# Issues, Challenges and Opportunities in Implementing SDG 11

## UNCRD Public Seminar on
## *"Localizing SDGs in Chubu Region"*
## 13 Feb 2018, Midland Square, Midland Hall, Nagoya, Aichi Prefecture, Japan

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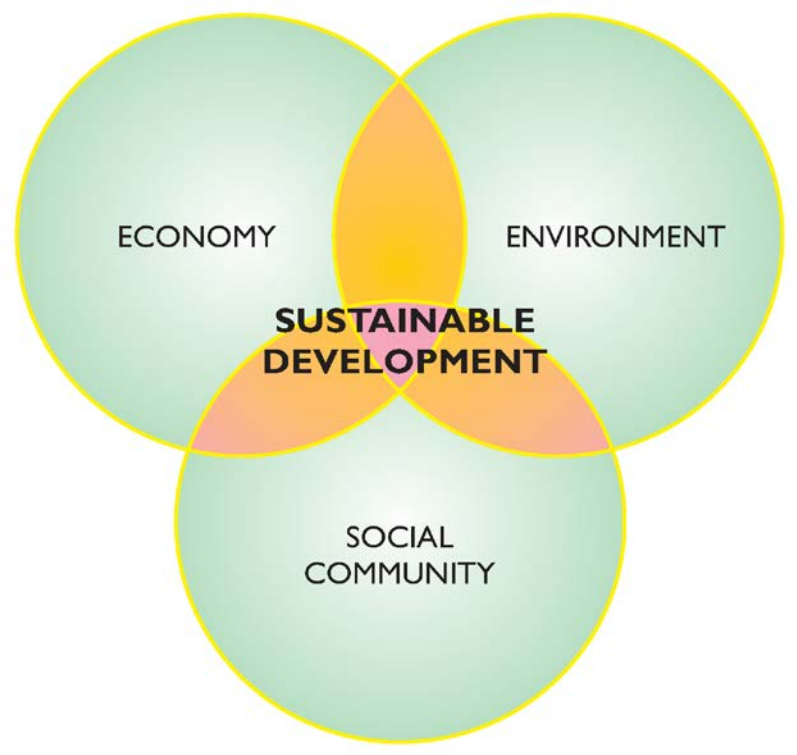
# The 2030 Agenda for Sustainable Development calls for deep integration of three pillars of Sustainable Development

*Sustainable Development Goals (SDGs)*




- 193 Member States adopted 17 SDGs and 169 targets at the UN Sustainable Development Summit, New York, 25-27 September 2015
- A plan of action around five critical areas (5Ps) of importance for humanity and the planet –
  - ***People*** *- end poverty and hunger, dignity, equality, healthy living environment;*
  - ***Planet*** *– protect planet from all forms of degradation, including through SCP, sustainable management of natural resources, climate mitigation;*
  - ***Prosperity*** *– economic, social and technological progress in harmony with nature;*
  - ***Peace*** *– peaceful and inclusive societies without fear and violence;*
  - ***Partnership*** *– a revitalized Global Partnership for Sustainable Development to mobilize necessary means to implement the post-2015 Development Agenda.*

# Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

**11.1** By 2030, ensure access for all to *adequate, safe and affordable housing and basic services and upgrade slums*
**11.2** By 2030, provide access *to safe, affordable, accessible and sustainable transport systems* for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, *women, children, persons with disabilities and older persons*
**11.3** By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, *integrated and sustainable human settlement planning and management* in all countries
**11.4** Strengthen efforts to *protect and safeguard the world's cultural and natural heritage*
**11.5** By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global GDP caused by *disasters, including water-related disasters*, with a focus on protecting the poor and people in vulnerable situations
**11.6** By 2030, reduce the *adverse per capita environmental impact of cities*, including by paying special attention to *air quality and municipal and other waste management*
**11.7** By 2030, provide *universal access to safe, inclusive and accessible, green and public spaces*, in particular for women and children, older persons and persons with disabilities
**11.a** Support positive *economic, social and environmental links between urban, peri-urban and rural areas* by strengthening *national and regional development planning*
**11.b** By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards *inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters*, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels
**11.c** Support *least developed countries*, including through *financial and technical assistance, in building sustainable and resilient buildings* utilizing local materials

(Source: *Transforming our world: the 2030 Agenda for Sustainable Development. UN*)

# Facts and Figures:

- Half of humanity 3.5 billion people live in cities today
- By 2030 60% of the world's population will live in urban areas

- Cities generate more than 80% of the Global GPD

- 700 million people live in slums today

- The world's cities occupy just 3% of Earth's land, but account for 60-80% of energy consumption and 75% of carbon emissions

- Growing vulnerability of coastal cities due to climate related disasters such as floods, storms and sea level rising

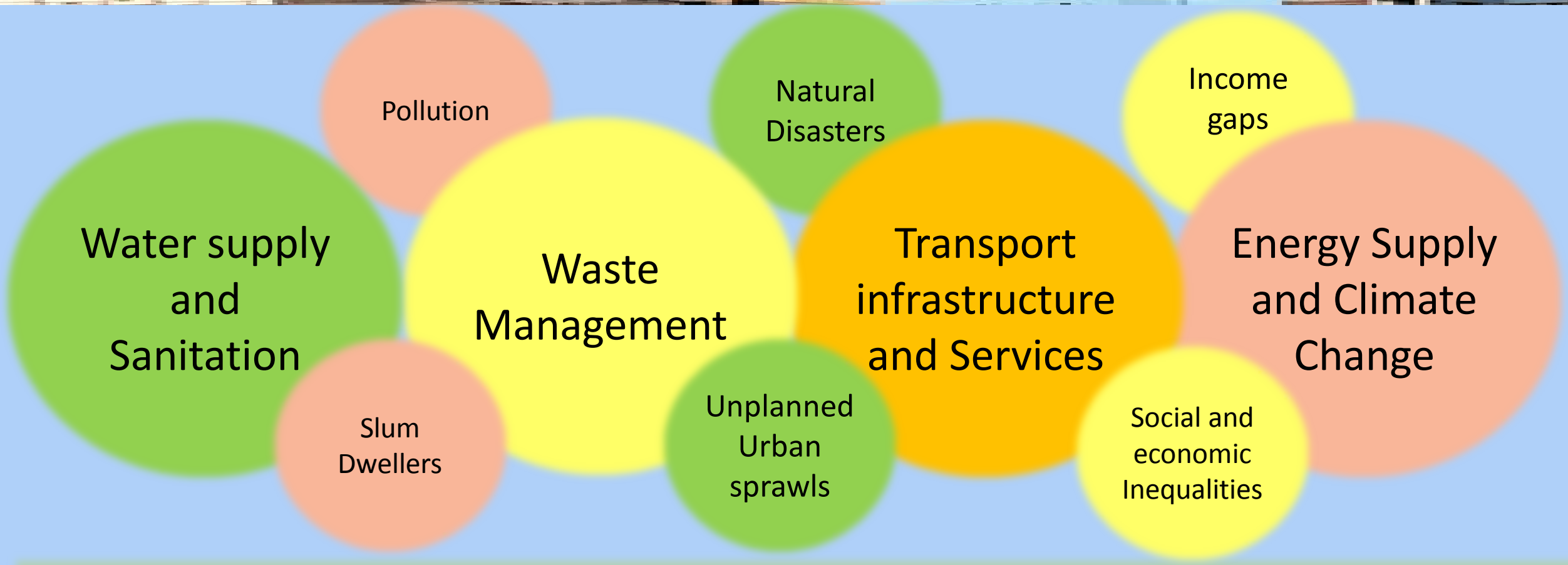
- Over the next four decades, India will add another 497 million to its urban population, China – 341 million, Nigeria – 200 million, the US – 103 million, and Indonesia – 92 million

- OECD estimates the cost of Air Pollution for OECD + People's Republic of China & India to be about USD 3.5 Trillion in terms of value of lives lost and ill health (OCED, 2014)

- 95% of urban expansion in the next four decades will take place in developing world, with Asia and African alone contributing > 86%.

Sources: compiled from UN DESA, 2011 & United Nations, 2012, UN HABITAT, 2016, UN Organization website, 2017
http://www.un.org/en/sustainablefuture/cities.shtml#overview

# Main Urban Challenges



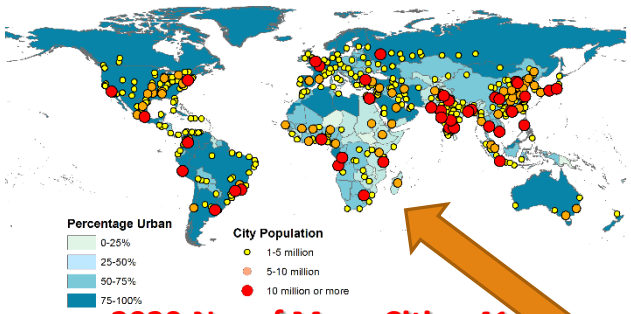

Environmental footprints of cities are quite alarming and can threaten the natural resources required to sustain the economic development and poverty alleviation rates. Maintaining economic growth, while creating sustainable livable cities for all, is the biggest urban challenge.

Sources: compiled from UN Environment, & United Nations, 2012, UN HABITAT, 2016, http://web.unep.org/asiapacific/sustainable-cities

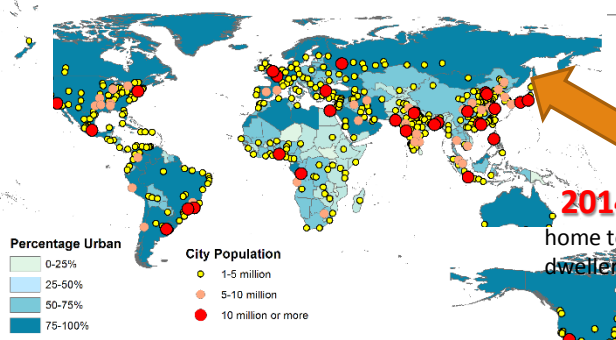
# Shared issues ~ Urbanization Trends & Implications

1) *Can the current level of urban infrastructure meet various demands ~ safe drinking water, energy, housing, healthcare, employment and transport, etc.?*

2) *Is the current level or provision of urban infrastructure and services able to cope up with the level of urbanization?*

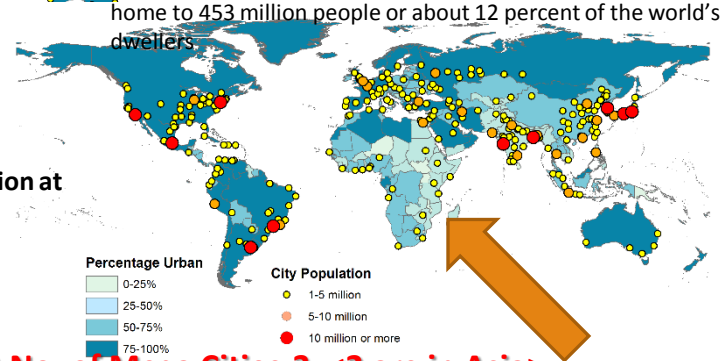



**2030 No. of Mega Cities-41**



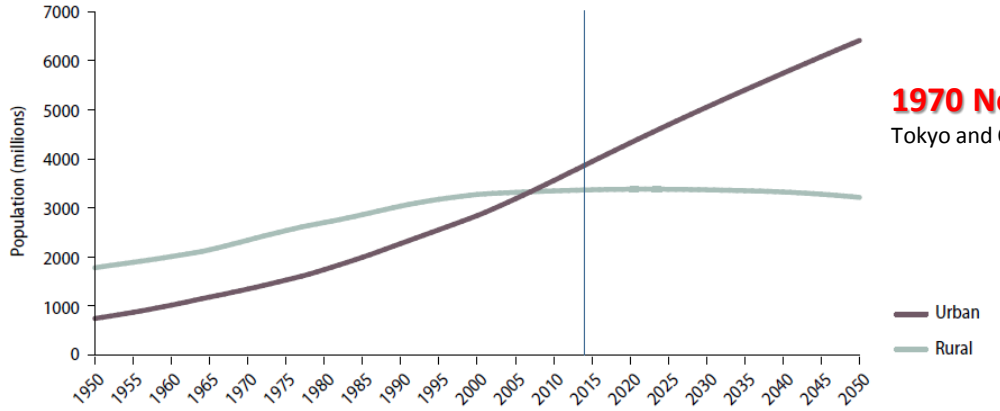

**2014 No. of Mega Cities-28 <16 are in Asia>**

home to 453 million people or about 12 percent of the world's urban dwellers



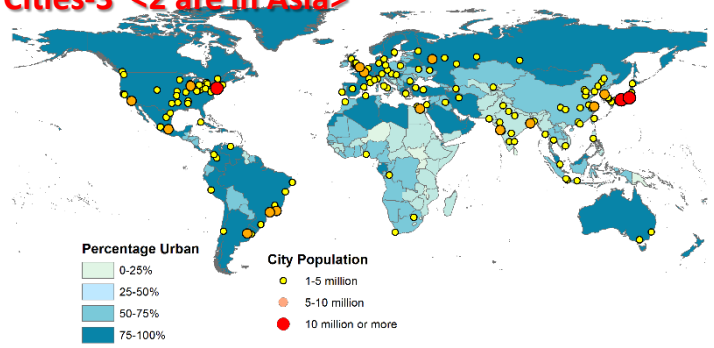

**1990 No. of Mega Cities-10 <5 are in Asia>**

**153 million people or slightly less than 7% of the global urban population at that time**




**1970 No. of Mega Cities-3 <2 are in Asia>**

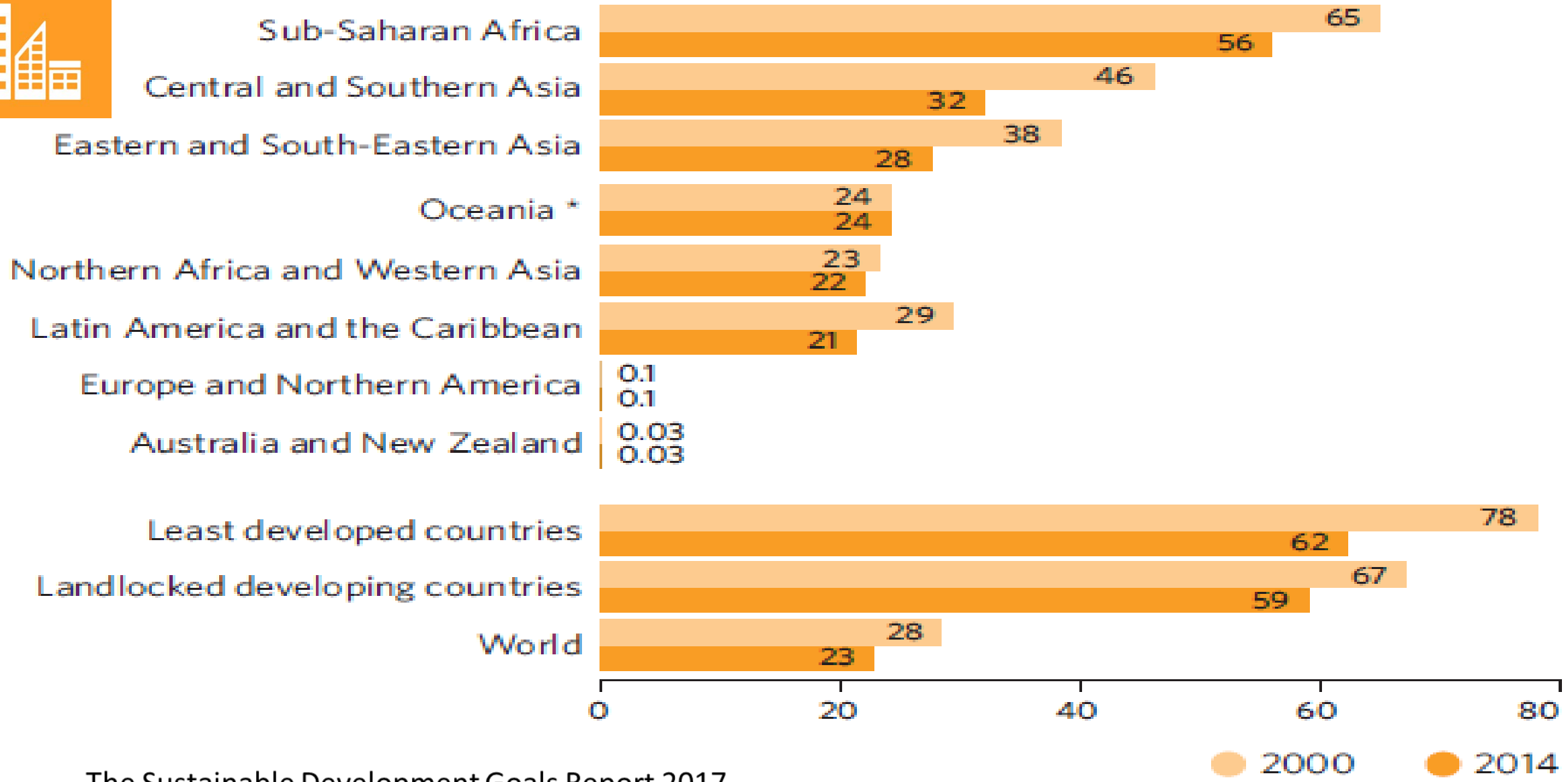
Tokyo and Osaka in Japan




*Source-World Urbanization Prospects, UN DESA 2014 (http://esa.un.org); at http://esa.un.org/unpd/wup/index.htm.*

# Proportion of Urban Population living in slums, 2000 & 2014 (average)

11 SUSTAINABLE CITIES AND COMMUNITIES

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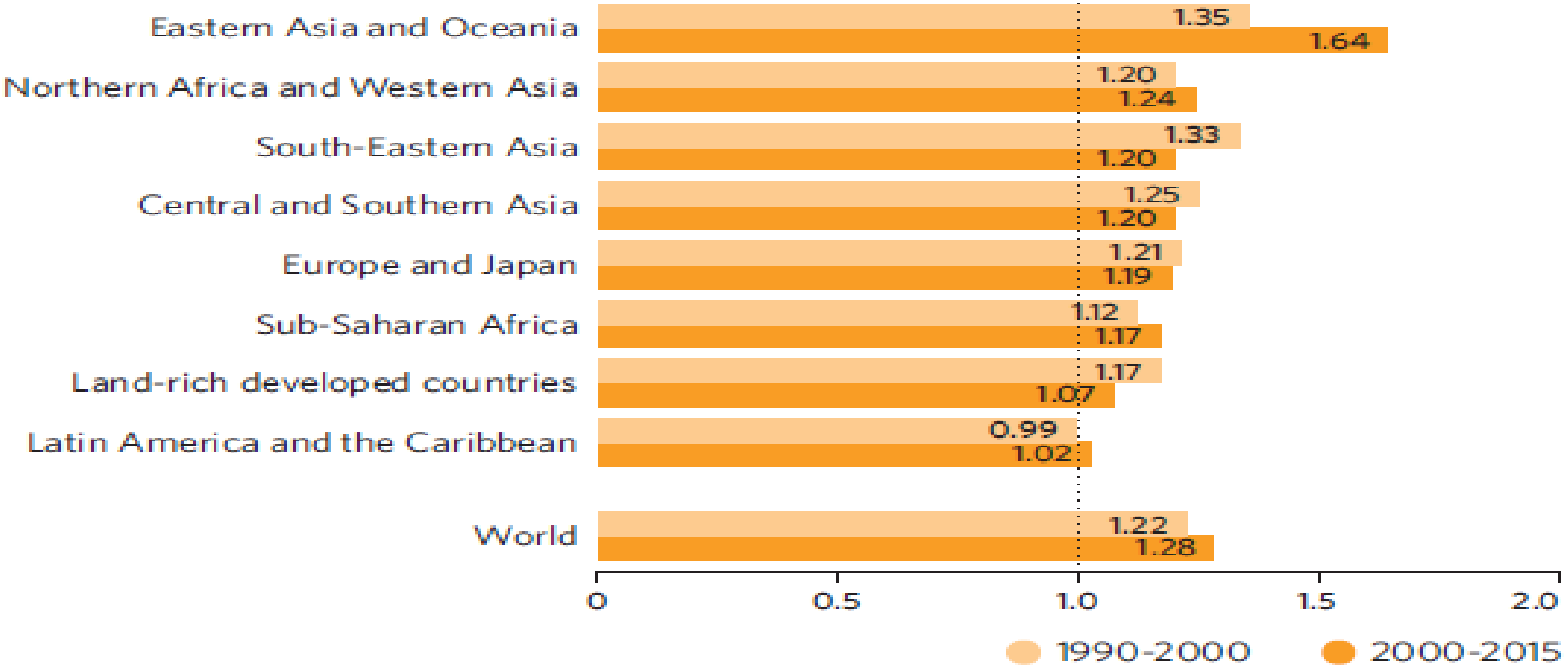
## Average ratio of land consumption rate to population growth rate, 1990-2000 and 2000-2015




Note: This chart includes a combination of SDG regional groupings and regional groupings from UN-Habitat. "Europe and Japan" includes European countries and Japan; "Land-rich developed countries" includes Australia, Canada, New Zealand and the United States of America; and "Eastern Asia and Oceania" excludes Japan, Australia and New Zealand.

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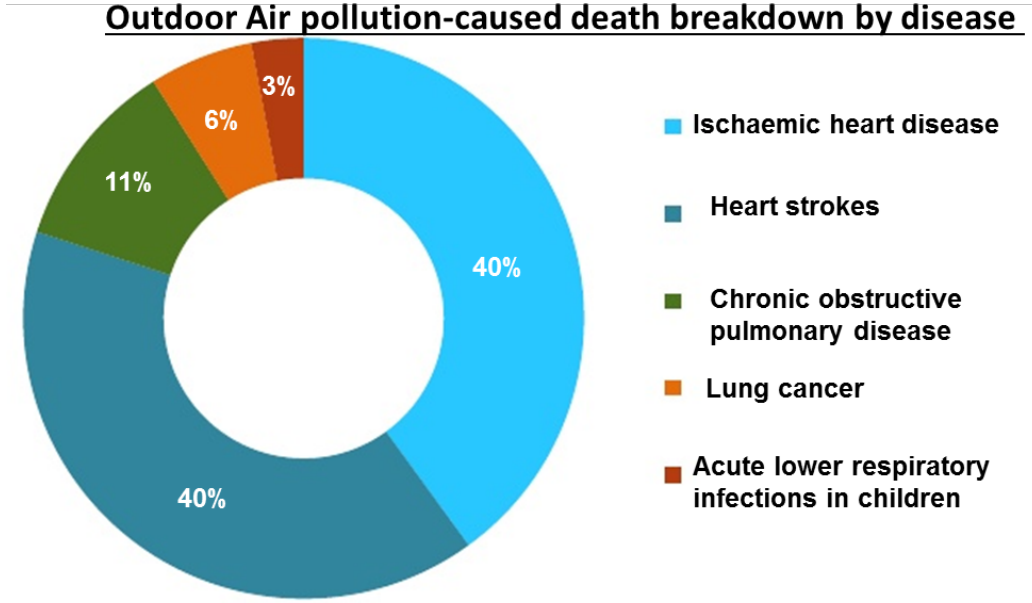
# Vital signs of unsustainable urban development and cities

**An estimated cost of Air Pollution for OECD + People's Republic of China & India is about USD 3.5 Trillion in terms of value of lives lost and ill health**




By region, low-and middle-income countries in South-East Asia and Western Pacific had the largest outdoor air pollution-related deaths of **2.6 million in 2012** (WHO, 2012), imposing costs equivalent to **2-4% of these countries' GDP.**

**The cost of the health impact of outdoor Air pollution cost China 1.4 Trillion US$ and India 0.5 Trillion US$ combine is more then all OECD countries (1.7 Trillion US$) in 2010 (OECD, 2014).**

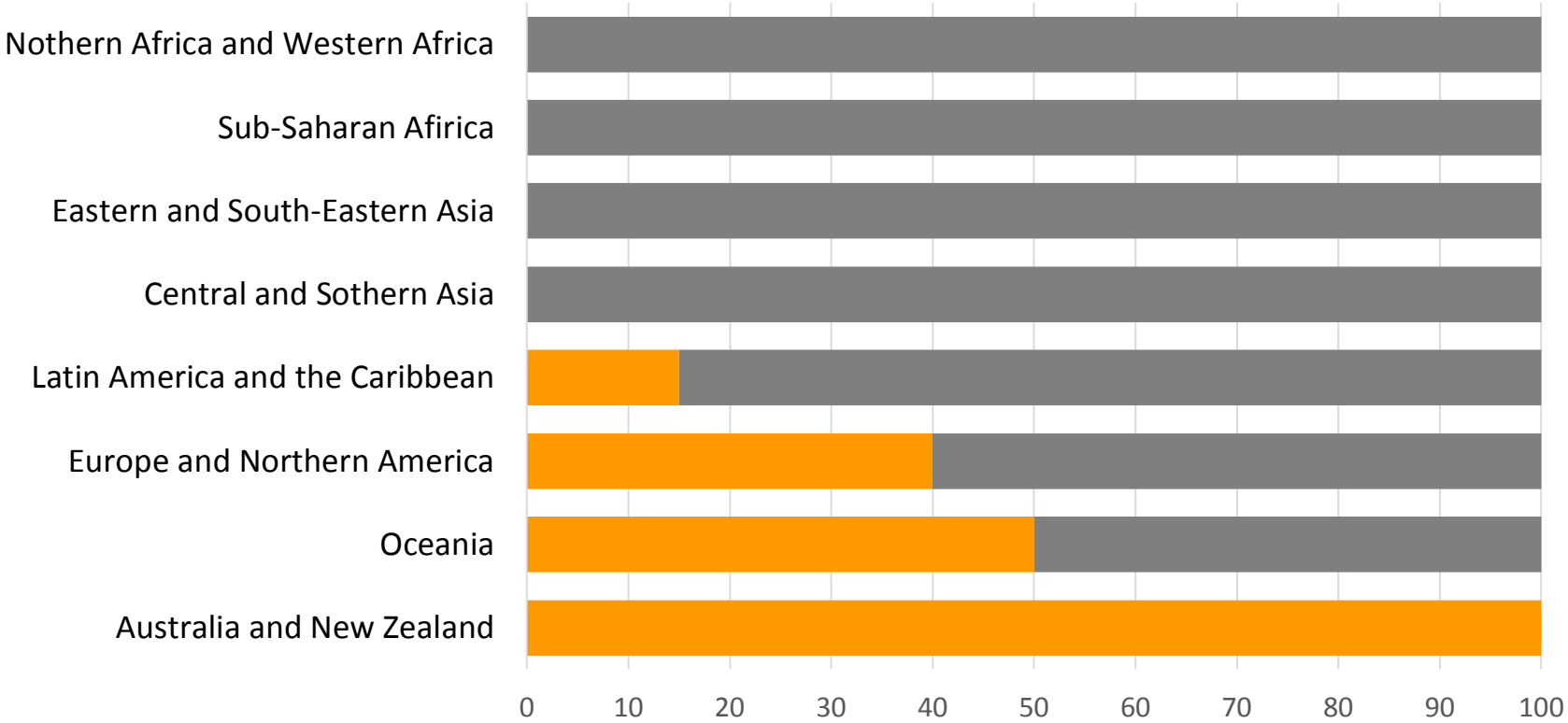
*What does it mean in terms of human development and national productivity loss to a country?*

# Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

## *Air quality*


Particulate matter of a diameter less than 2.5 micrometers (PM2.5)/ year

Proportion of the urban population living in areas that meet the annual WHO air quality guideline value, 2014 (percentage)

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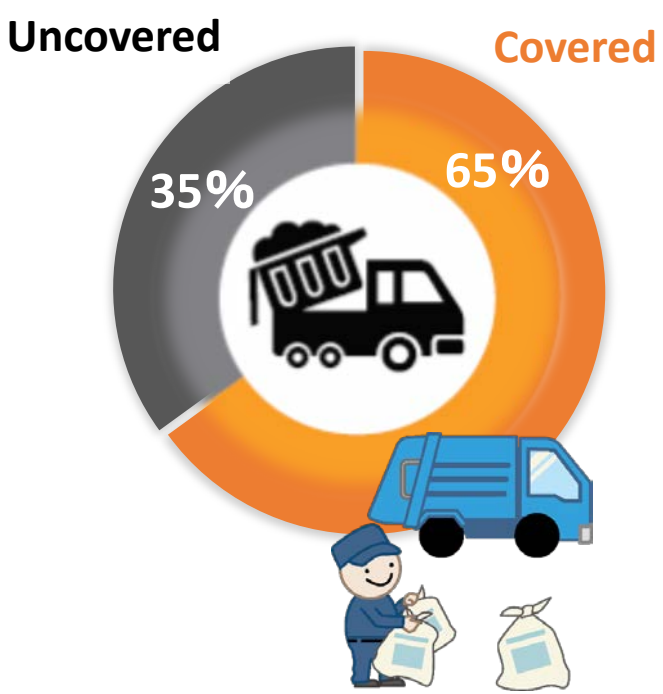
11 SUSTAINABLE CITIES AND COMMUNITIES

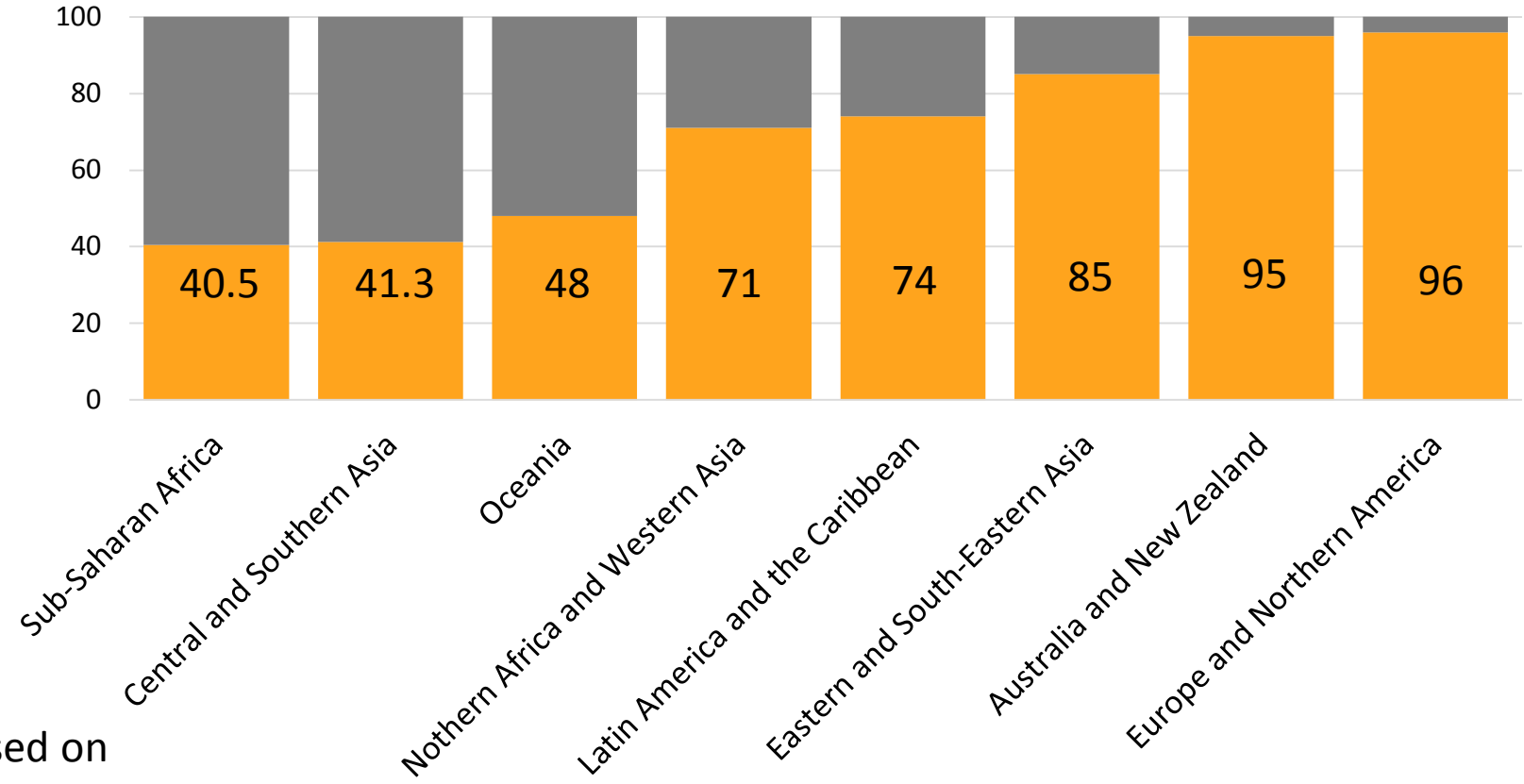
# Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

## *Coverage of Municipal Waste Collection*

**In World (%)**




**By Region (%)**




Note: Information in charts is based on data from cities in 101 countries

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# Consequences of linear economy: Plastics waste and resilience

## *Unclogging Jakarta's Waterways*

- Estimated population of over 10 million people:
  - 20% of city's daily waste ends up in local rivers and canals

- City administration is dredging its 17 rivers and canals for the first time since 1970s due to waterways being 70% blocked, a central contributor to the city's chronic flooding problems

(Source: The New York Times, October 2016)

# Consequences of linear economy: Plastics issue – vast implications on coastal and marine environment

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Source: http://surfingindia.net/

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- Plastics carry hazardous chemicals in marine environment (e.g., PCBs)
- More than 200 species of animals are known to have ingested plastic debris, including birds, fish, turtles and marine mammals.
- Transfer of chemicals from ingested plastics to biological tissue has been confirmed (bio-magnification).
- Micro-plastics (size < 5 mm) in coastal and marine environments is a critical problem, including bio-accumulation of hydrophobic persistent organic pollutants (POPs) like PCBs, DDTs, HCHs and others from the plastics through ingestion or food-chain (fist to fish and fish to people),

(Source: Prof. Hideshige Takada and 6th Regional 3R Forum in AP, 2015)

Source of photos: UNEP, http://www.unep.org/regionalseas/marinelitter/publications/gallery/default.asp

# *Climate adaptation and disaster resilience of cities through sustainable transport policies and solutions (-----> SDG 11.b)*

- **rise in frequency and magnitude of natural disasters (flood, earthquake, cyclones, landslides, etc.) across the world;**

- **climate resilience is not a major part of the current transport policy, planning and urban/transport infrastructure and services development resulting in unprecedented potential damages to both human life and economy during such extreme events;**

- **urban/transport infrastructures in Asia and Africa are vulnerable to effects of climate change and these vulnerabilities should be addressed in the design, construction, and geometry of roads, railway tracks, and other transport infrastructure, including the drainage system of cities.**


# Connection Between Transport and the SDGs

**Sustainable transport and mobility are fundamental to progress in realizing the promise of the 2030 agenda for sustainable development and in achieving the 17 SDGs (Global Mobility Report, 2017). Sustainable transport has direct relevance to 7 SDGs (1, 3, 8, 9, 10, 11, 13)**

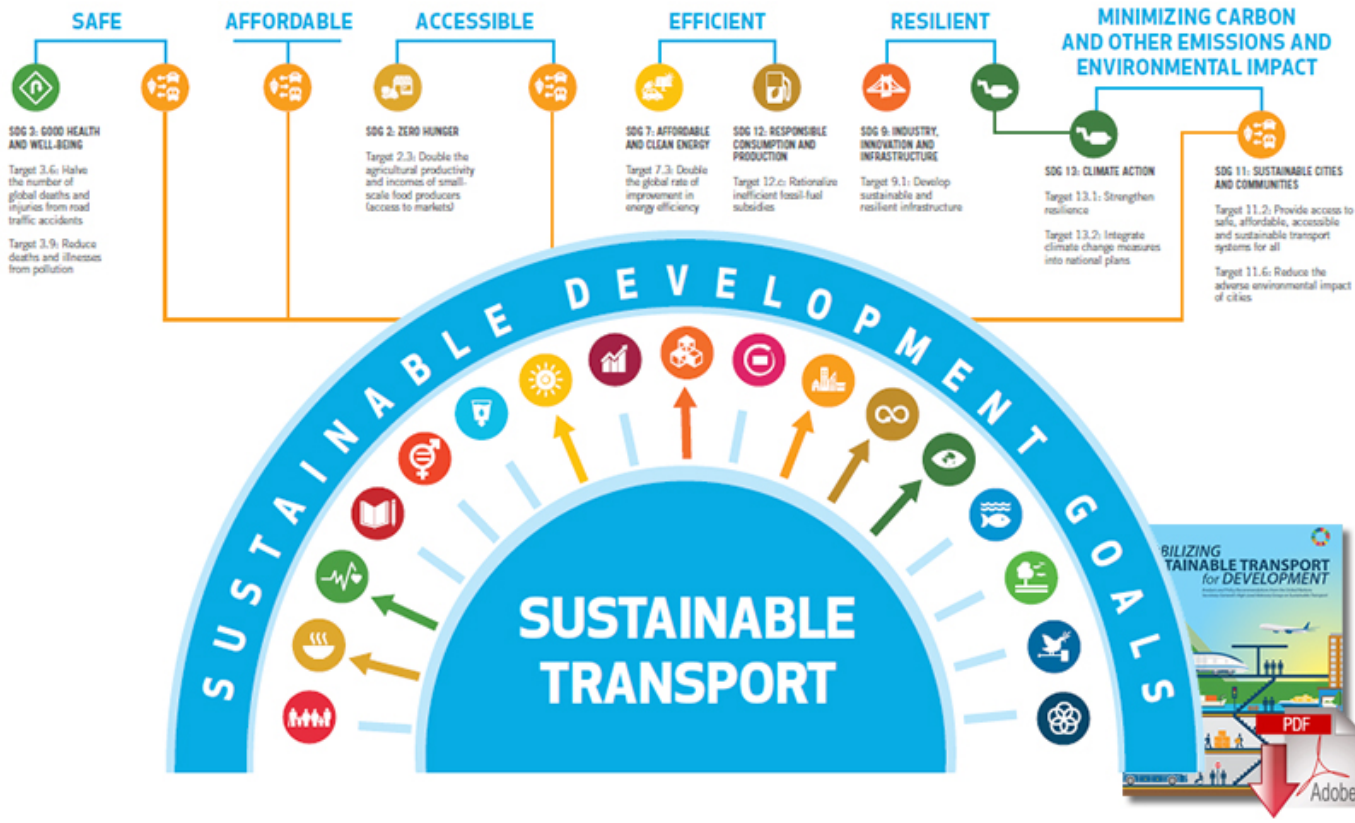
## SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable

**SDG: 11.2.** ***By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.*** **(Indicator: proportion of population that has convenient access to public transport, by sex, age and persons with disabilities)**

***SDG:*** **11.6.** By 2030, ***reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality*** and municipal and other waste management.

***SDG: 11.7. By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.***

11.a. ***Support positive economic, social and environmental links between urban, peri-urban and rural areas*** by strengthening national and regional development planning.




Mobilizing sustainable transport for development –analysis and policy recommendations from the United Nations Secretary-General's high level advisory group on sustainable transport, Oct 2016

# The Sustainable Mobility for All – key attributes..

**The Sustainable Mobility for All (SuM4All) is a global multi-stakeholders partnership with a goal to make the mobility – equitable, efficient, safe and green (clean).**

**Universal Access** – to ensure that everyone (the elderly, children, women, families and people with disability) has access to the transport needed, and "***no one is left behind***" to take advantage of social, economic and environmental benefits for current and future generations. Equity and inclusivity are the core of the global mobility objectives. **Universal access features directly SDG target 11.2.**

**Safety** – Improve the safety of mobility across all modes of transport by avoiding fatalities, injuries, and crashes from transport mishaps across all modes of transport, thus averting public health risks, and social and economic losses associated with unsafe mobility. **Road safety has direct implications to SDG target 11.2.**

## GLOBAL OBJECTIVES

### UNIVERSAL ACCESS

Ensure for all equitable access to economic and social opportunities by 2030

### EFFICIENCY

Increase the efficiency of transport systems by 2030

### SAFETY

Improve safety of mobility across transport modes

### GREEN

Shift transport systems to low polluting (GHG/air/noise) and climate resilient path

(Source: Global Mobility Report, 2017).

**Efficiency** – This objective seeks to ensure that transport demand is met effectively, at the least possible cost. Since efficiency cuts across multiple aspects-the optimization of resources (i.e., energy, technology, space, institutions, and regulations) to generate an efficient transport system or network.

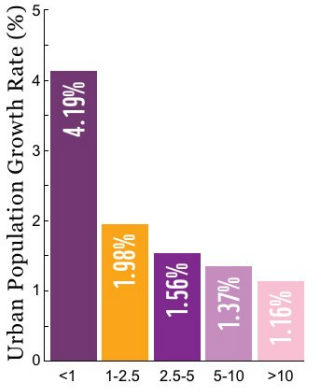

Source: New urban mobility concept, Greenpeace

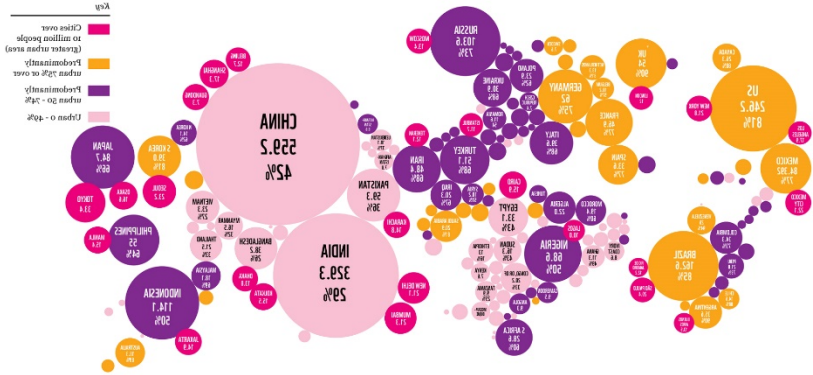
**Green Mobility –** This objective aims to address climate change through mitigation and adaptation, and to reduce both air and noise pollution.

# Key Issues and Major Challenges in the Sustainable Transport & Mobility

- Half of humanity – 3.5 billion people – lives in cities today. In 2016, an estimated 54.5 % of the world's population lived in urban settlements.
- By 2030, urban areas are projected to 60 % globally. By 2050, 66% of the world's population will be urban (UNDESA, 2014).
- Automobile sales are expected to increase from about 70 million a year in 2010 to 125 million by 2025, with more than half forecasted to be bought in cities. It is predicted that on the existing trajectory, today's 1.2 billion strong global car fleet could double by 2030 (Dargay, et al, 2007).

- **Asia is currently home to some 17 megacities, which is expected to grow to 22 by 2030. This rapid growth raises many urban challenges, such as traffic congestion, air pollution and road accidents and fertilities.**
- **95 % of urban expansion in the next decades will take place in developing world.**



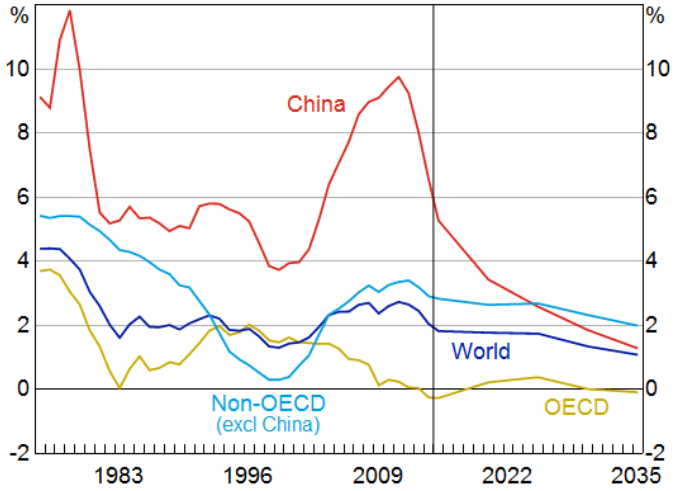




Source: WWF Living Planet Report 2012 / http://www.businessinsider.com/small-cities-population-growth-by-2050 and

***Rapid urbanization is exerting pressure on urban mobility and public transport system.***

**Growth in Energy Consumption***

10-year average growth rate




* BP Projections from 2015 onwards under base case scenario

Sources: BP Energy Outlook 2016; BP Statistical Review 2015; RBA

**By 2050, the average time an urban dweller spends in traffic jams will be 106 hours per year, three times more than today.**

(Source: The Future of Urban Mobility Report)

**Mumbai, India**

Source: https://www.oneindia.com/feature/world-population-day-top-10-worlds-populated-cities-in-pics-1481206.html

# Urban Mobility Situation in Asia Cities

Urban mobility situation in Dhaka, Bangladesh

**Traditional mobility solutions are not enough for future mobility situation. It needs significant improvements on overall policy, planning, infrastructures, technology, and financing.**

**Integrated transport system allow people to move easily from one point to another and address the last mile connectivity.**

**Vehicles and transport infrastructure should be the part of the intelligent network which helps to improve the safety, efficiency and the traffic flow of the city.**

Traffic congestion in Lahore, Pakistan

Air pollution in Kathmandu, Nepal

Air pollution problem in PR China

Walking still a chore in Jakarta, Indonesia

| | Traditional mobility solutions | New mobility services | |
|---|---|---|---|
| Individual-based mobility | Private car ownership | Car sharing: peer to peer | A peer-to-peer platform where individuals can rent out their private vehicles when they are not in use |
| | Taxi | E-hailing | Process of ordering a car or taxi via on-demand app. App matches rider with driver and handles payment |
| | Rental cars | Car sharing: fleet operator | On-demand short-term car rentals with the vehicle owned and managed by a fleet operator |
| Group-based mobility | Car pooling | Shared e-hailing | Allows riders going in the same direction to share the car, thereby splitting the fare and lowering the cost |
| | Public transit | On-demand private shuttles | App and technology enabled shuttle service. Cheaper than a taxi but more convenient than public transit |
| | | Private buses | Shared and Wi-Fi-enabled commuter buses available to the public or to employees of select companies. Used to free riders from driving to work |

Source: McKinsey analysis


There were 4,80,652 road accidents in India in 2016, (source: Ministry of Road Transport, India

# Urban Mobility -Best Practices

Cambodia's first accessible tuk tuk

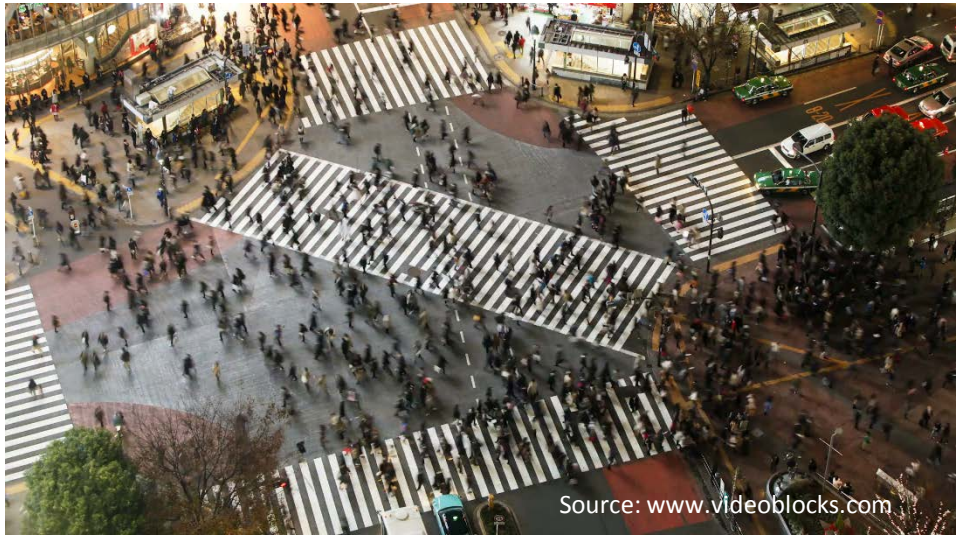

**Korea case:** Safe sidewalk with protection fences, creating a safe walking environment for children.


**Japan case**: a person riding in the subway in a wheelchair.


- **A city should provide equal opportunity for the mobility options for everyone, including those with a disability.**
- **A city should have continuous accessible paths of travel linking public transport, parking, retail, business, and entertainment areas.**

**Hong Kong Case:** Inclusive cycling routes from Sha Tin to Tai Po


Shibuya Crossing, Tokyo, Japan




Accessible taxi available in Narita airport

# Key challenge: NMT remains as a peripheral issue in transport policy, planning and development…

| Economic benefits | Pedestrian upgrades | Pedicabs | Bicycle rentals | Car-free day |
|---|---|---|---|---|
| Congestion reduction | √ | √ | √ | √ |
| Consumer spending savings | √ | √ | √ | √ |
| Employment creation | √ | √ | √ | √ |
| Small-enterprise development | √ | √ | √ | √ |
| Traffic accident reduction | √ | √ | √ | √ |
| Technology transfer | | √ | | |
| Energy security | √ | √ | √ | √ |
| Economic productivity | √ | √ | √ | √ |
| **Environmental benefits** | | | | |
| Greenhouse gas reductions | √ | √ | √ | √ |
| Particulate matter reduction | √ | √ | √ | √ |
| Sulphur oxides reduction | √ | √ | √ | √ |
| Nitrogen oxides reduction | √ | √ | √ | √ |
| Carbon monoxide reduction | √ | √ | √ | √ |
| VOC reduction | √ | √ | √ | √ |
| Noise reduction | √ | √ | √ | √ |
| Solid waste reduction | √ | √ | √ | |
| Water contaminant reduction | √ | √ | √ | |
| **Social benefits** | | | | |
| Health (e.g. obesity reduction) | √ | | √ | √ |
| Crime reduction | √ | √ | √ | √ |
| Gender equity promotion | √ | √ | √ | √ |
| Universal access for disabled | √ | | | √ |
| Scholar access improvement | √ | √ | √ | √ |
| Convenience and comfort | √ | √ | √ | √ |
| Community sociability | √ | | √ | √ |
| Reduction in severance | √ | | | |

Source: Win-Win Solutions to Climate Change and Transport, UNCRD, 2009.

Despite numerous co-benefits, NMT receives very low priority in most transport planning and infrastructure design and development, which is most often oriented to promote motorized transport rather than to support people movement or pro-poor mobility needs….

consequence => thousands of non-polluting pedestrians and cyclists are killed by accidents each year in developing countries!

. Each Sunday, Bogotá gives 120 kilometres of road space over to cyclists, skaters, jogg and families. Photo by Lloyd Wright.

Bicycle rental facility in Seoul, Photo: Lloyd Wright


Delivery service by Pedicab/bicycle taxi in London, Photo: ITDP

# Asia Region

**Northeast Asia, Southeast Asia and South Asia**

## Economics, Environment and Society Challenges:

- Rapid growth the urban population in Asia. Over 1.1 billion more Asian urban residents in 2030 than compared to 2005.
- Poverty between 240-260 million people in Asia urban areas live on less than $1 a day.
- Environmental factors depletion in resources and increase in pollution.
- Lack of access to health care, education and training or social networks.
- Lack of affordable housing and infrastructures.
- Traffic jams and pollution reduce the efficiency of economic activity in cities and lower worker productivity.

## Current trends towards achieving SDG 11:

- Improvements in solid waste management (SWM) with a strong focus on 3R - reduce, reuse and recycle.
- Community-based waste collection and contracting out of collection and transport services have proven effective.
- Eco-industrial parks and buildings to reduce consumption of resources and environmental strain and improve the use of energy resources.
- Disaster Management Planning
- Environmental sustainable transport / low carbon solutions
- Global and regional cooperation on reducing marine and plastic waste
- Providing Governments and stakeholders with critical knowledge for climate change adaptation

Sources: compiled from United Nations, 2012, UN HABITAT, 2016, UN Organization website, 2017. Asian Development Bank, 2008. http://www.un.org/en/sustainablefuture/cities.shtml#overview and https://www.adb.org/sites/default/files/publication/27976/mac-report.pdf

# Africa Region

**North Africa, West Africa, East Africa, Southern Africa**

## Economics, Environment and Society Challenges:

- Africa faces serious environmental challenges, land degradation, deforestation, biodiversity loss and extreme vulnerability to climate change.
- inadequate infrastructures, lack of land and sea transportation
- Political corruption and good governance
- Lack of resilience to disasters and conflicts
- Decision makers of cities lack planning and securing adequate land for public streets, arterial roads and public open spaces to organize further development.
- Poor monitoring and Evaluation systems
- Economic and financial barriers
- Poverty and inequalities

## Current trends towards achieving SDG 11:

- Improvement in Land and Urban planning
- Training experts in designing and implementing monitoring and evaluation systems effectively
- An increase in Housing and access to basic services
- Improvement in public infrastructure and transportation
- Improvement in access to clean water and sanitation
- Empowerment of urban actors to solve practical problems
- Aid has been provided to assist governments in addressing urbanization challenges through national and local development policy frameworks.

Sources: compiled from UN Environment, 2015 United Nations, 2012, UN HABITAT, 2016, UN Organization website, 2017
http://https://unhabitat.org/sustainable-urban-development-in-africa/

# LAC Region

## Latin America and the Caribbean

### Economics, Environment and Society Challenges:

- 75% of housing built annually in the region are informal lack access to basic infrastructure and services.
- High poverty and social vulnerability in slum areas.
- Greater risk in disasters, flooding, landslides.
- Political corruption and lack of good governance
- Lack of resilience to disasters and conflicts
- Lack of waste management
- High statistics for violence and crime

### Current trends towards achieving SDG 11:

- The adoption of a paradigm shift in the vision of the cities in terms of policies and city planning
- Public-Private partnerships for promoting urban sustainability in LAC
- Development in planning and public administration
- Strengthening the public sectors development capacities
- Encouragement of NMT or public transport new construction of public transportation

Sources: compiled from UN DESA, 2011 & United Nations, 2012, UN HABITAT, 2016, UN Organization website, 2017
http://www.worldbank.org/en/news/feature/2017/10/05/ciudades-del-futuro-en-america-latina

11 SUSTAINABLE CITIES AND COMMUNITIES

# Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

*Our approaches*

**Regional 3R Forum in Asia and the Pacific**

**Vientiane International Mayors Forum on SDG 11**

**Regional EST Forum in Asia**

Photos: UNCRD

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Environmentally Sustainable Transport

# ASIAN EST INITIATIVE

Ministry of the Environment Japan

**Aichi Statement** (defining core EST areas)

**Kyoto Declaration** (endorsed first by 22, now 47 Asian Mayors with addendum 2014)

**Seoul Statement** (climate change)

**Bangkok 2020 Declaration** (20 goals)

**Bali Declaration on Vision Three Zeros** (Zero Congestion, Zero Pollution, Zero Accidents)

**Colombo Declaration for Next Generation Low-carbon Transport Solutions in Asia**

**Vientiane Decleration on Sustainable Rural Transport (2017)**

EST 1 2005 → EST 2 2006 → Mayors 2007 → EST 3 2008 → EST 4 2009 → EST 5 2010 → EST 6 2011 → EST 7 2013 → EST 8 2014 → EST 9 2015 → EST 10 2017

SDGs

25 EST Member Countries


- Awareness Raising on Sustainability Transport in Asia
- Formulation of National EST Strategies (Philippines, Viet Nam, Cambodia, Lao PDR, Indonesia, Nepal)
- Development Banks start shifting funding to Sustainable Transport
- Promotion of Green Freigh in Asia/Green Freight Agreement in Asia
- Greater focus on sustainable transport, low carbon solutions for livable society in Asia in line with Rio+20 outcome – *The Future We Want*, SG's Climate Summit (2014), Post-2015 Development Goals/SDGs.

**Avoid** trips

**Shift** to most efficient mode

**Improve** efficiency

*3Rs in the context of **Green Economy***

***3Rs in a broader context** - not just about municipal waste management, but is intrinsically linked with **resource efficiency** in a wide range of sectors with an objective to reduce or eliminate the waste load for final disposal towards transitioning to a resource efficient and zero waste society vis-à-vis green economy*

***Multilayer Partnerships and Coalition as the Basis for 3R's Promotion***

*3Rs in the context of **Rio+20 outcome – The Future WeWant***

**Pacific countries join 3R Forum**

- 1st Regional 3R Forum in Asia — Japan/2009
- 2nd Regional 3R Forum in Asia — Malaysia/2010
- 3rd Regional 3R Forum in Asia — Singapore/2011
- 4th Regional 3R Forum in Asia — Viet Nam/2013
- 5th Regional 3R Forum in Asia-Pacific — Indonesia/2014
- 6th Regional 3R Forum in Asia-Pacific — Maldives/2015
- 7th Regional 3R Forum in Asia-Pacific — Australia/2016

**Tokyo 3R Statement**

**Singapore Recommendation**

**Surabaya 3R Declaration**

**3R as an Economic Industry**

**Adelaide 3R Declaration on Circular Economy**

**Ha Noi 3R Declaration (2013-2023)**

**33 Goals** for Urban/Industrial areas, Rural areas/Biomass, New and Emerging Wastes, Cross-cutting issues

**2nd East Asia Summit - Environment Ministers Meeting (EAS EMM), Brunei, 2010** → **Endorsed Regional 3R Forum in Asia**

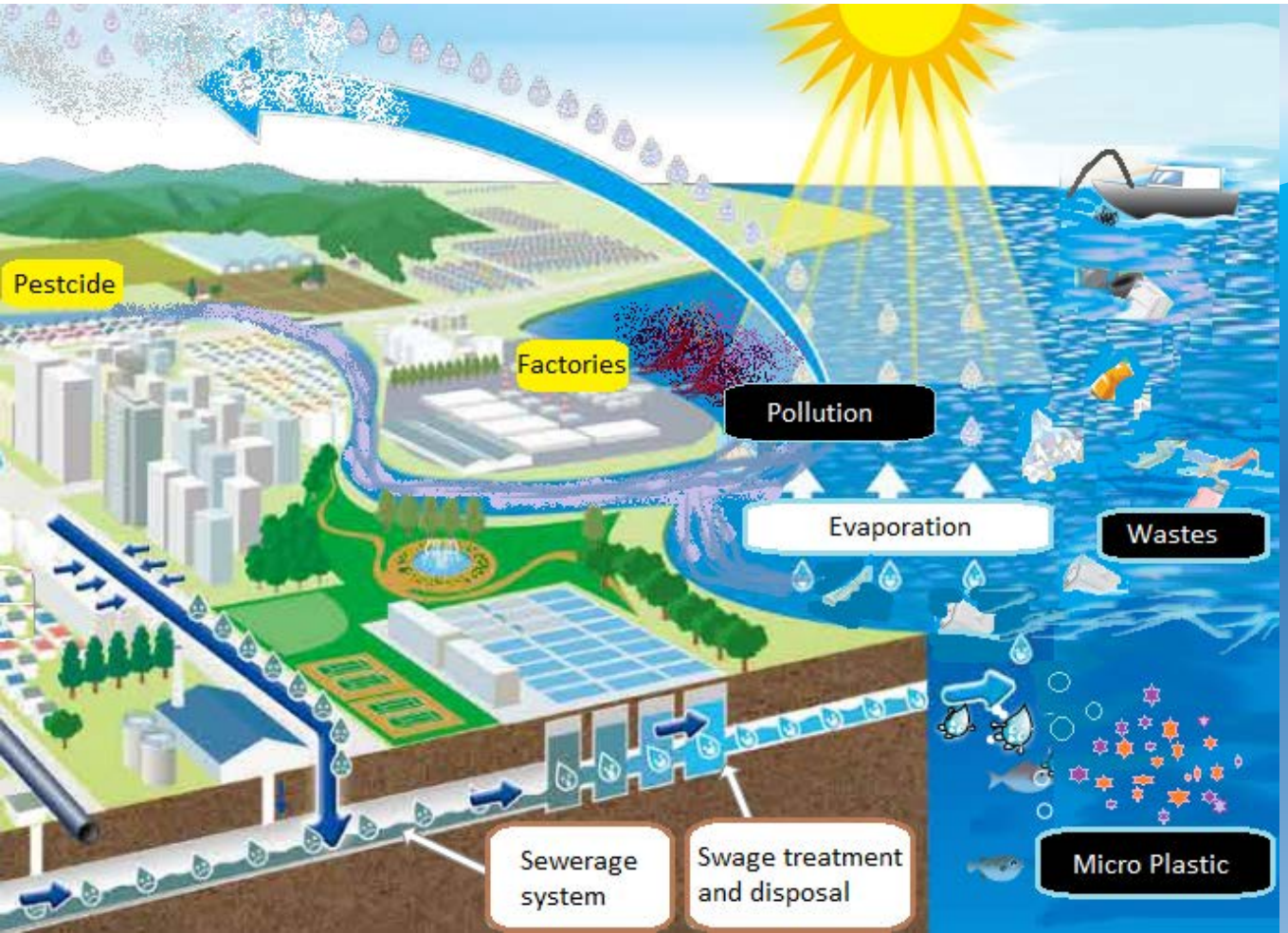
RIO+20 United Nations Conference on Sustainable Development

2030 Agenda for Sustainable Development / SDGs

- **3R for Green Economy**
- **3Rs for Sustainable Cities and Human Settelment (Healthy & Safe)**
- **3Rs for Costal & Marine Ecosystem**
- **Needs for Innovative Partnerships**

# Achieving Clean Water, Clean Land and Clean Air through 3R and Resource Efficiency

*A 21st Century Vision for Asia-Pacific Communities*




**8th Regional 3R Forum in Asia and the Pacific**

*9-12 April 2018, Indore, Madhya Pradesh, India*

UNCRD

SUSTAINABLE DEVELOPMENT GOALS
17 GOALS TO TRANSFORM OUR WORLD

IPLA

# International Partnership for Expanding Waste Management Services of Local Authorities (IPLA) - A SDGs Partnership- #SDGAction267

- ***Partnerships*** offer alternatives in which governments and private companies assume co-responsibility and co-ownership for the delivery of solid waste management services. Waste disposal is expensive – financially and in lost resources (substantial inputs of labour, material, energy, land resources for land filling, etc. ).
- ***Partnerships*** combine the advantages of the private sector (dynamism, access to financial resources and latest technologies, managerial efficiency, and entrepreneurial spirit, etc.) with social concerns and responsibility of the public sector (public health and better life, environmental awareness, local knowledge and job creation, etc. ).
- ***Partnerships*** (PPP) are indispensable for creating and financing adaptation measures towards resilient cities which in turn are more attractive for private investments.
- ***Partnerships*** provide win-win solutions both for the public utilities and private sector—if duly supported by appropriate policy frameworks. Such partnerships could lead to savings in municipal budgets where waste management usually consumes a large portion. The private sector, on the other hand, may use this opportunity to convert waste into environmentally friendly products and energy that could also serve as income generating opportunities.

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SUSTAINABLE DEVELOPMENT GOALS
17 GOALS TO TRANSFORM OUR WORLD


Recyclable Collection Station in Nagoya City

# Thank you

Aichi Kaisho Forest Center

Bicycle Parking

Toyota Ecoful Town

JR Kachikawa St.

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