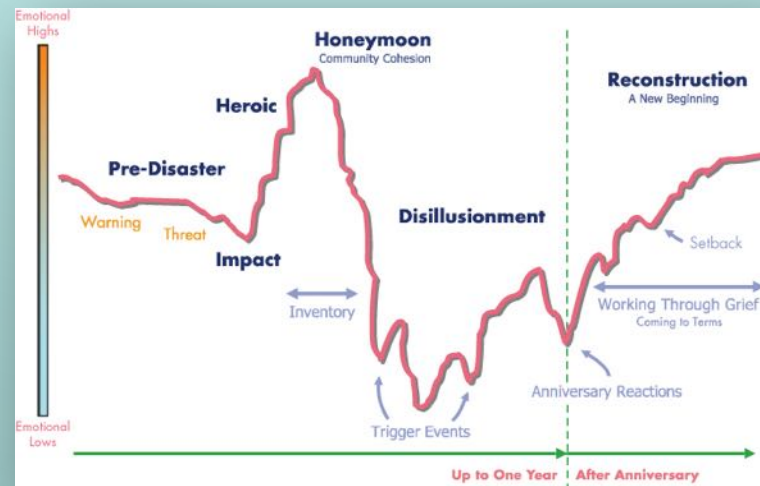
- Urban Transition
- Financialization
- Depopulation



Nepal



Jakarta kampung



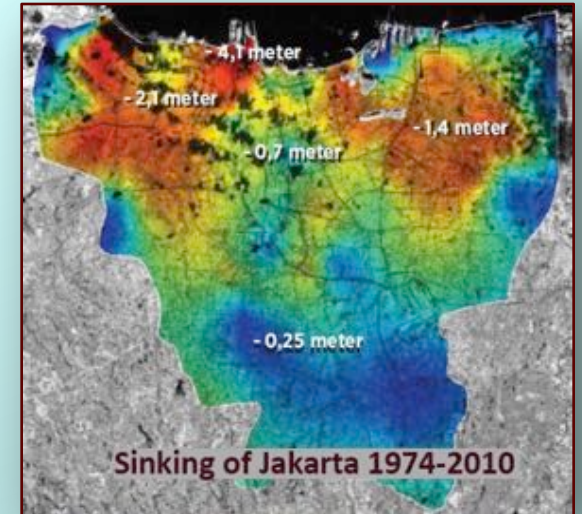


## Jakarta

Proposed Sea Wall and 17 Landfill Islands to prevent citywide flooding while promoting corporatization of the city and eliminating low-income neighborhoods



### Ground Subsidence 1974-2010

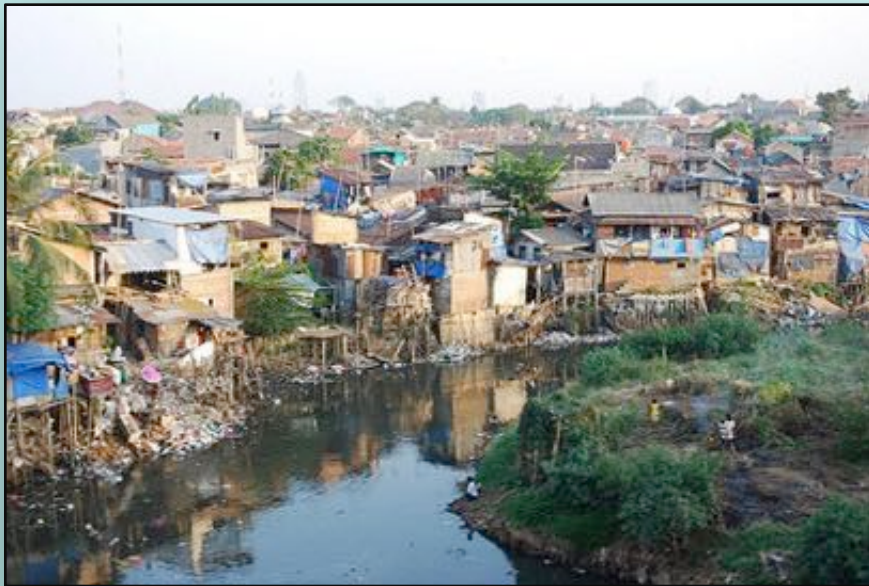


- ❖ 20-30 % of Jakarta population lives in slums with significant flood risk. Only 35 percent of Jakarta's population has direct access to potable water
- ❖ 32 percent of dwelling have a per capita living space of less than seven square meters.
- ❖ Most do not have legal title to the land; threats of demolition and removal are also ever present.

Mangroves and coastal habitat?



# Compound Effects: Poverty, Flooding & Evictions



## Protesters dig deep in eviction protest

LAST UPDATED AT 11:30 ON TUE 3 AUG 2010



A protester buried up to her shoulders during a protest against a government plan to evict people from their homes in Jakarta.

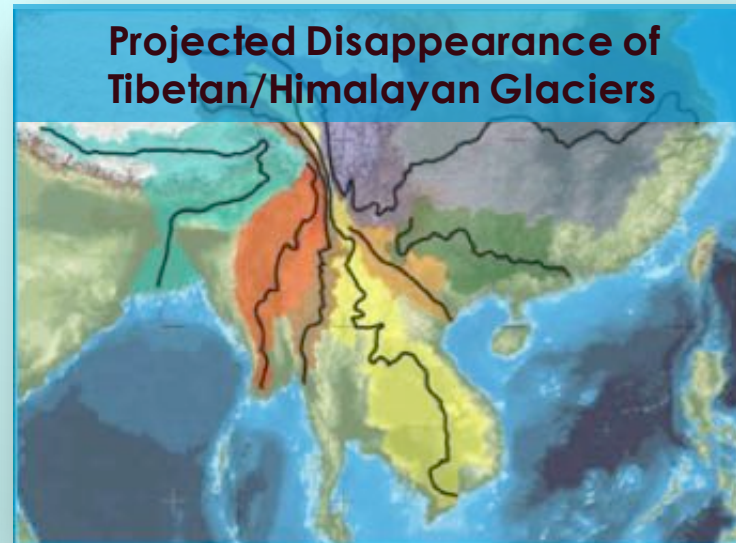
prev next



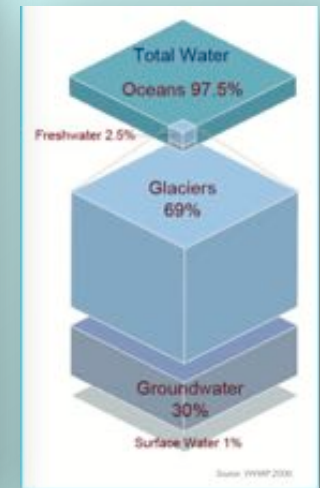
Source: "EM-DAT: The OFDA/CRED International Disaster Database, [www.emdat.be](http://www.emdat.be) - Université Catholique de Louvain - Brussels - Belgium. Created on: Oct-13-2011. Data version: v12.07



# The Expanding Reach of Cities – *Transborder Riparian Regions*

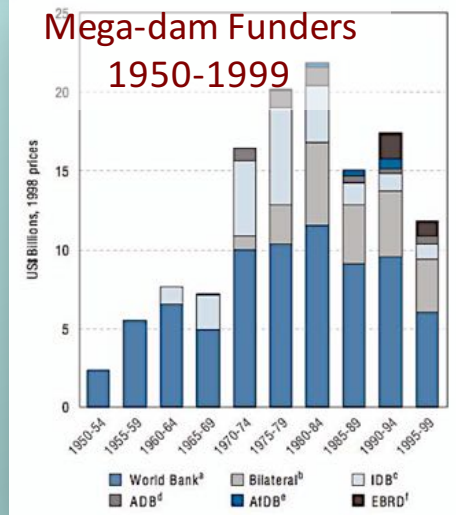


## Global Sources of Water



- ✧ Impacts of large dams on rivers, watersheds and aquatic ecosystems are more negative than positive
- ✧ Irreversible loss of species and ecosystems.
- ✧ Impoverishment and displacement affecting some 40-80 million people.
- ✧ Human rights and equitable distribution of benefits.

✧ (Source: World Commission on Dams)



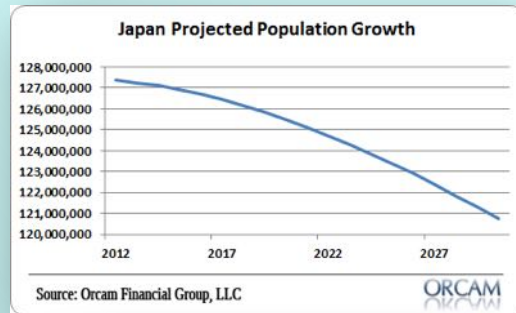
# Megatrends – Incubating & Compounding Disasters

- ❖ **Urbanization:** coastal shift, mega-urban regions, new and massive vulnerabilities, city and regional depopulation, intercity transmissions of impacts of disasters.
- ❖ **Demographic** shift toward shrinking populations in countryside, towns and cities
- ❖ **Non-state actors in conflict** – potential of conflict disasters to merge with environmental disasters without governance structures in place (refugees, cross-border “water wars”)
- ❖ **Global climate change:** extreme weather events, rising sea levels, disappearance of the Himalayan-Tibet glaciers.
- ❖ **Corporatization** of government and financialization of global capital: deep cuts in social services, precarious government financial conditions and “rainy day” funds.
- ❖ **Environmental disasters:** increasing in frequency and compounding costs
- ❖ **Digital and social media:** new forms of communication during and after disasters
- ❖ ....

How do we integrate mega-trends into disaster resilience concepts, anticipation and responses?

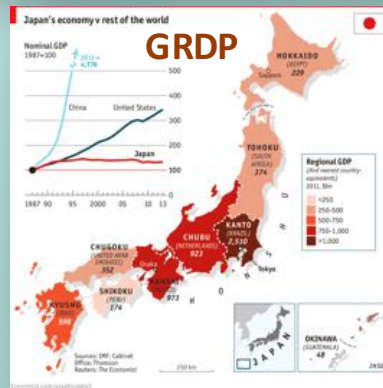
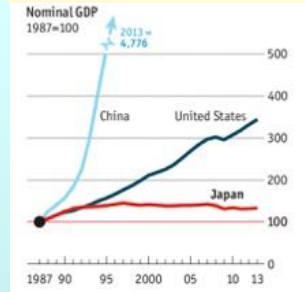


# Multi-Scalar Impacts – Japan 2011

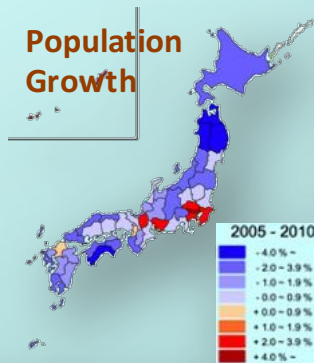


**MACRO –**  
Demographic shift  
and “lost” decades of  
the economy

## Japan's Economy Vs China and US



**MESO – National Spatial  
Trends and Disparities**



**MICRO – Depopulated  
towns & Villages,  
Uneven Devastations**

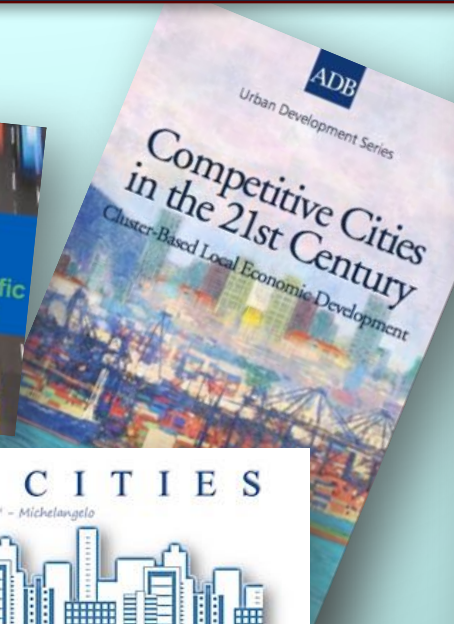


**Personal/Household**



# Resilience in the Neo-Developmental Globopolis?

*“Cities everywhere are makers of wealth, magnets for the industrious, motors of invention. The city is an engine of growth” (World Bank 1996).*



- ✓ The competitiveness and attractiveness of each city is measured by the presence of globally renowned institutions (Fortune 500 companies) headquartered in the city, which are indications of diversity and civil society strength.
- ✓ *For competitiveness, the social and cultural character of a city has been weighted at 5% (EIU 2012).*



# 21<sup>st</sup> Century – Planetary Urbanization without Cities?

- ❖ “splintering urbanism” – the city as private archipelagos
- ❖ “privatopia”
- ❖ “desocialization of space”
- ❖ “geographies of nowhere”, “variations of a theme park”, and “non-places.” “the urban spectacle as commodity,”
- ❖ Assemblages of de-nationalized Spaces
- ❖ Secessionary networked spaces.

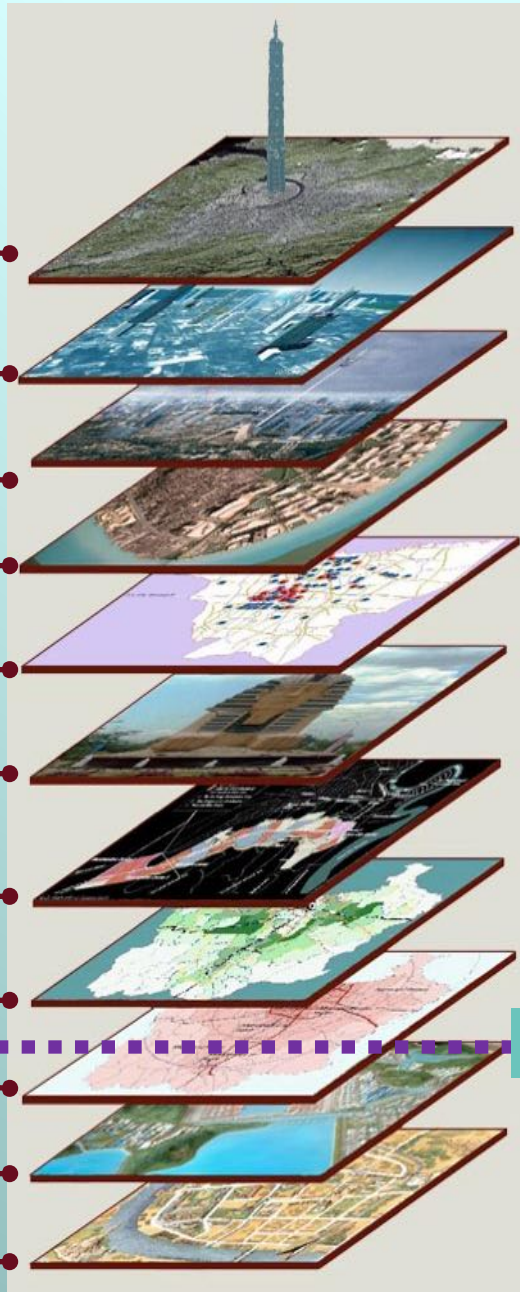
## Corporate-driven De-urbanization

- ❖ “We are witnessing large scale corporate buying of whole pieces of cities. What was small and/or public is becoming large and private. Corporate mega-projects inevitably kill much urban tissue of little streets and squares, street-level shops and modest offices. They raise the density of the city, but they actually de-urbanise it – density is not enough to have a city.
- ❖ If the current large-scale buying continues, we will lose this type of city making that has given our cities their cosmopolitanism. one that alters the historic meaning of the city. Such a transformation has deep and significant implications for equity, democracy and rights.

Saskia Sassen(2015) “Who owns our cities” *The Guardian*, 24 November 2015.

# Corporatizing City Regions in Asia

- Symbolic Towers
- Global Spectacles
- World Hubs
- Business Districts
- Franchise/Malls
- Simulacra
- New Towns
- Peri-urban Housing
- Highways
- EPZs
- (Pre)Colonial City



c. 1985



COEX Mall

The "New" Public Space?



Singapore Ion



Zaha Hadid, Seoul



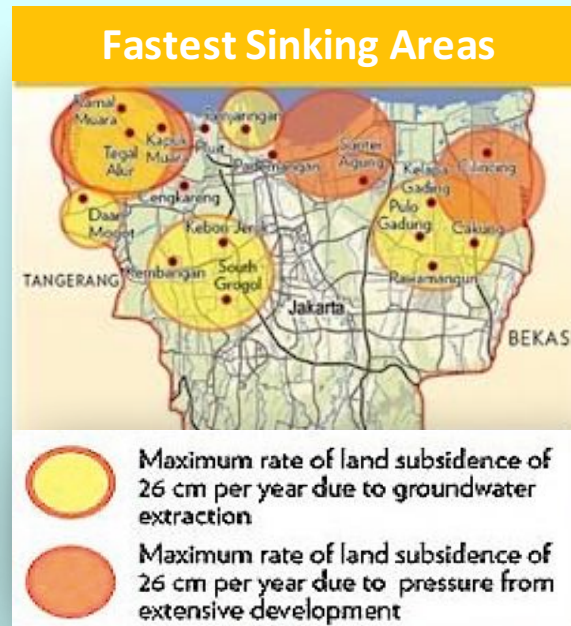
**Privatizing and Fortifying the City**



# New Era of Mega-Projects 1985-present

In just one year, 2009, mega-projects in Jakarta jumped by 30%

*“Urbanization has waterproofed the surface, causing increased direct runoff to the 13 rivers of Jakarta. In the last decade, large shopping centers and upper class residences have progressively been replacing traditional neighborhoods (kampung) and reducing vegetated areas.”*



- ❖ 1995-2001 Jabodetabek saw the construction of 25 new town development projects ranging from 500 to 6,000 hectares each.
- ❖ Commuting from the surrounding areas to DKI Jakarta increased 10 fold from 1985 to 2002. About 1 million people now daily commute into Jakarta's urban core.

# Greening China's Urbanization

## More than 100 “Eco-cities” planned



## Issues

- ❖ No successes to date
- ❖ “green washing” (e.g., golf courses)
- ❖ Environmental costs are huge: loss of wildlife sanctuaries, materials used, commuting to employment centres
- ❖ Absence of resident participation
- ❖ Fixed, inflexible land uses

Meixi Lake Ecocity, Hunan



- Too remote, too class-exclusive and expensive.
- They are also too prone to marketing gimmicks and economic or political subterfuge
- too limited to really have a decisive impact on the broader urban environment.

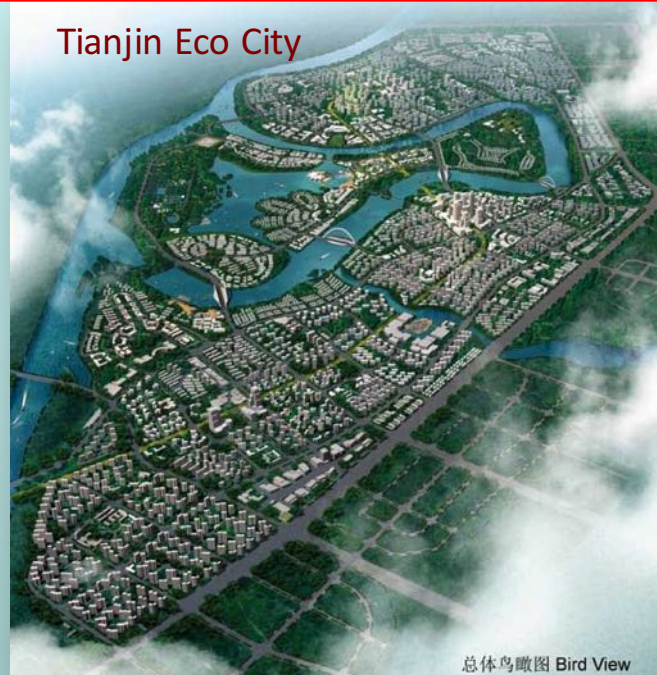




# Eco-Cities, Smart Cities



Sino-Singapore  
US\$ 24 bn. **Eco City**  
for 350,000  
residents by 2020.  
**one-half the size of  
Manhattan**



- ✓ Wetlands to attract birds and animals creating an eco-system,
- ✓ Wind turbines and solar panels for 20% of city's energy
- ✓ Organic waste recycling for power generation,
- ✓ Power and water consumption management within the buildings,
- ✓ Desalinated water from the sea,
- ✓ Smart buildings.

<http://www.myco2.com/ecocities/tianjin-eco-city/>

Criticism (World Bank): "Wide roads designed for cars dwarf the narrow bike lanes and sidewalks. While many of the city's tall slimmer buildings are clustered together to increase walkability, these giant blocks are about four times the size of a typical block in Manhattan and make pedestrian and bike journeys cumbersome."

# Lavasa “Smart City” – India

*100 km<sup>2</sup>, 5 new towns. US\$30 bn. 2 hours from Pune IT hub. For 300,000 residents.  
Expected to take 20 years to complete.*

“abundant access to nature, a cosmopolitan lifestyle, good schools, a functional and clean city, an uninterrupted power supply, high-speed internet, e-governance, drinkable tap water and a walkable city in which the need for cars is minimal”



- Everything except the post office and police station – is run by a corporation,
- “with sweeping rights over nearly all aspects of the life of the residents.”
- No mayor, just a city manager, appointed by the board of Lavasa Corporation Limited.
- All services and schools are privately owned and run. Many are global tie-ups.
- Receives government subsidies for spurring tourism.
- The least expensive apartments now sell for between \$17,000 and \$36,000 – out of reach for most middle-class Indians.



# Disparities in Well-Being

## • Impermanent Employment - Precariatization

- ❖ Part-timer and sub-part-time labour = 1/3 Japan's and Korea's wage workers (2009).
- ❖ Shares are increasing, and average wages are falling.

## • 470 million people living in slums in 2010, with numbers increasing

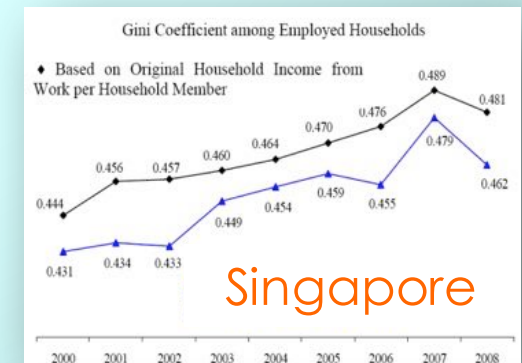
Region	1990	1995	2000	2005	2007	2010
East Asia	160	177	192	195	194	190
South Asia	180	190	194	192	192	191
Southeast Asia	69	76	82	84	84	89
Total Asia	409	443	468	471	470	470

## • Intra-Asia Foreign Workers and Multi-cultural Societies

Table 1. Foreign Workers and Populations in East Asia, 2007-2008			
Destination	Legal foreign Workers <sup>1</sup>	Illegal foreign Workers	Registered Foreigners
Japan	477,000	130,000	2.2 million
Korea	480,000	230,000	1 million
Hong Kong <sup>2</sup>	225,000	n.a.	n.a.
Taiwan	374,000	300,000	570,000
Singapore	700,000	n.a.	1.4 million

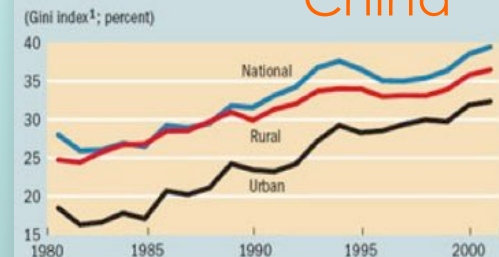
Source: *Migration News*. Various issues 2008-2009.  
<sup>1</sup>For Japan legal workers include "trainees".  
<sup>2</sup>foreign domestic workers and caregivers only.

## • Increasing Inequality



### Rising inequality

The gap between rich and poor has risen in China, although more in urban areas than rural areas.



Source: Ravallion and Chen, 2004.

<sup>1</sup>The Gini index is a measure of income inequality within a population.



# Political Freedom & Democracy

2015 World Press Freedom Index

Rank ▲	Country
51	Taiwan
60	Republic of Korea
61	Japan
70	Hong Kong
88	Kyrgyzstan
104	Bhutan
105	Nepal
116	Tajikistan
134	Thailand
135	Chad
136	India
138	Indonesia
139	Cambodia
139	Cambodia
141	Philippines
144	Myanmar
147	Malaysia
153	Singapore
159	Pakistan
160	Kazakhstan
165	Sri Lanka
166	Uzbekistan
175	Vietnam
176	China
179	Democratic People's Republic of Korea

Source: Reporters without Borders

## *Democracy in Retreat*

- “Democracy is on the retreat and authoritarianism is on the rise in the Global North and South...”
- “Those ... defending local communities from land grabs and environmental degradation have been subjected to various forms of persecution.”
- “The link between unethical business practices and closing civic space is becoming clearer as global inequality and capture of power and resources by a handful of political and economic elite rises.”

United Nations (2015)



# The Rise of Civil Society for Progressive Cities in Asia

Environmental Protestors, Qidong, China



Tokyo Anti-APEC Protest 2010



Foreign Workers, Taipei



Bersih 4.0 Goes Global

Hong Kong "Umbrella" Occupy Movement



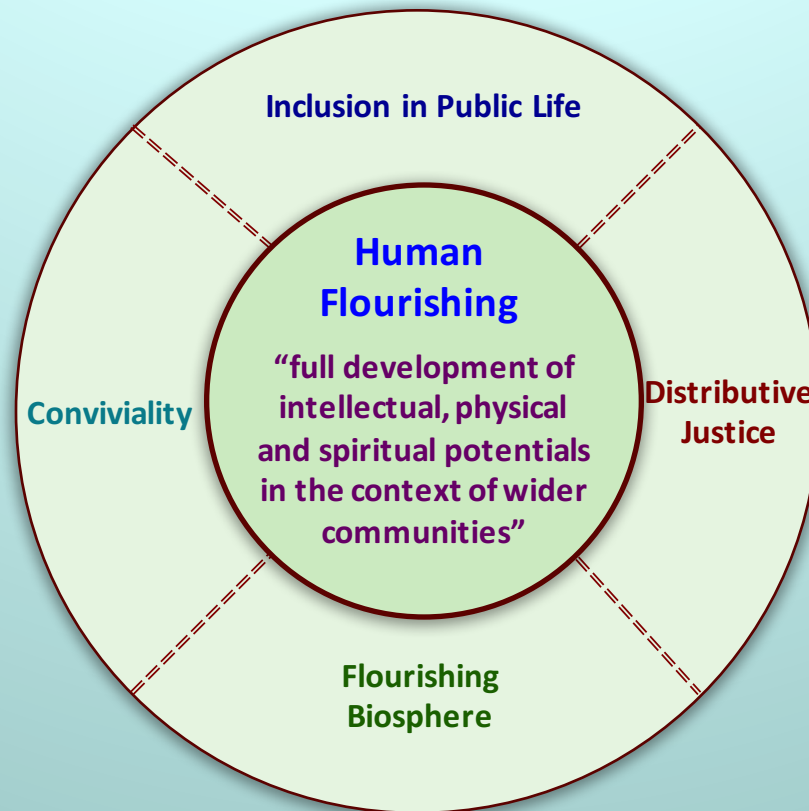
Miyashita Park, Tokyo



# Progressive City Regions for Resilience through Human Flourishing

“Grassroots Cosmopolis” – “where inhabitants can assert their differences and negotiate them in a productive and affirmative way”

“In human happiness, creative activity and a sense of community count for at least as much and maybe more than material standard of living.”



**Socially Just,  
Right to the City,  
Empowerment**

**Beyond sustainable development as “doing no harm”  
and toward the restoration and regeneration of nature  
... of consciously returning more than is taken.**



# Human Flourishing

- ❖ Aristotle's 4<sup>th</sup> century BCE: **eudaimonia** – “the innate potential of each individual to live a life of enduring happiness, penetrating wisdom, optimal well being, and authentic love and compassion” (Ramussen 1999:1).
- ❖ In Confucianism it appears as a form of “**learning to be human**” which is made possible as a “**communal act**”, with the self “never an isolated individual but a center of relationships.” (neo-Confucianist scholar Tu Wei Ming)
- ❖ John Friedmann (2002), human flourishing is the central idea of an alternative development to **counter the hegemony of the prevailing neoliberal world system** dedicated to the personal (material) enrichment of a few.
- ❖ **Human flourishing is a universal claim** that depends on reciprocal and redistributive cooperation. It rests on enhancing individual capacities and the differences that result from them. The idea arises from many cultural, religious and philosophical origins.

# Inclusion with Distributive Justice

## A Public City – A Polis of Civic Life

- ❖ Participatory governance, freedom of speech, assembly
- ❖ The idea of the public interest and common good
- ❖ Expands the commons
- ❖ Public and civic spaces for public life and civicism

**The Right to the City** is the right to directly participate in changing the city.

### Empowerment

- ❖ Defensible life space
  - ❖ Surplus time
  - ❖ Social organization
  - ❖ Social networks
  - ❖ Other dimensions
- (Friedmann 1992)

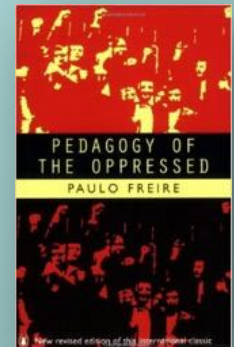
### Pedagogy of the Oppressed

The Oppressed to be co-creators of knowledge through cooperation, unity, organization and cultural synthesis  
(Paulo Freire 1970)

- ✓ Living wage
- ✓ Social housing
- ✓ Collective consumption
- ✓ ....

### 5 Faces of Oppression

- ❖ exploitation
- ❖ marginalization
- ❖ powerlessness
- ❖ cultural Imperialism
- ❖ violence (I. M. Young 1990)





# Lifeworlds & Conviviality

“In human happiness, creative activity and a sense of community count for at least as much and maybe more than material standard of living.” – *Lisa Peattie*

## Convivial Spaces

- Open, public spaces
- Human scale
- Mixed use
- Local cultural practices
- Place-making/vernacular
- Inclusive
- Allows for spontaneity



# Planetary Flourishing in the Anthropocene



- ❖ Failure of “Sustainable Development” (1987 UN Brundtland Report) instrumental uses of nature as environment-economy trade-off.
- ❖ “The rapid dwindling of biodiversity during the last century represents not only an irreversible impoverishment of our human experience and the loss of essential contributions to human well-being now and or generations to come.”
- ❖ A human-centered city is also a nature-centered city drawing from human values to nurture the Earth’s vitality.



# Bangkok's Baan Mankong Collective Housing Program

❖ **Total 2011:** 277 cities, 73 provinces

As the 2011 flood came to Bangkok, the community organized to prepare sandbags, open a disaster center with a kitchen to provide food, and basic medical equipment.

❖ Upgrading projects in 1,010 communities completed or underway in 226 towns and cities, in 69 of the country's 76 provinces, involving 54,000 households



Initiated by the Community Organizations Development Institute (a public organization under the Ministry of Social Development and Human Security). January 2003

# Research on Progressive Cities in Asia



- ❖ What is a progressive city?
- ❖ In what ways is a specific city progressive?
- ❖ What are the drivers that give rise to its progressivity?
- ❖ how was progressive governance achieved in each case?
- ❖ in what ways are they being effective (or not)?
- ❖ what are their prospects for the future?



# The Seoul Experience, 2002-2011

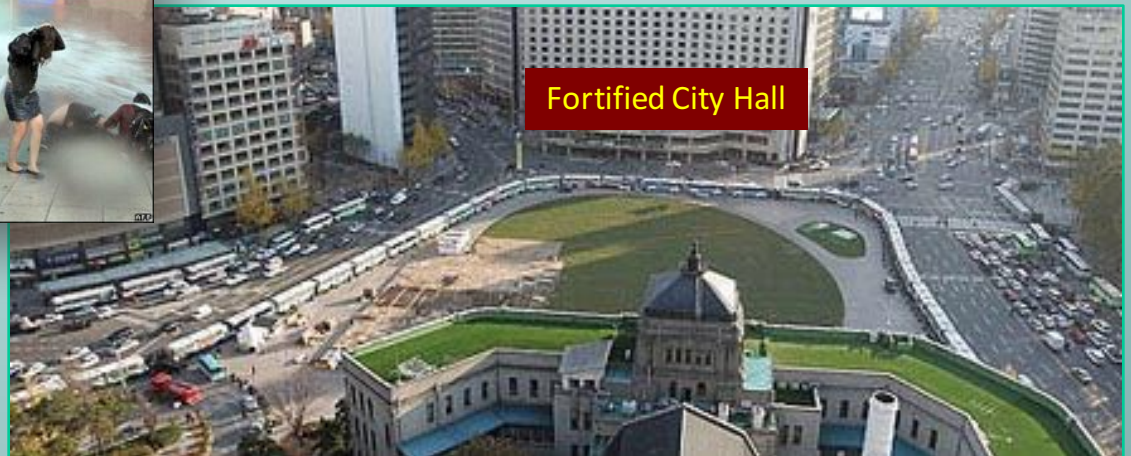


\$31 billion “Dreamhub” 152 story building.

“Hangang Renaissance” plan covering a twenty year period and composed of twenty-two mega-projects. SCG to invest 672.6 billion up to 2010.

◆ The entire Han River area to be an “iconic landmark, which will allow the city to have competitiveness” in the world (quoted in Kim 2008b).

◆ “Second Miracle on the Han”



# Seoul as a Progressive City (from 2011)

## Inclusion – “*Making Seoul a city for the citizens and by the citizens.*”

- ❖ Citizen is mayor!: citizen mayor, opening mayor office, on-site mayor office
- ❖ Citizens' committees on reform agenda: fair trade, energy saving, city planning, human rights, housing redevelopment, traditional markets, urban design, etc.
- ❖ Policy-listening from citizens
- ❖ Civilian officers recruited from citizens
- ❖ Instituted participatory planning and budgeting



## Distributive Justice: “*Welfare is not charity, but the endowed right of citizens*”

- ❖ Sharing services for a sharing city
- ❖ Initiated social economy
- ❖ Social fund for social housing and social business venture
- ❖ Welfare-based community regeneration
- ❖ Free school meal, housing allowance, job creation for the elderly, cutting CUS' tuition by half

## Conviviality – “*I want to make Seoul a city full of fun.*”

- ❖ CMapo power plant to a culture plant, Seoul's highline
- ❖ Designated 1000 future heritages
- ❖ Human scale urban design with neighborhoods, support for cultural artisan business



## Environment – “*Make Seoul a City of Sunlight*”

- ❖ Sustainable development as core principle
- ❖ Renovation of Cheonggyecheon for environmental sustainability
- ❖ Eco-Mileage System
- ❖ **One Less Nuclear Plant (alternative energy, recycling, energy use reduction)**
- ❖ Mayor Park elected Chairman of the World Mayors Council on Climate Change (WMCCC)





# Innovations for Progressive Cities

- ✧ Participatory budgeting
- ✧ Social economy & community enterprises
- ✧ Sharing city
- ✧ Community currency
- ✧ Collective tenure
- ✧ (Re-) making the commons
- ✧ Transforming abandoned spaces into community centers
- ✧ (Re-)establishing open markets, public spaces
- ✧ Participatory art and cultural festivals
- ✧ Direct citizen participation in government decisionmaking
- ✧ Human scale architecture
- ✧ Progressive cities linking with progressive cities and (inter-) national NGOs to scale up environmental programs.

# Scaling up for Transformative Resilience

## **(1) Directly addressing disaster-related problems (including compound effects)**

- ✓ Rebuilding
- ✓ Counseling
- ✓ Social networks
- ✓ Livelihoods

## **(2) Changing government and laws to gain the right to participate in governance and to dwell in the city**

- ✓ Democratic reforms
- ✓ Anti-eviction laws
- ✓ Participation on disaster mitigation and recovery processes

## **(3) Link with other civil society organization to create a voice in the public sphere.**

(Author)



# Concluding Remarks

- (1) Actions for resilience need to be engaged in transformative processes toward progressive city regions – not a return to the status quo ante.
- (2) The major challenge resilient urbanism is to reclaim city regions as public spheres of decisionmaking in which individuals flourish through associational and public life.
- (3) In an age of planetary urbanization in which rural and urban activities take place in global(izing) matrices of city regions, apatial rural-urban dichotomies are not useful analytically or for policies.
  - ✓ Rural-urban relations are interdependencies, not oppositions
  - ✓ Rural regions are invariably town or city centered
  - ✓ Post-agrarian rural regions can no longer be defined as agriculture plus village.
- (4) The future of the world depends on good governance of city regions rather than nation-state levels of policy making.
- (5) Scaling up processes of governance from the grassroots holds the greatest promise for gaining planetary resilience.