

Making our Cities and Communities More Inclusive, Safe, Resilient and Sustainable

2017 ASIA PACIFIC CITIES SUMMIT
& MAYORS FORUM

Daejeon, 12 September 2017

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United Nations
Office for Sustainable Development

SDGs' holistic approach: (universal and integrated Agenda) 5 elements underpinning the Agenda 2030

The Goals are meant to stimulate action over the next ~~15~~ 13 years
in 5 areas of critical importance:



- People
- Planet
- Prosperity
- Peace (and Justice)
- Partnership

Sustainable Development Goals (SDGs) (and their 169 Targets)

1 NO POVERTY



2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



4 QUALITY EDUCATION



5 GENDER EQUALITY



6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



10 REDUCED INEQUALITIES



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



16 PEACE, JUSTICE AND STRONG INSTITUTIONS

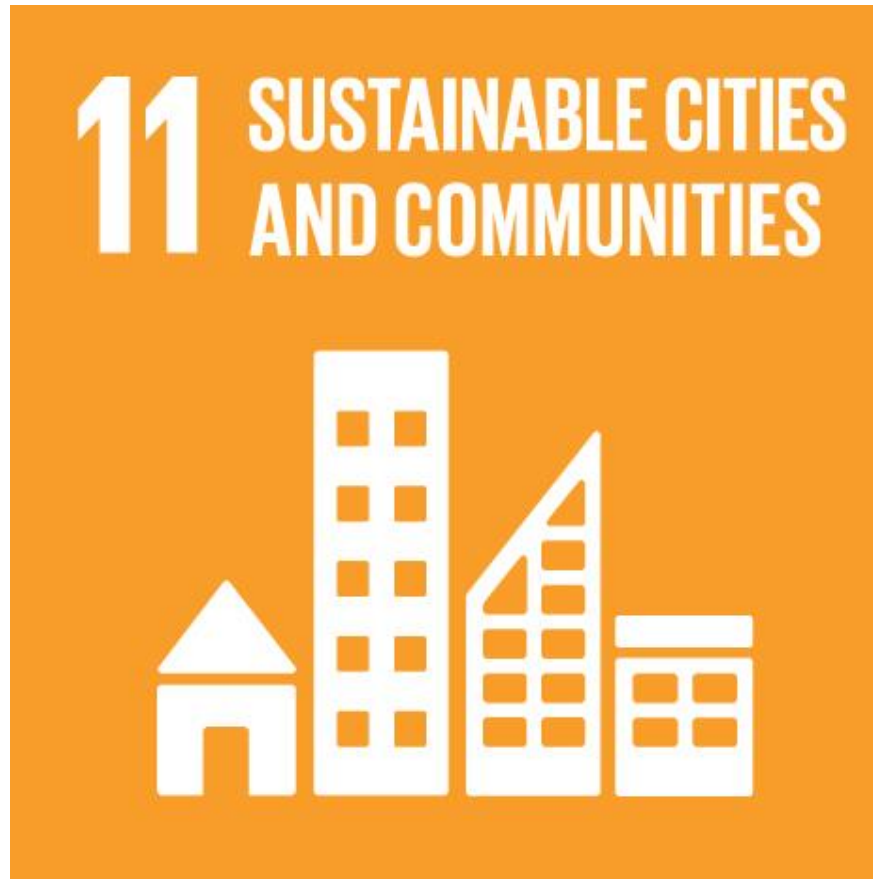


17 PARTNERSHIPS FOR THE GOALS



SDG 11

**Sustainable cities and human settlements:
Make cities and human settlements
inclusive, safe, resilient and sustainable**



Urbanization

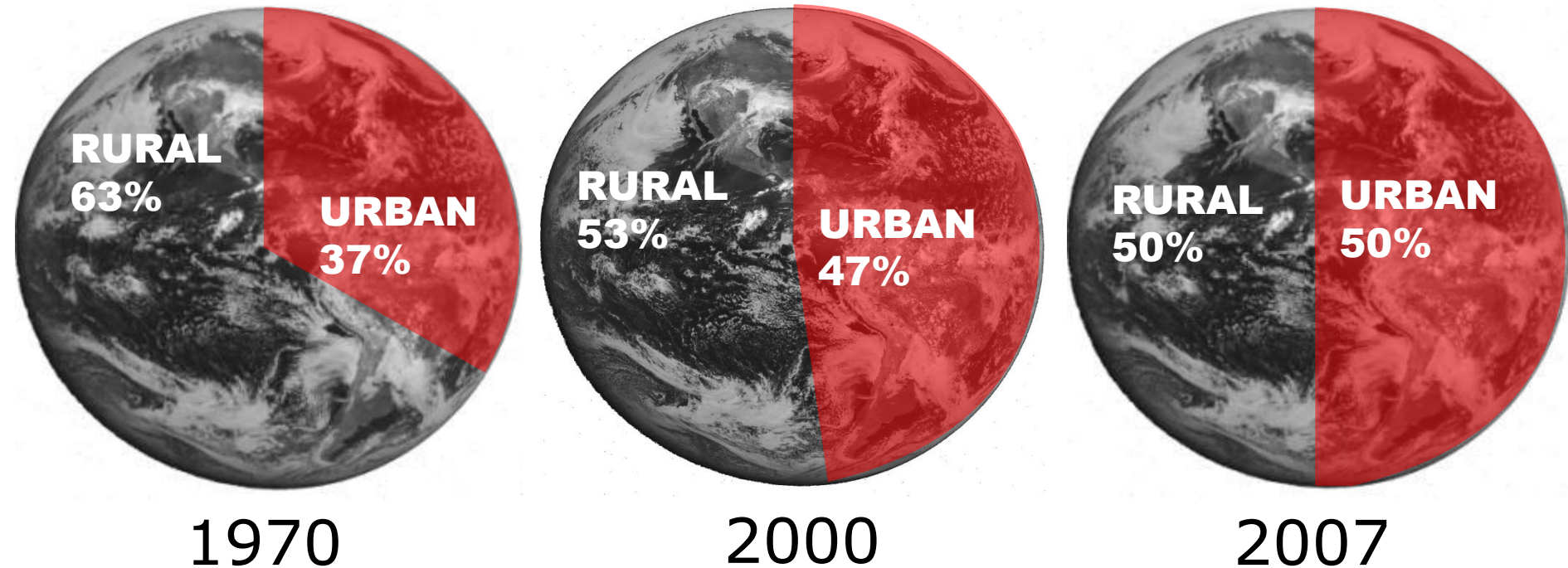
Today, the **world's cities** occupy only **2%** of the earth's **land**, but account for **60-80%** of **global energy consumption** and generate as much as **75%** of the **energy-related greenhouse gas (GHG) emissions**.

If we look at **buildings** alone, those account for more than **40%** of the **global energy use**, and for about **30%** of **energy-related greenhouse gas (GHG) emissions**.



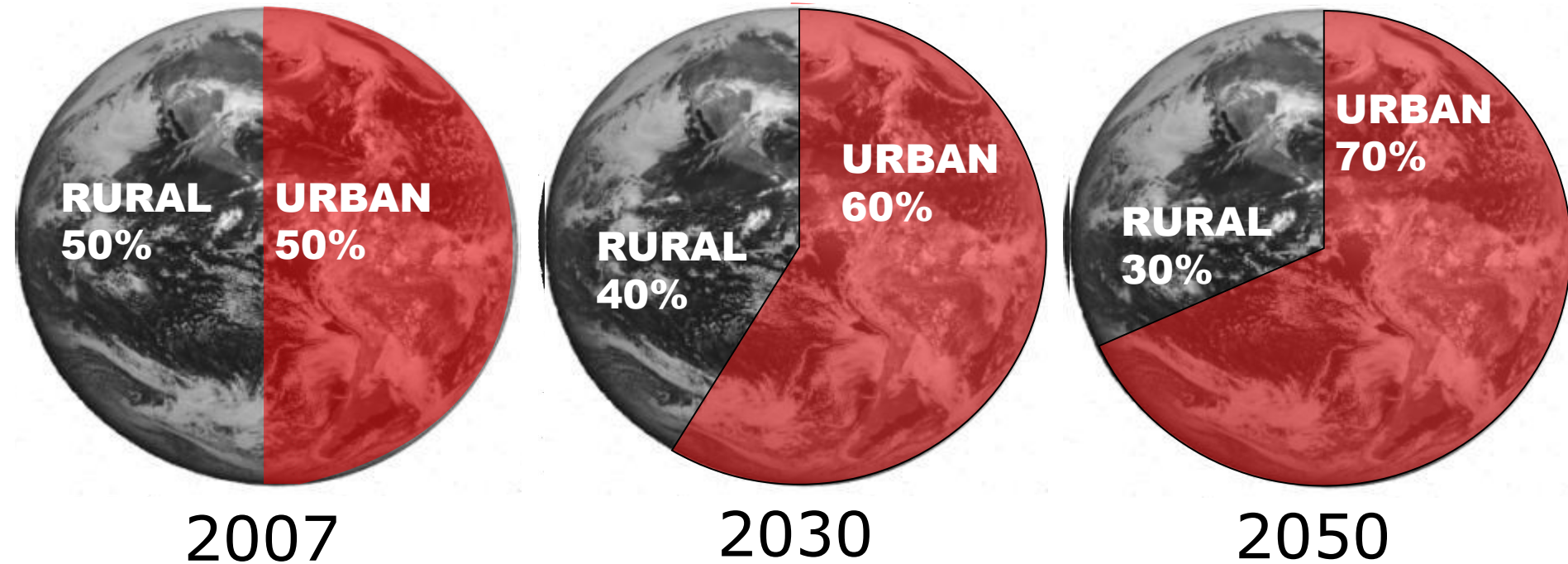
Urbanization Trend

GLOBAL POPULATION: RURAL / URBAN



Urbanization Trend

GLOBAL POPULATION: RURAL / URBAN



- **200,000 people migrates to cities every day**
- **Every year, 70 million people move to cities**

Urbanization, poverty and vulnerability

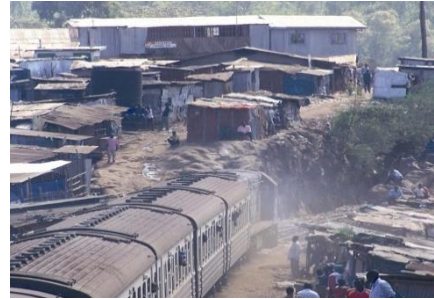
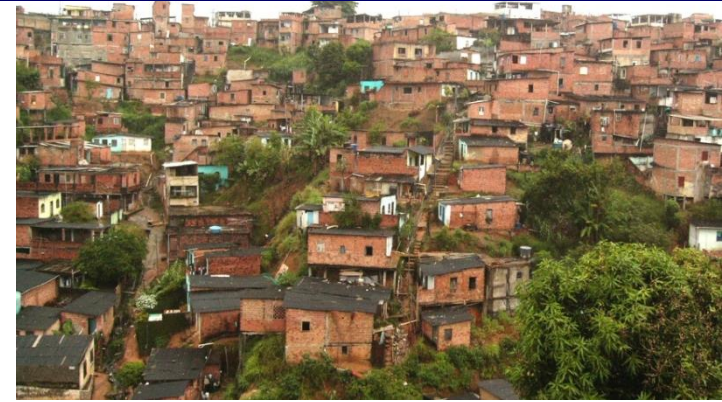
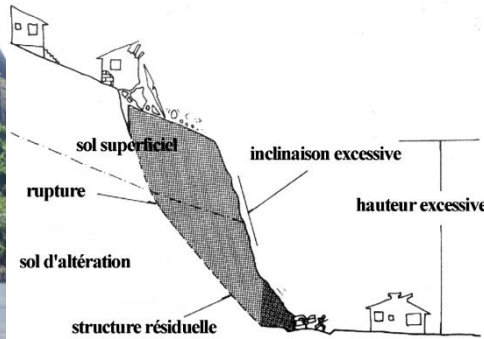


Urbanization, poverty and vulnerability

- **95 % of the urban growth** will occur in **developing countries** (particularly in **Asia** and **Africa**)
- **80 % of this** (95 %) **rapid urban growth** will be **uncontrolled** or **informal**, taking the shape of **urban slums**, (often in disaster-prone areas)
- The **main factors** of **urban growth** are:
 - **Natural growth of cities**,
 - **Conversion of rural areas into urban areas**; and
 - **Rural migration** (Urban development and rural development are linked)
- The **main factors** contributing to **slum formation** are:
 - **Lack of access to adequate, affordable urban land**
 - **Lack of access to adequate, affordable and safe housing options**
 - **Lack of access to urban infrastructure and urban services**
- The **main factors** contributing to **disasters** are:
 - **Uncontrolled urban expansion**
 - **Inappropriate land use planning and management**

Poverty increases exposure and vulnerability to environmental risks and natural hazards and disasters

The urban poor often have no other choice than establishing themselves on vulnerable land.



Top 10 natural disasters (Economic losses, 2011)

Event	Date	Country	Damage (US billion)
Earthquake/ Tsunami	March	Japan	210
Flood	August	Thailand	(40) 46.5
Earthquake	February	New Zealand	16
Storms/ Tornadoes	April	USA	15
Drought	Spring-Fall	USA	10
Storms/ Tornadoes	May	USA	9
Hurricane Irene	August- September	USA	7
Flood	June	China	6
Flood	April-July	Colombia	5
Flood	September	China	4

Source: CRED, Catholic University of Louvain, Brussels (Belgium), Debarati Guha-Sapir, Geneva, 18 January 2012

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**5 out of Top 10 disasters
occurred in the Asia-Pacific
in the Asia-Pacific Region**

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**Top 3 disasters occurred
in the Asia-Pacific Region**

Top 10 natural disasters (Number of deaths, 2011)

Event	Date	Country	Deaths
Earthquake/ Tsunami	March	Japan	19,846
Tropical Storm Sendong	December	Philippines	1,430
Flood	January	Brazil	900
Flood	August-December	Thailand	813
Earthquake	October	Turkey	604
Flood	August - November	Pakistan	509
Storms/ Tornadoes	April	USA	350
Flood	August - November	Cambodia	247
Flood	June	China	239
Flood	August - October	India	204

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8 of Top-10 disasters (deaths) occurred in Asia			
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Source: CRED, Catholic University of Louvain, Brussels (Belgium), Debarati Guha-Sapir, Geneva, 18 January 2012

2011 Thailand (Bangkok) flood: Summary of damage and losses by sector in Thai baht (millions)

Sub Sector	Disaster Effects			Ownership	
	Damage	Losses	Total	Public	Private
Infrastructure					
Water Resources Management	8,715	-	8,715	8,715	-
Transport	23,538	6,938	30,476	30,326	150
Telecommunication	1,290	2,558	3,848	1,597	2,251
Electricity	3,186	5,716	8,901	5,385	3,517
Water Supply and Sanitation	3,497	1,984	5,481	5,481	-
Productive					
Agriculture, Livestock and Fishery	5,666	34,715	40,381	-	40,381
Manufacturing	513,881	493,258	1,007,139	-	1,007,139
Tourism	5,134	89,673	94,808	403	94,405
Finance & Banking	-	115,276	115,276	74,076	41,200
Social					
Health	1,684	2,133	3,817	1,627	2,190
Education	13,051	1,798	14,849	10,614	4,235
Housing	45,908	37,889	83,797	-	83,797
Cultural Heritage	4,429	3,076	7,505	3,041	4,463
Cross Cutting					
Enironment	375	176	551	212	339
TOTAL	630,354	795,191	1,425,544	141,477	1,284,066
US Equivalent (billion)	21	26.5	47.5	4.7	42.8

Source: GFDRR (2012) *Thai Flood 2011: Rapid Assessment for Resilient Recovery and Reconstruction Planning*

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Water Supply and Sanitation	5,481			5,481	-
Productive					
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Finance & Banking	-	115,276	115,276	74,076	41,200
Social					
Health	2,190				
Education	4,235				
Housing (1,9 million houses affected with about 19,000 houses destroyed)	45,908	37,889	83,797	-	83,797
Cultural Heritage	4,463				
Cross Cutting					
Environment	339				
TOTAL	630,354	795,191	1,425,544	141,477	1,284,066
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4 most affected groups:

- 1) Manufacturing industry (whose private estates' individual flooding protection (dykes) systems have failed): biggest damage and losses;
- 2) Tourism industry: Limited damage
- 3) Finance & Banking: No damage
- 4) Households (no flooding protection, no insurance): second biggest damage

Southeastern Asia

(selected fast-growing economies: countries/urban agglomerations)

Region/ Country/ Province /city	POPULATION					Social/Economic/Environment (Hazards) (Selected indicators)									
	Total (1,000s)	Urban (1,000s)	Urban (% of total)	Populat. of urban agglom. of 750,000 inhab. & more (1,000s)	Aver. annual growth rate of urban pop. (%) (cities: 2006- 2020) countries	Populat. of slums (% of urban pop.)	GDP per capita at PPP (2005 constant intern. dollars)	Coast al status (coasta l or inland)	Number of multi- Hazards in 8 th -10 th decile	Type of Hazard (years of data collection)					
										No Hazard		1 st - 4 th deciles (low-risk)			
										5 th - 7 th deciles (medium-risk)		8 th - 10 th deciles (high-risk)			
										Cyclone	Drought	Earth- quake	Flood	Landslide	Volcano
										(1980- 2000)	(1980- 2000)	(1976- 2002)	(1985- 2003)	(1979- 2002)	(1979- 2002)
World	2010 6 895	2010 3 479	2010 50	2011	2005-10 1,9	2005-07 35	2009 9 547								
South-East Asia	593	248	42		2,2	33	4 737								
Indonesia	239 871	106 217	44		1,7	26	3 813								
Bandung				2 429	2,90			*Inland	2 hazards	No hazard	5th-7th d.	5th-7th d.	8-10th d.	8-10th d.	5th-7th d.
Jakarta				9 769	3,03			Coastal	1 hazard	No hazard	5th-7th d.	1st-4th d.	8-10th d.	No hazard	No hazard
Malaysia	28 401	20 497	72		3,0	..	12 724								
Klang				1 190				Coastal	1 hazard	No hazard	No hazard	No hazard	8-10th d.	No hazard	No hazard
Kuala Lumpur				1 556				*Inland	1 hazard	No hazard	No hazard	No hazard	8-10th d.	No hazard	No hazard
Philippines	93 261	45 607	49		2,1	44	3 216								
Davao				1 565				Coastal	2 hazards	8-10th d.	1st-4th d.	8-10th d.	8-10th d.	No hazard	No hazard
Manila				11 862				Coastal	2 hazards	8-10th d.	1st-4th d.	8-10th d.	8-10th d.	No hazard	No hazard
Thailand	69 122	23 476	34		1,7	26	7 260								
Krung Thep (Bangkok)				8 426				Coastal	No hazard	No hazard	1st-4th d.	No hazard	5th-7th d.	No hazard	No hazard
Samut Prakan				1 212				Coastal	No hazard	No hazard	1st-4th d.	No hazard	5th-7th d.	No hazard	No hazard
Viet Nam	87 848	26 687	30		3,3	41	2 682								
Hà Noi				2 955				Coastal	1 hazard	5th-7th decile	No hazard	No hazard	8-10th d.	No hazard	No hazard
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Source: [Urban Population, Development and the Environment 2011](#), DESA, Population Division, 2011

Southeastern Asia

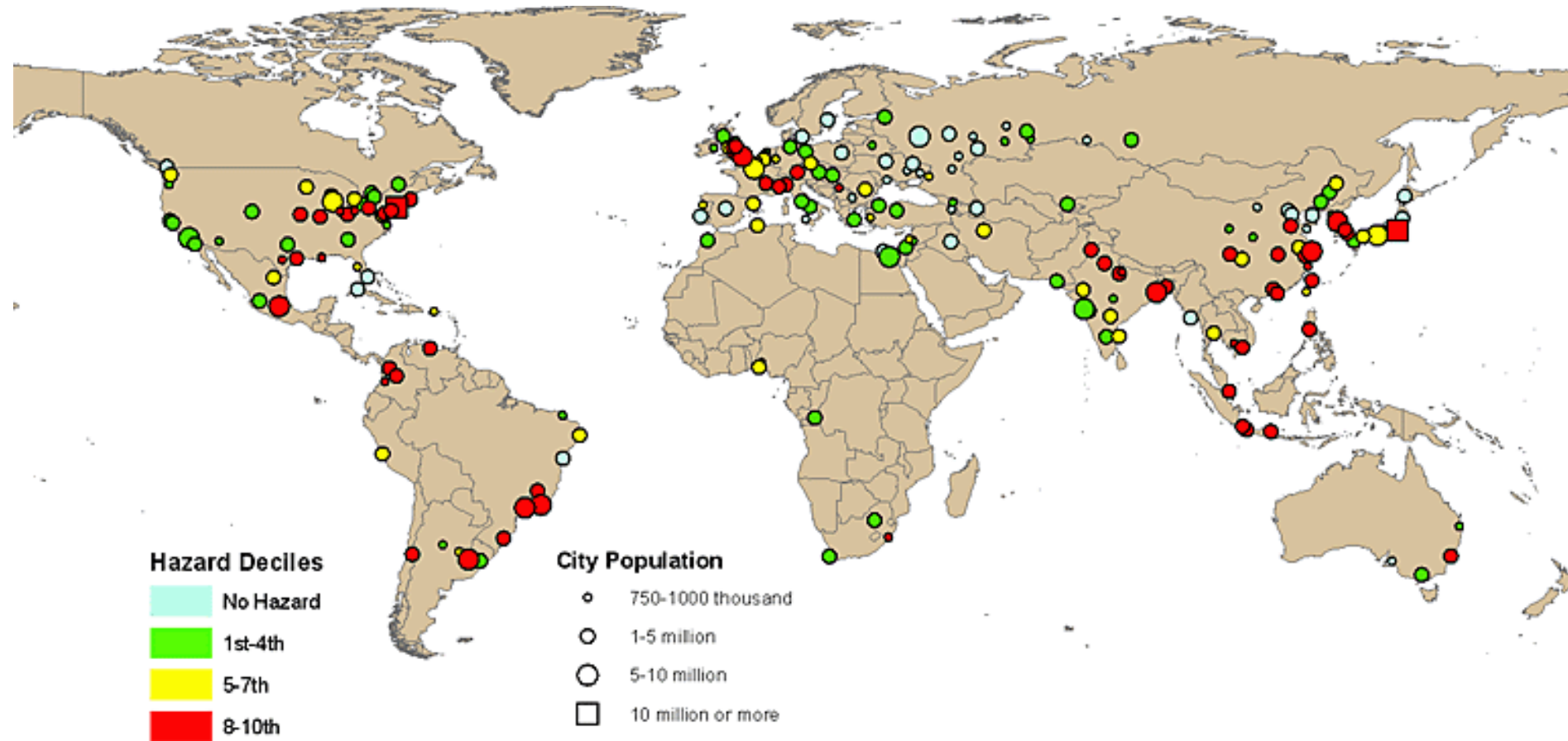
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Concentration of flood in the regions

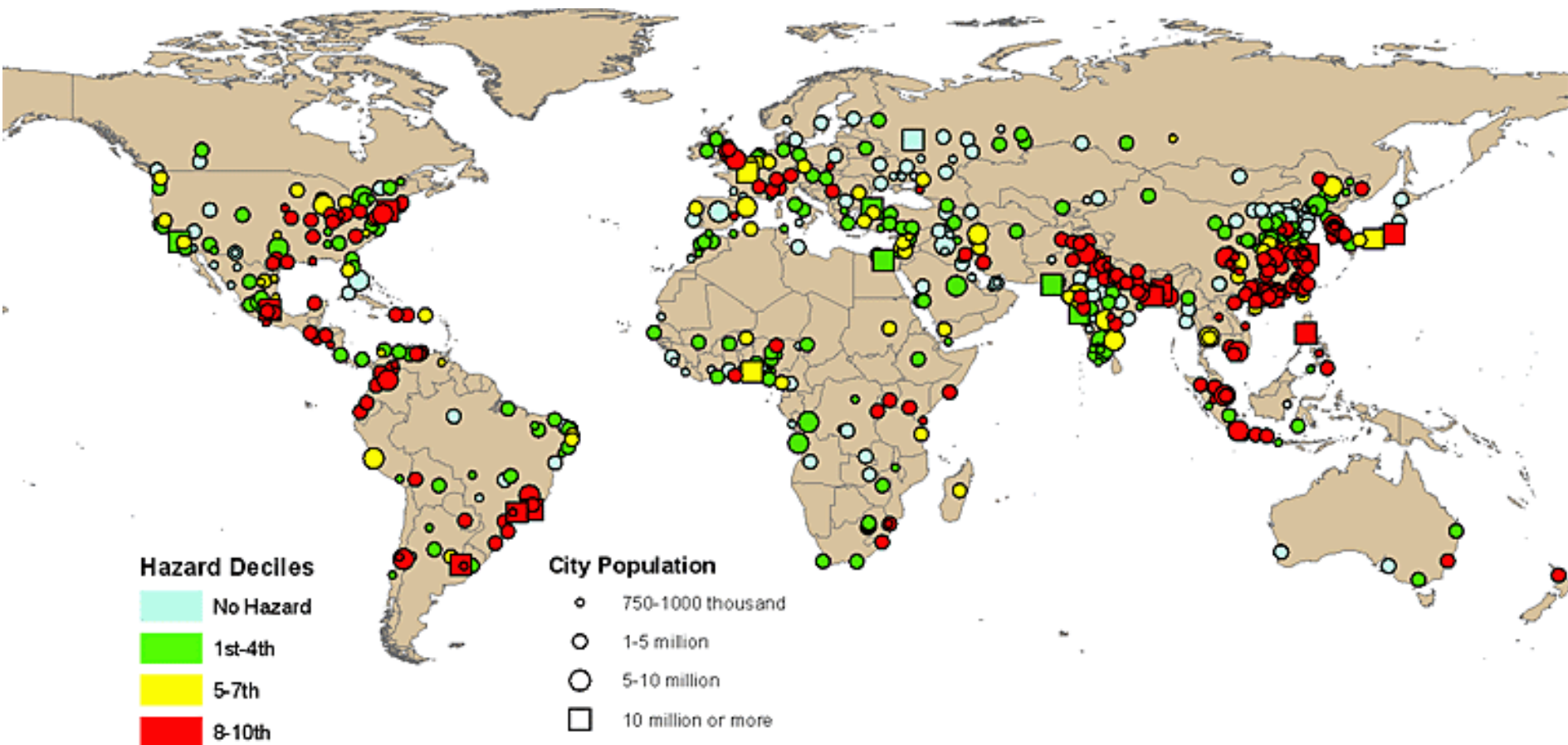
Urban agglomerations by size class and potential risk of flooding, 1970



Source: United Nations, Department of Economic and Social Affairs, Population Division: *World Urbanization Prospects, the 2011 Revision*. New York 2012
http://esa.un.org/unpd/wup/Maps/maps_flooding_1970.htm

Concentration of flood in the regions Urbanization (seem to) increase risks of flooding

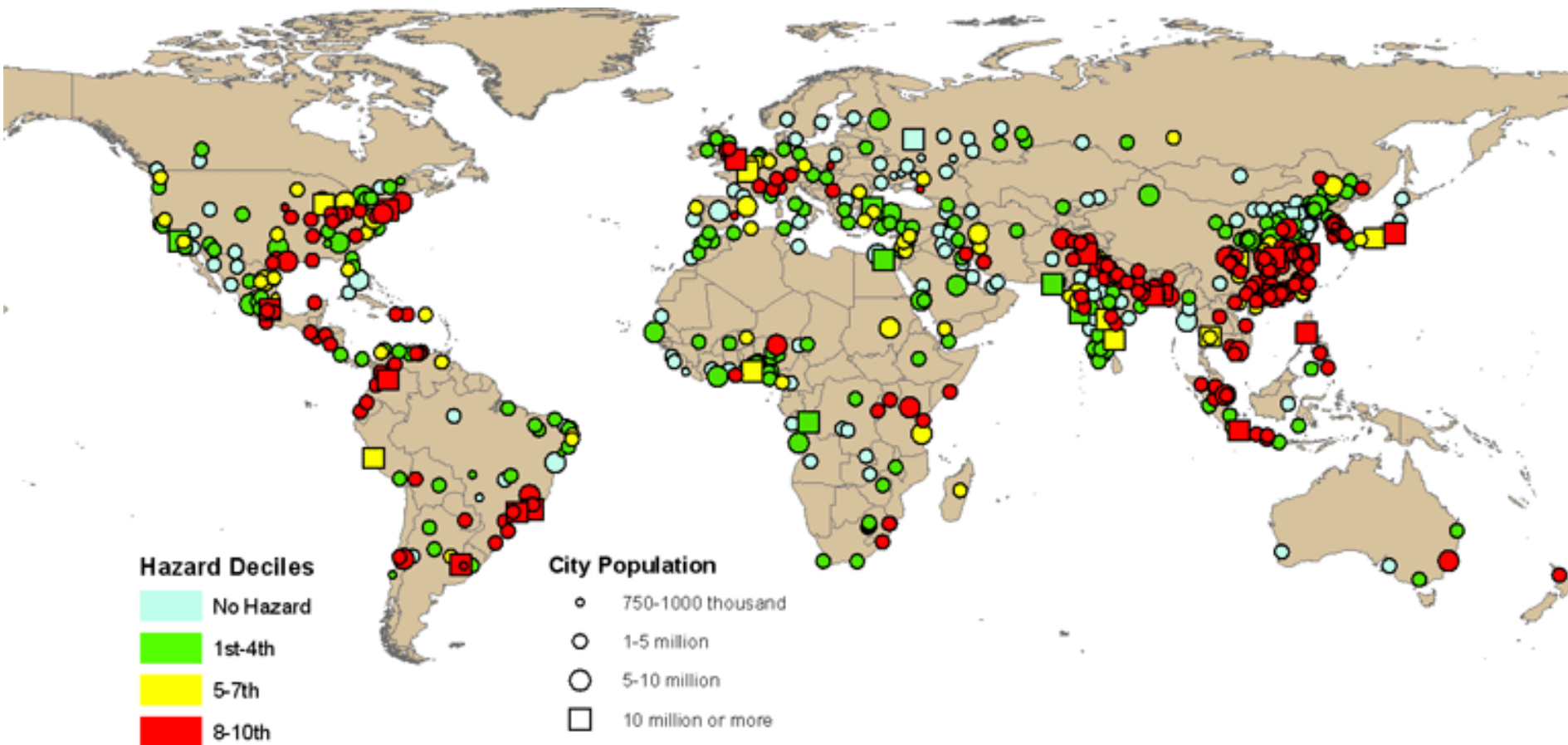
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Concentration of flood in the regions Urbanization increases even more risks of flooding

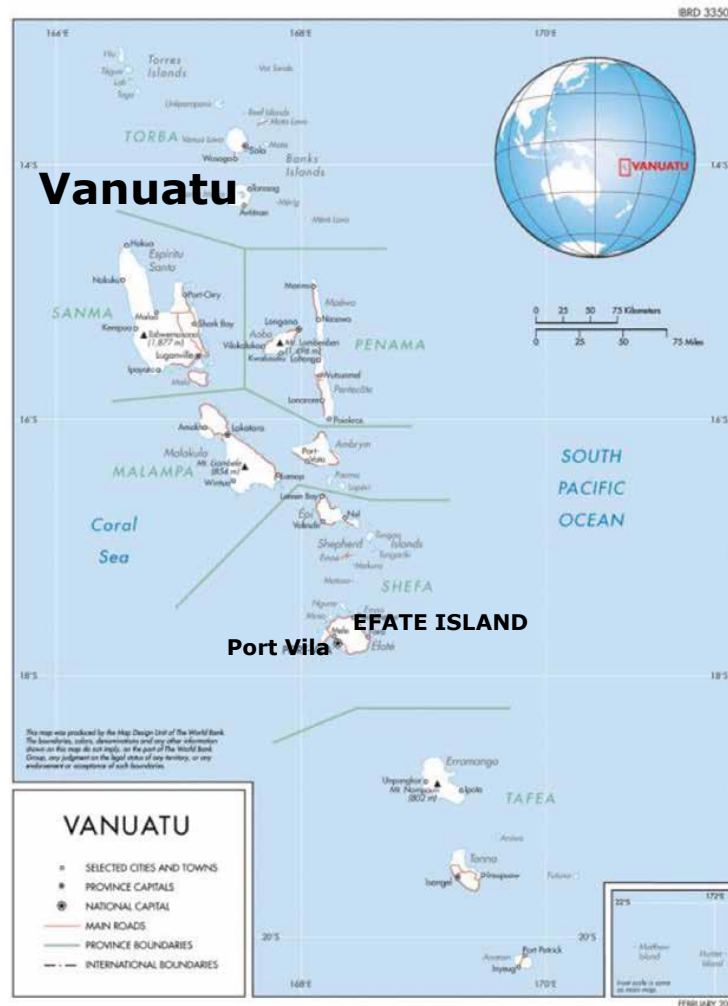
Urban agglomerations by size class and potential risk of flooding, 2025



Source: United Nations, Department of Economic and Social Affairs, Population Division: *World Urbanization Prospects, the 2011 Revision*. New York 2012
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Vanuatu: Category 5 Tropical Cyclone Pam

On **13 March 2015**, **Category 5 TC Pam** hit **Vanuatu** causing **widespread** damage in the archipelago nation in the South Pacific Ocean.



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On **13 March 2015**, **Category 5 TC Pam** hit **Vanuatu** with winds around 250 km/hour, and gusts peaking at 320 km/hour, **causing widespread damage** in the archipelago nation in the South Pacific Ocean.



Impact at national level

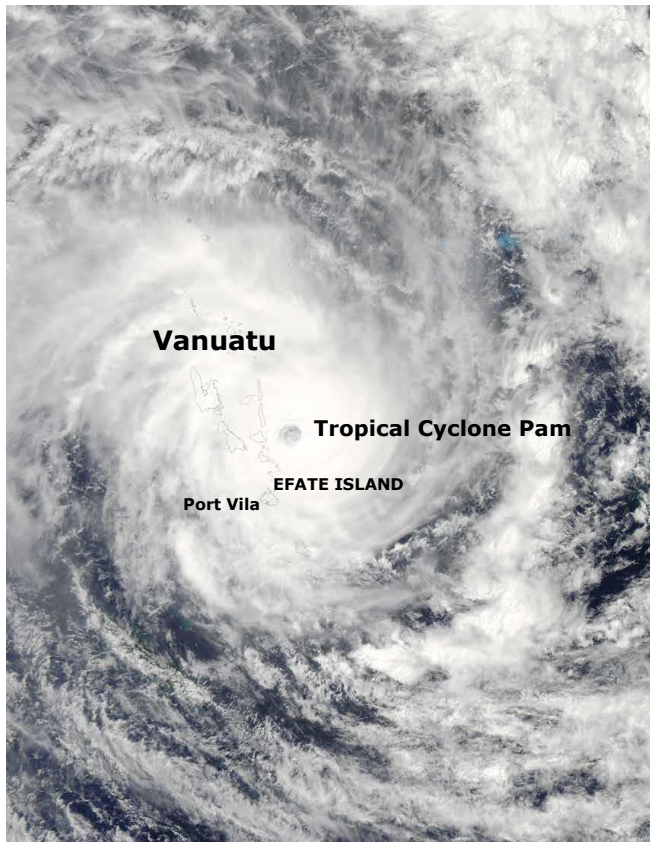
- 11 deaths
- 188,000 people affected
- 17,000 buildings damaged or destroyed
- 90,000 people (18,000 HHs) needing shelter assistance
- 65,000 people displaced from their homes

- Damage: USD 270.9 million
- Loss: USD 178.5 million
- Total: USD 449.4 million (**64.1% GDP**)

- **Housing sector: 32%** of total damage cost (**highest damage**)
- Tourism: 20% of total damage cost
- Education sector: 13% of total damage cost
- Transport sector: 10% of total damage cost
- **Agriculture: 33%** of total losses (**highest losses**)
- Tourism: 26% of total losses

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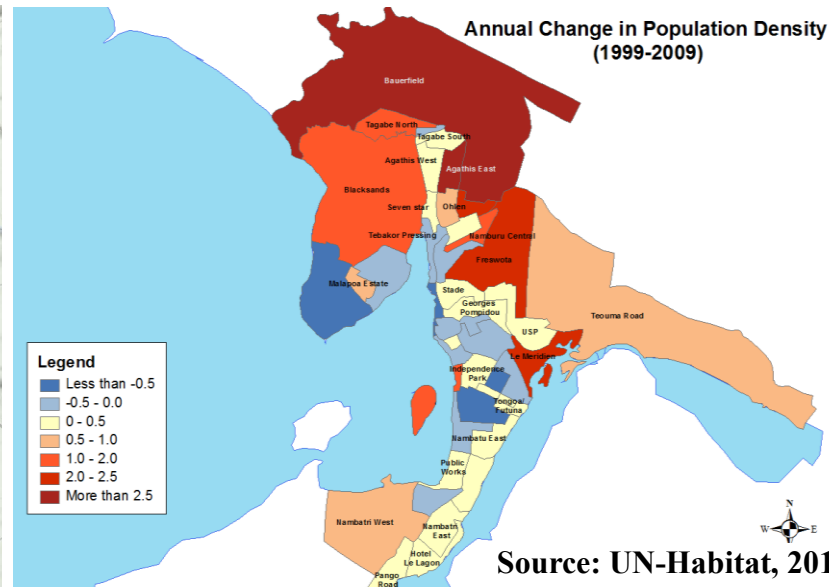
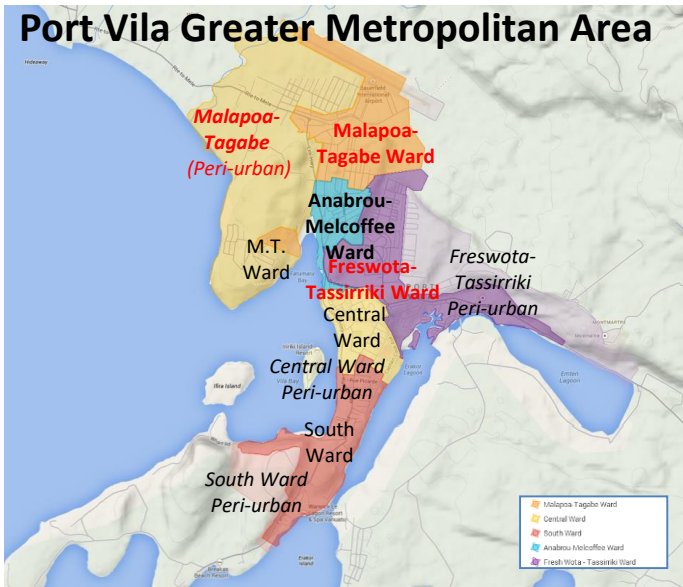
Urbanization in Vanuatu (SIDS)

- **Total population:** 258,000 (2014)
- **Urban population:** 67,000 (26%)
- **Annual urban growth:** 3.4%



Port Vila, Efate Island
Source: OCHA, 2014

- **Population living in Port Vila:** 53,000 (79.1% of urban population; 1/3 urban poor)
- **Annual Urban Growth**
 - **Greater Port Vila:** 10.7% (1999-2009)
 - **Central Ward:** 1.6% (mainly formal)
 - **South Ward** (mainly formal): 2.3%
 - ***Malapoa-Tagabe, Northern Division:** 14.6% (mainly informal), where 50% of the population in Greater Port Vila resides



Urban poverty, vulnerability and disaster risk reduction: Stakeholders and their roles

Central Governments cannot/should not address those issues alone, but in partnership with a wide range of actors playing different roles:

- **Central governments:** Setting national priorities; making policy reforms (institutional, legislative and financial); creating an enabling environment; providing financial support to sub-national authorities;
- **National/central Disaster Management Agencies:** formulating and coordinating the implementation of a central (basic) Disaster Management Plan; formulating and coordinating the implementation of contingency plans for emergencies; providing logistic & technical assistance to lower levels of governments
- **Sub-national/ local (village, town, city, metropolitan) authorities:** coordination and guiding the direction of growth and development of urban areas + Disaster Risks Reduction strategies, measures, plans and programmes and their integration into official urban planning and management systems
- **Civil Society:** brings knowledge of needs and reality on the ground; participate in disaster risk assessment, in development and implementation of community or local risk reduction strategies; watchdogs monitoring interventions and process (in particular, if they are transparent and in line with SDGs)
- **Private Sector:** can contribute with technical and financial resources in (re)building resilient infrastructures
- **International community (including UNOSD):** can provide support in terms of policy, technical advice and capacity building

Making our Cities and Communities more Inclusive, Safe, Resilient and Sustainable

- Mr. Sung-hwan Son, Advisory Ambassador for Green Climate Fund Cooperation, Incheon City
Sustainability with Open Data and Sharing Economy
- Ms. Xing Meng (Rachel), Director of International Department of JiaCui Environmental Promotion Center/SUC Programme
Sustainable Urban Development and Liveable Garden Community Programme / SUC Programme
- Mr. Xian Li (Billy), Head of International Department of JiaCui Environmental Promotion Center/SUC Programme Management Center, Beijing, China
Development & Application of Guidelines for Sustainable Cities and Communities in China (under SDG 11 Framework)
- Ms. Laurence Kwark, Secretary General, Global Social Economy Forum (Gsef)
Social Solidarity Economy (SSE)" as a tool and public policy to localize SDGs: the case of Seoul Metropolitan Government

감사합니다



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