



Asian Mayors Policy Dialogue on Achieving Clean Water, Clean Land and Clean Air through 3R and Resource Efficiency

MAYORS SESSION 1:

The 2030 Agenda for Sustainable Development and the UN HABITAT III New Urban Agenda and the Contribution of the 3Rs

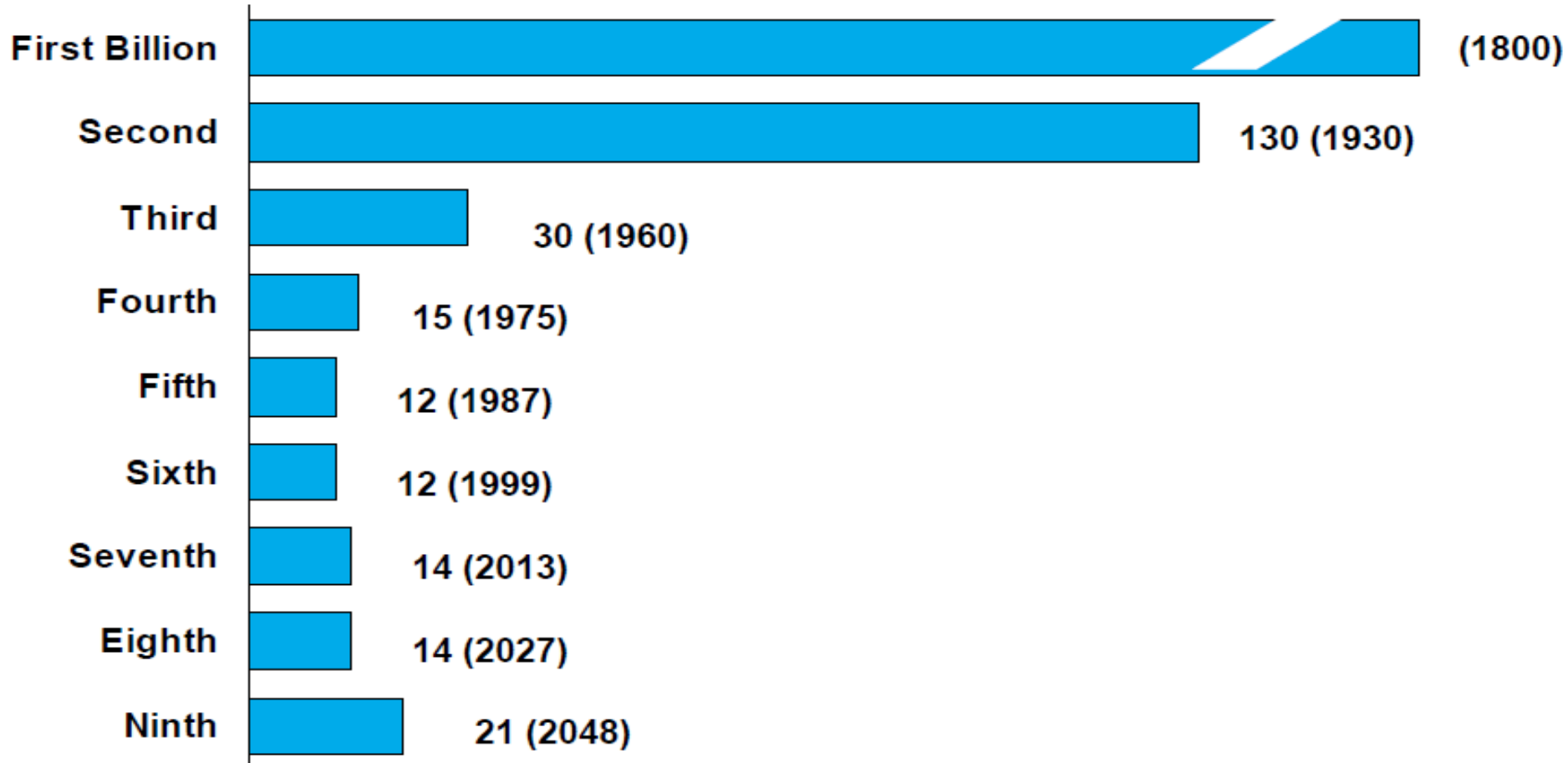
11th APRIL 2018

Moderator: Dr. Kulwant Singh, Director, CEO, 3R WASTE Foundation, India

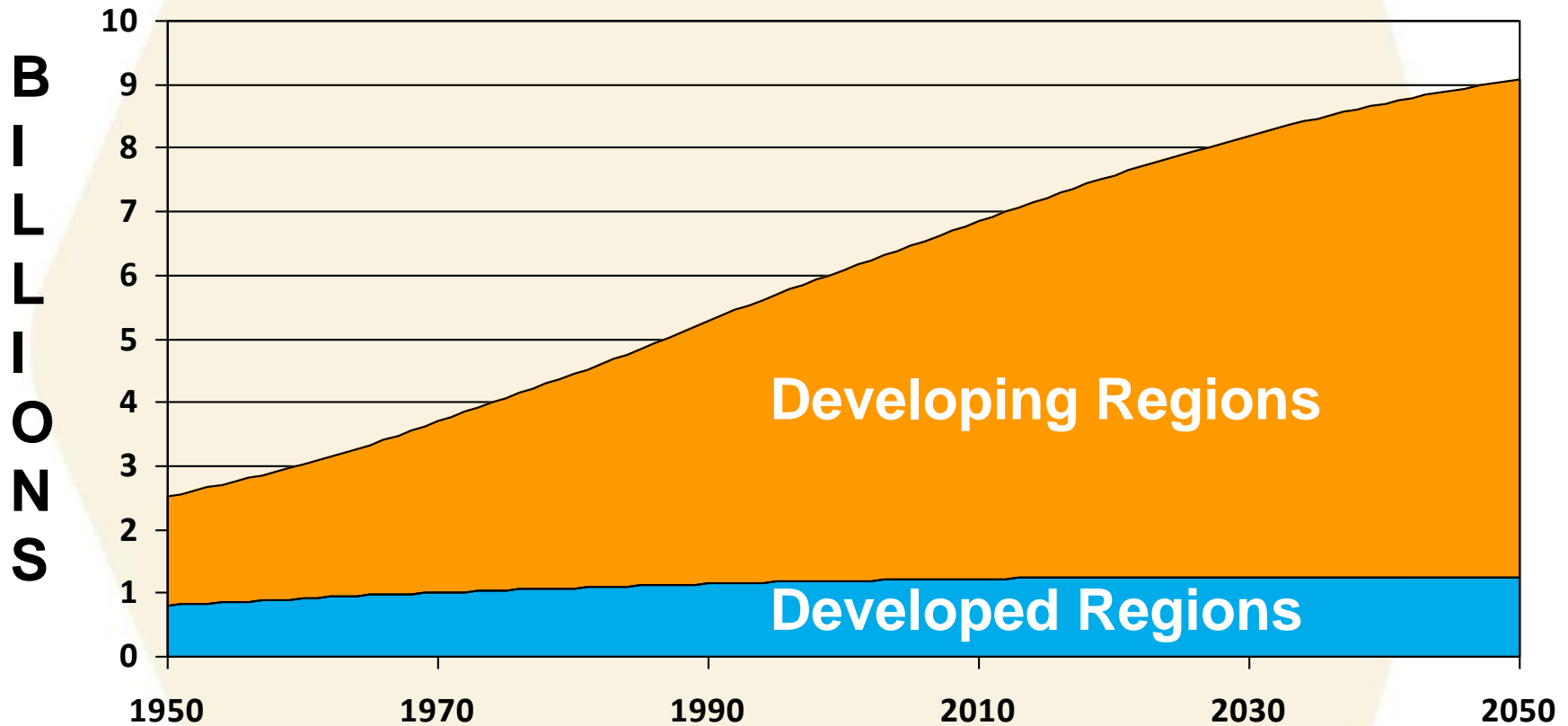


World Population Growth (in billion)

Number of years to add each billion (year)



Urbanization is Growing Really Fast, more than the Population Growth

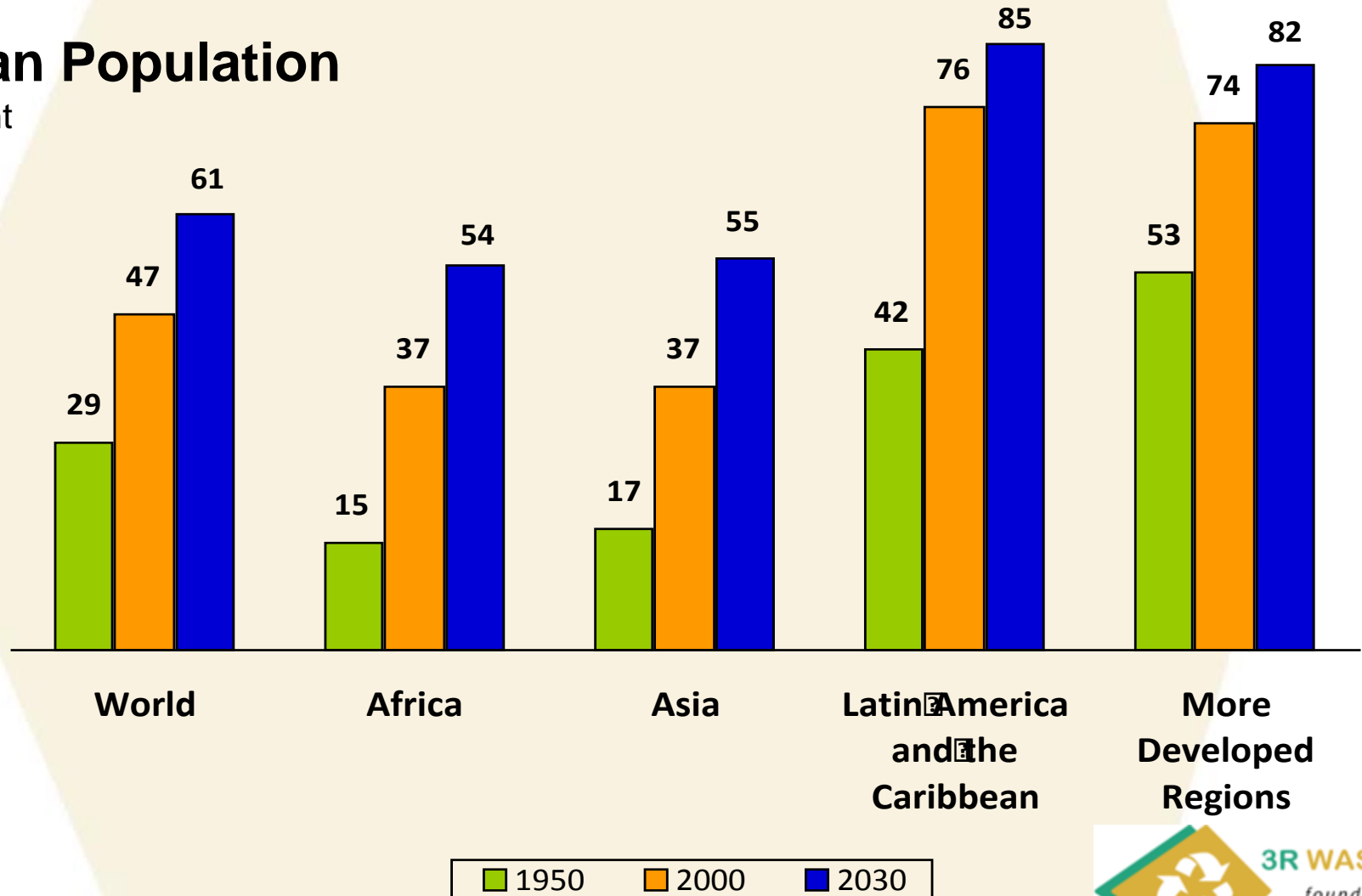


Source: United Nations

Regional Character of Urbanization

Urban Population

Percent

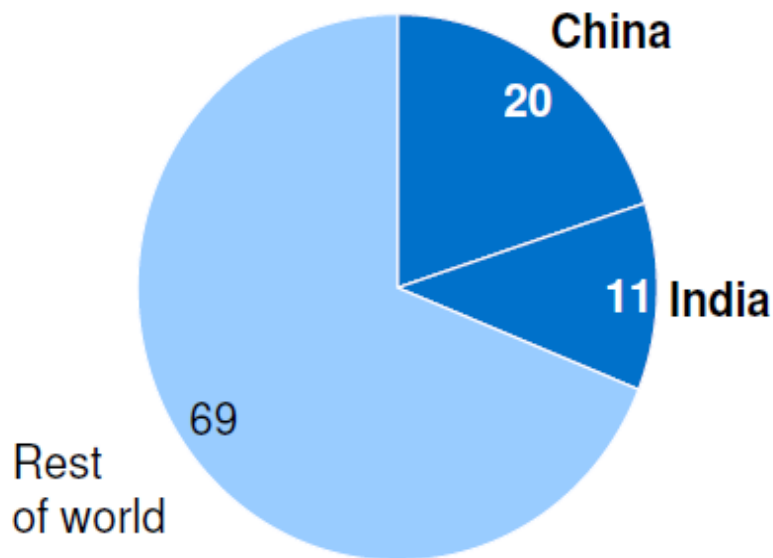


Source: United Nations

Within Asia, China & India will be at the forefront of Urbanization

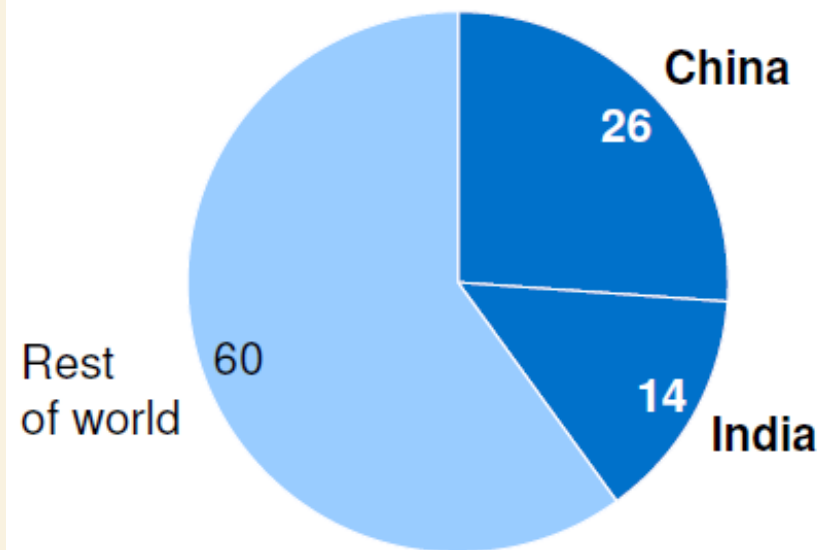
Share of Global Urban Population, 2025 (Percent)

100% = 4.7 billion people



Share of growth of Global Urban Population from 2005 to 2025 (Percent)

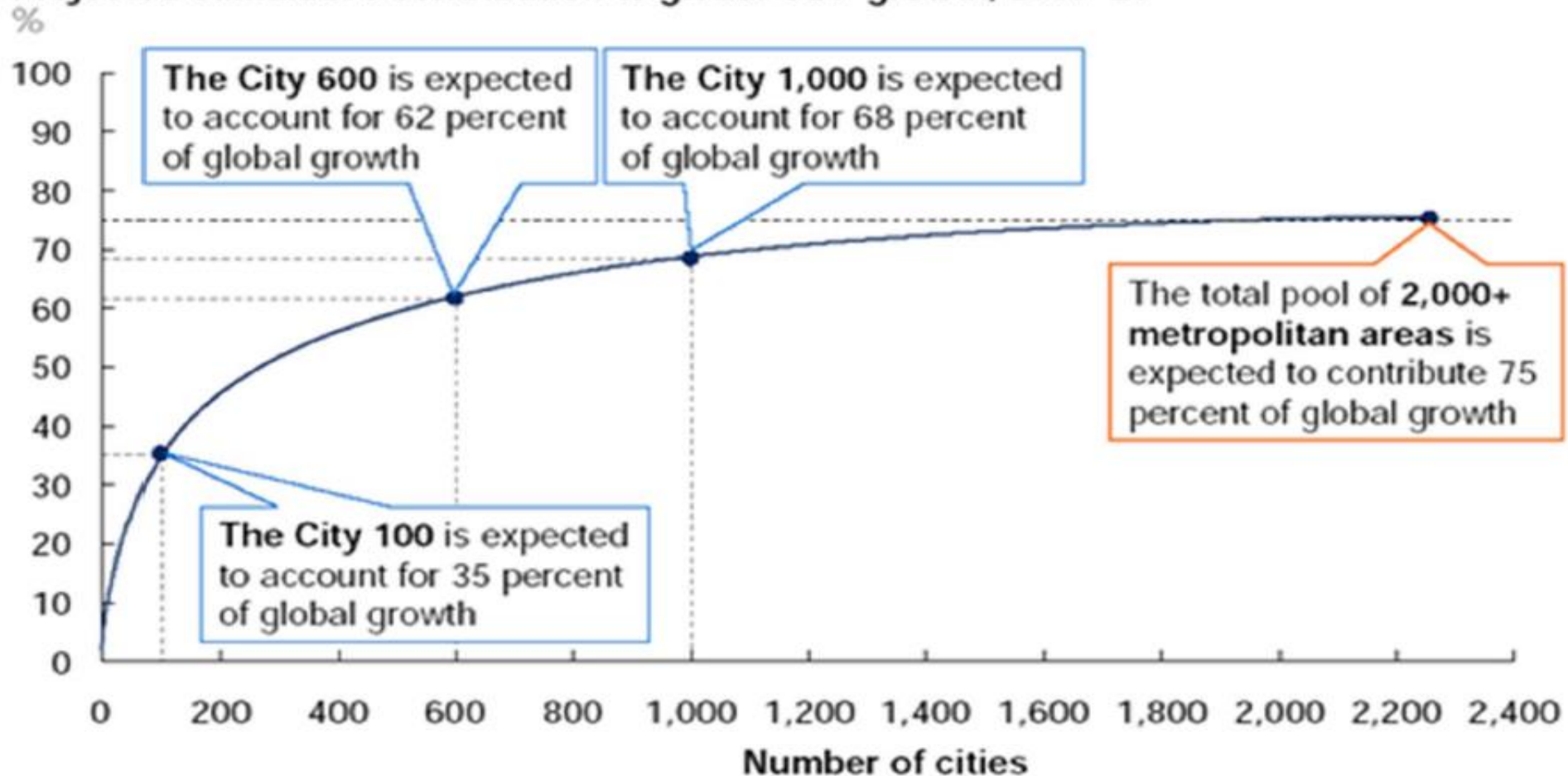
100% = 1.6 billion people



SOURCE: United Nations, World Urbanization Prospects 2007

Cities are becoming more important as Urbanization Intensifies

Projected cumulative contribution to global GDP growth, 2007–25



Nearly 1 billion people living in slums

- Sub-Saharan Africa: 62% of the urban population
- South Asia: 43%
- East Asia: 37%
- Latin America and the Caribbean: 27%

Three concurrent changes with long term and deep impacts:

- Differential Impact of Climate Change
- Differential Impact of Growing and Ageing
- Differential Impact of Urbanization on Economies

Developed World

(More than 30,000 USD per capita)

- **Climate change:** Cities are sources of high level emission of CO₂
- **Demographic Shift:** Aging population Growing cost of old age services
- **Growing inequality:** Growing youth unemployment Financial crisis of the welfare services

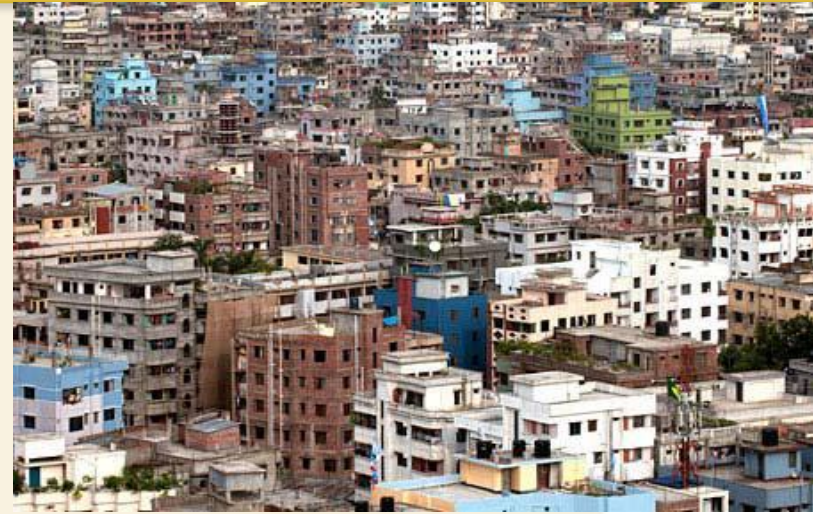
Developing World

(Less than 1,000 USD per capita)

- **Climate change:** Highest impact due to climate change in vulnerable and poor cities (floods, droughts, famines...)
- **Demographic shift:** A growing youth population, potential economic asset but challenging unemployment of urban youth. High rates of urbanization with low level industrialization
- **And endemic urban poverty:** Manifested as slum formation and resort to informal low value economy

Urbanization Trends & Its Impact – Ground Realities & Challenges

- Half of humanity – 3.5 billion people – live in cities today
- By 2030, almost 60 per cent of the world's population will live in urban areas
- 95 per cent of urban expansion in the next decades will take place in developing world
- 828 million people live in slums today and the number keeps rising
- The world's cities occupy just 3 per cent of the Earth's land, but account for 60 - 80 per cent of energy consumption, 75 per cent of carbon emissions, approximately 70% of global GDP, and consume 70% of all resources
- Rapid urbanization is exerting pressure on fresh water supplies, sewage, the living environment, and public health.



Moving Towards a Circular Economy

Source: United Nations 2012 <http://www.un.org/en/sustainablefuture/cities.shtml#overview>

Regional trends in urbanization and sustainable development

- **The Asia-Pacific region is home to more than 2.1 billion urban residents, or 60 per cent of the world's urban population.**
- **The urban transformation experienced by Asia-Pacific region over the past two decades has enhanced regional economic development and improved the lives of many urban residents.**
- **Urban transition is however still incomplete and remains fundamentally unsustainable.**
- **Despite growing economies providing greater opportunity, basic living conditions still remain unmet for millions of people in the region's cities, and environmental consequences increasingly severe. Persisting challenges of climate change and vulnerability to disasters.**

Sustainable Development Goals - a Framework for Transformative Change

1 NO POVERTY



2 NO HUNGER



3 GOOD HEALTH



4 QUALITY EDUCATION



5 GENDER EQUALITY



6 CLEAN WATER AND SANITATION



7 RENEWABLE ENERGY



8 GOOD JOBS AND ECONOMIC GROWTH



9 INNOVATION AND INFRASTRUCTURE



10 REDUCED INEQUALITIES



11 SUSTAINABLE CITIES AND COMMUNITIES



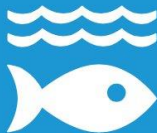
12 RESPONSIBLE CONSUMPTION



13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



16 PEACE AND JUSTICE



17 PARTNERSHIPS FOR THE GOALS



THE GLOBAL GOALS
For Sustainable Development

The 2030 Agenda for Sustainable Development

- **2030 Agenda coupled with the New Urban Agenda provides countries with a framework and global road map for promoting sustainable urbanization.**
- **Local Actions required for implementation of Sustainable Development Goals and targets as well as New Urban Agenda.**

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

- 11.1** By 2030, ensure universal access to adequate and affordable housing and basic services for all, and eliminate slum-like conditions everywhere
- 11.2** By 2030, provide access to safe, affordable, accessible and sustainable transport for all, expand public transport and improve road safety
- 11.3** Enhance capacities for integrated and sustainable human settlement planning and management for all, particularly developing countries
- 11.4** Strengthen positive economic and social links between cities and peri-urban and rural areas
- 11.5** By 2030, reduce the environmental impacts of cities and improve the quality of environment in cities
- 11.6** By 2020, increase by x% the number of human settlements adopting and implementing policies and plans towards resilience and adaptation to climate change and natural disasters
- 11.7** Enhance social cohesion and personal security, and ensure universal access to inclusive and safe public spaces
- 11.8** By 2030 ensure that all cities are accessible and offer opportunities to persons with disabilities
- 11.9** Protect and safeguard the world's cultural and natural heritage

New Urban Agenda for Sustainable Urbanisation: Five Main Pillars

- Well-planned and well-managed, urbanization a powerful tool for sustainable development for both developing and developed countries.
- Five main pillars of NUA implementation: National urban policies, Urban legislation and regulations, Urban planning and design, Local economy and municipal finance, and Local implementation.

NEW URBAN AGENDA :

Sustainable Urban Planning & Design

- Better Planning & Design with optimal density and diversity
- Plan in advance and to scale of expected growth
- Plan to start with basic streets, water, sanitation networks, energy supply, urban mobility and other services;
- Avoid risky developments on steep slopes, water beds and earthquake prone zones

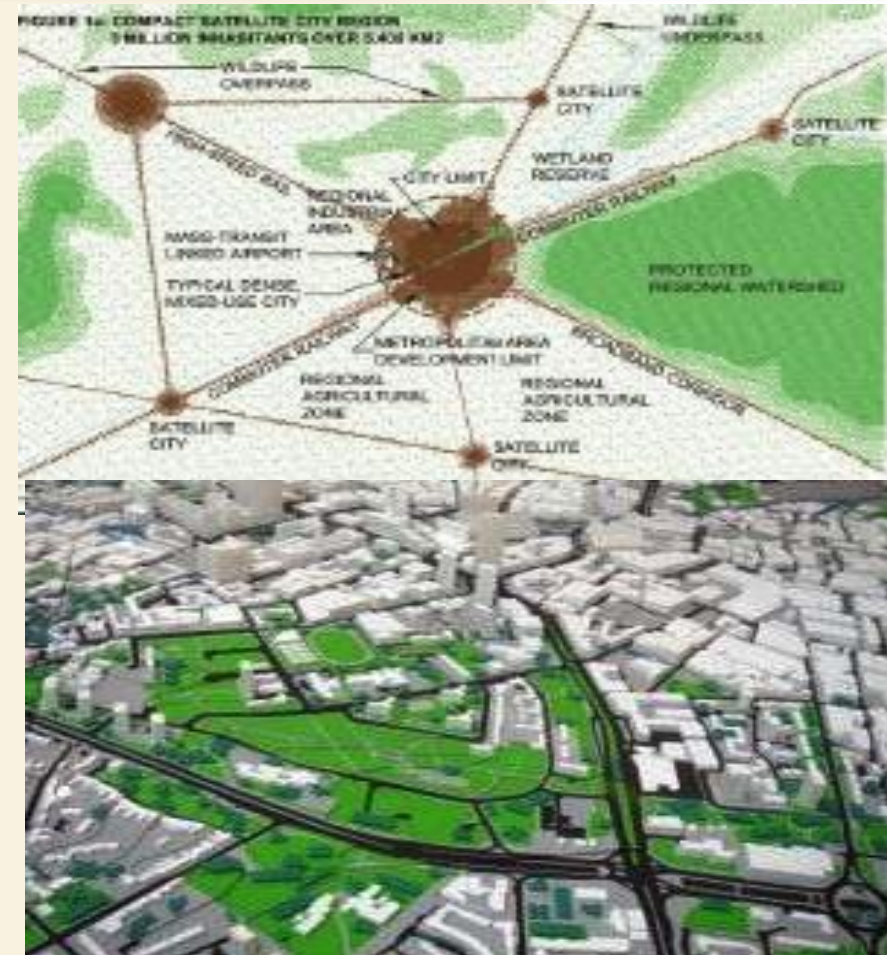
NEW URBAN AGENDA

Promoting Urban Economy

- **Economies of Urbanization:** Economical value generated by location and proximity to urban services and common goods.
- **Economies of Agglomeration:** Economical value generated by the proximity and diversity of factors of production, diminishing transaction costs, favoring specialization. Massive increase of productivity

New Urban Agenda 21st Century Developed World:

- Revitalization of the urban fabric
- Well-designed compactness
- Affordability of the city
- Containment of the edges
- Integrated regional planning
- Mixed Land uses
- Infrastructure adaptation to the needs of the people and the plan (not the other way around)



New Urban Agenda 21st Century Developed World

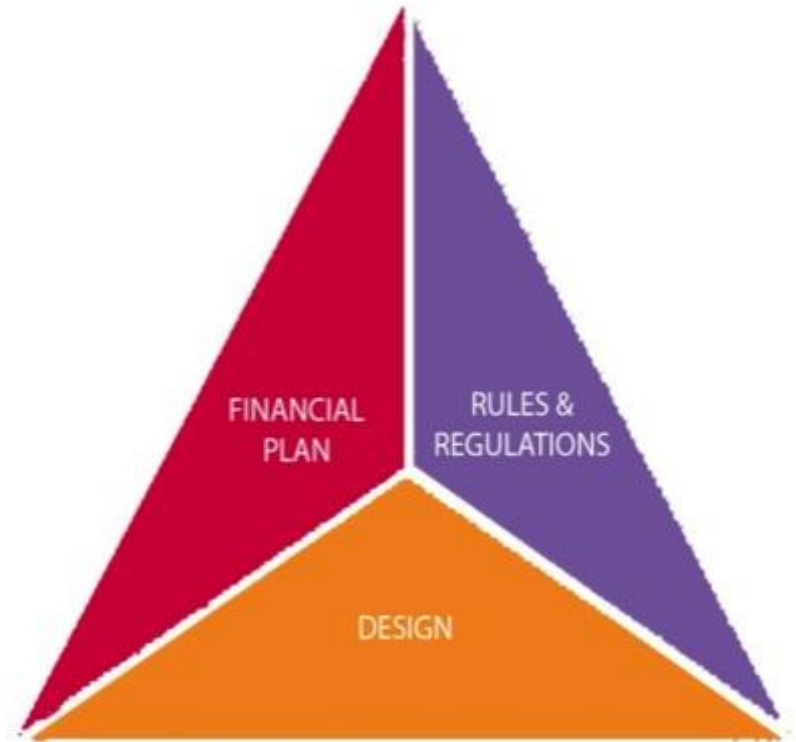
- Urban affordability policies
- Addressing the challenge of climate change
- Renewable energy

Energy efficiency

- Walkability
 - Proximity of sources of food
 - Adequate technology
- Identifying new urban sources of prosperity and well-being

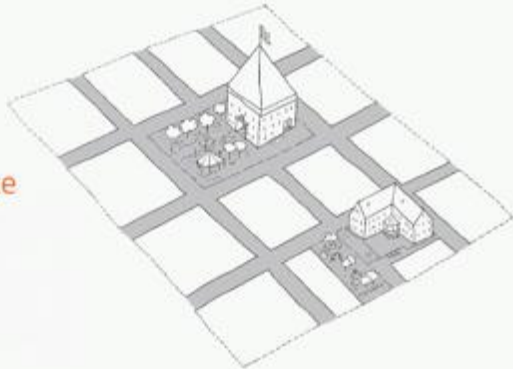


- **National Urban Policies**
- **Planned City Extensions and City Infills**
- **Three-legged approach**
- **Urban affordability policies**
- **Design to obtain economies of agglomeration and economies of urbanization**
- Urbanization to eradicate poverty and promote development

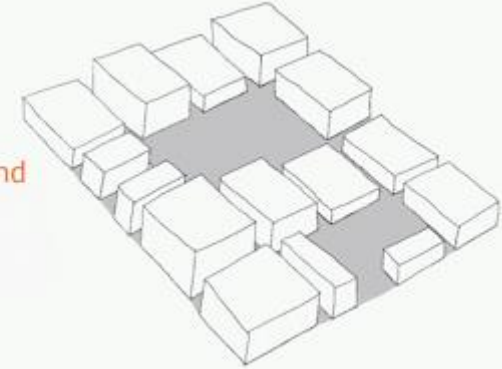


Urban Design – Back to Basics for Efficient Land Use

Public Space



Buildable Land



The City



The **essence of urbanization** is the proper design of public spaces and the provision of well-structured buildable plots.

Resource Efficiency is not Business-As-Usual: ...Which Development Path to follow?

One-Way Economy



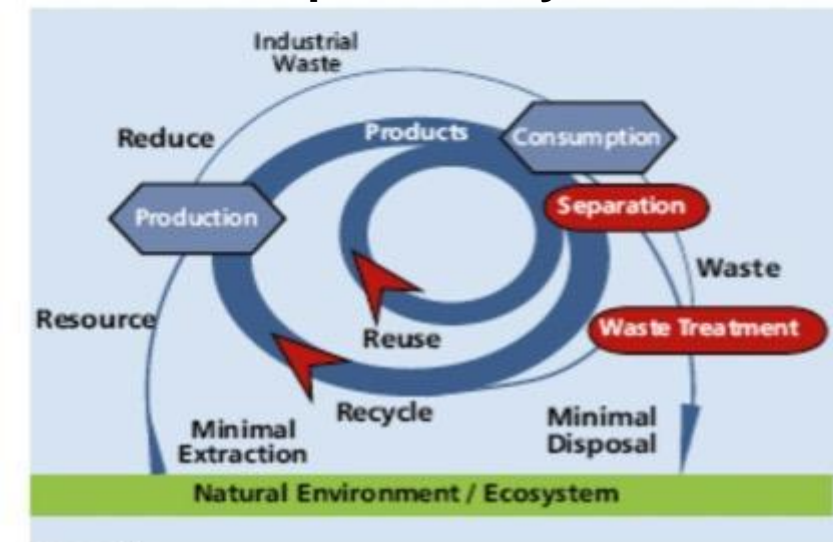
Source: ADB.



More Resource Efficient Economy

Source: ADB.

Closed -Loop Economy



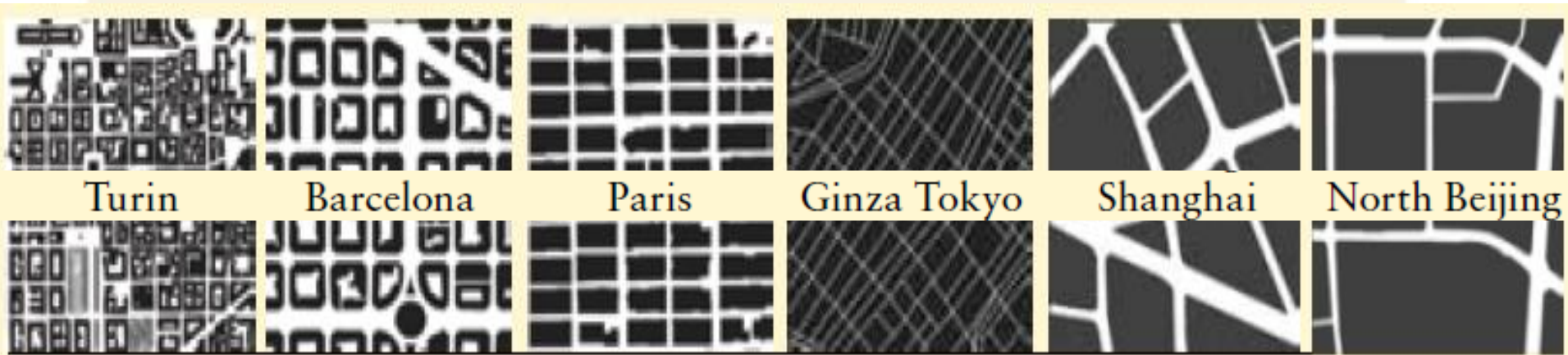
Source: ADB.

Resource Efficiency => Minimize per unit product or services

- Raw material input
- Water input
- Energy input
- Emission, pollution, waste generation

...Good Urbanization can only come out of proper dialogue between National & Local Government

- While **local governments** carry a great deal of responsibility, they often have limited power. They can do little without support and resources from their national governments
- **National governments** have the greatest responsibility for the end-quality of urbanization. They establish the legal, and financial frameworks, as well as large infrastructures, and the broad national policies in security, social welfare (redistribution) and regional policies.



The Role of National Governments

- **Many fundamental issues are decided at national level:**
 - **Degree of decentralization**
 - **Responsibilities of every level of government**
 - **Coordination between subnational levels**
 - **Structure of financing of the different levels of administration**
 - **Determination of the public debt capacity**
 - **Urban legislation**

For proper urbanization to occur, an effective and relevant **National Urban Policy** is as necessary as **good urban planning and design** at local level.

The Indispensable role of LOCAL GOVERNMENTS, but.....



Sustainable Agenda 2030 and New Urban Agenda Commitments – Role of 3R

- Promoting the conservation and sustainable use of water by rehabilitating water resources
- Reducing and treating wastewater, minimizing water losses,
- Promoting water reuse and increasing water storage, retention and recharge, taking into consideration the water cycle

Sustainable Agenda 2030 and New Urban Agenda Commitments – Role of 3R

- Promoting environmentally sound waste management
- Substantially reducing waste generation by reducing, reusing and recycling waste,
- Minimizing landfills and converting waste to energy when waste cannot be recycled or when this choice delivers the best environmental outcome.
- Reducing marine pollution through improved waste and wastewater management in coastal areas.

Sustainable Agenda 2030 and New Urban Agenda Commitments – Role of 3R

- Making sustainable use of natural resources
- Focusing on the resource efficiency of raw and construction materials such as concrete, metals, wood, minerals and land.
- Establishing safe material recovery and recycling facilities,
- Promoting the development of sustainable and resilient buildings and prioritizing the use of local, non-toxic and recycled materials