Integrating the three dimensions of sustainable development
From policy to practice: The Urban Nexus
‘the struggle for global sustainability will be won or lost in cities’

‘As the world charts a more sustainable future, the crucial interplay among water, food and energy is one of the most formidable challenges that we face’

Ban Ki-Moon, UN Secretary-General
As population grows, pressures mount

And the relationships between food, water, and energy supplies become critical

Because of growth in global population and the consumption patterns of an expanding middle class, in less than two decades three key demands will sharply increase:

1. Increased Urbanization
2. Population Increase
3. Demands of Larger Middle Class

- Energy-intensive desalination efforts use energy to produce drinkable water
- Demand for food +35%
- Demand for energy +50%
- Demand for fresh water +40%
- Food production requires water
- Food production requires energy to plant and harvest
- Crops are being converted into biofuels in some countries
Impact of cities at the global level

- Occupy 3% of land space
- Produce 50% of waste
- Account for 60-80% of GHG emissions
- Consume 75% of natural resources
- Produce 80% of GDP
Asia-Pacific has traditionally been rural, but its future is urban.
Asia-Pacific’s urbanization: Megacities & secondary cities

• Most of the world’s megacities are in Asia-Pacific. This trend will continue in the next decade
  - 2011: 13 out of 23  ➞  2025: 22 out of 27

• However, highest growth in secondary cities
  - Between 2010-2025: 460m in secondary cities
    270m in megacities

• Their development will largely shape the region’s urban future: a reorientation of research & policy attention

• On the frontlines of new urban agendas: innovations & policy initiatives at scale

• Great opportunity to adopt a nexus approach because the infrastructure has not yet been built
Patterns of Urban Development: Spatial

- Urban growth patterns in Asia-Pacific ‘radiate-out’ & ‘regionalize’ rather than concentrate

- Cities → megacities → mega-urban regions

- Examples:
  - Mumbai Municipal Region 21m over 4,355 sq km most vulnerable city in world in exposure to coastal flood hazard;
  - JABODETABEK 28m over 6,372 sq km encompasses 13 river systems
Urban Expansion Into Resource Hinterlands

- The ‘resource map’ of cities illustrates increasing reach & impact.
- Cities are consumers of resources and sources of waste and are vulnerable to this unsustainable pattern.
- Continued degradation of ecosystem services through an exploitation model.
- This necessitates changing paradigms from exploitation to investment and toward an integrated framework of thinking, planning & acting.
Managing Cities – A changing paradigm

- Cities now transcend their administrative, institutional and regulatory boundaries

- But resource demand – water, energy, and food sectors – are rarely considered through a ‘policy nexus’

- Working in silos – disconnected approaches and sectoral thinking results in planning gaps

An Urban Nexus

Society
Ensuring equitable development and access

Economy
Shifting from “brown” to “green” economy models

Environment
Moving from exploitation of ecosystems services to their sustainable management

Finance

Governance
Enabling factors/incentives

Innovation

To promote:
Water/energy/food security for all
Equitable, resilient & sustainable urban development
Sustainable ecosystem services

Urbanization  Population growth  Climate change

ESCAP, adapted from: Hoff, 2011
An urban nexus in action

- Moving from sectoral to holistic frameworks: from fragmentation to integration through innovation
- Balancing decentralization and local level fragmentation with national & regional planning: getting the institutional relationships right
- From competitive to collaborative governance
- Integrated sustainable development requires financing to match action: the right enabling factors/incentives
- Planning to meet current and projected resource needs requires data and transparency in decision-making
- Commitments to equity & access underpin social dimensions

Source: The SymbioCity Approach
Towards sustainable cities

Economically productive and equitable

Effective governance & institutional arrangements

Environmentally sustainable/Resilient to natural disasters

Inclusive & livable cities of opportunity
Towards a new urban agenda

Urban nexus relevant to the Post-2015 Development Agenda – Sustainable Development Goals – including goal 11

Urban nexus relevant for the New Urban Agenda to be adopted at the United Nations Conference on Housing and Sustainable Development - Habitat III
Towards a new urban agenda in Asia-Pacific

- The High-level regional preparatory meeting to Habitat III in Asia and the Pacific, hosted by Indonesia, Jakarta, 22-23 October 2015
- The sixth Asia-Pacific Urban Forum, to be held back-to-back, Jakarta, 19-21 October 2015
- The Regional Report, which will reflect ongoing analysis and the substantive outcomes of the above meetings
- The third session of the preparatory committee for Habitat III, to be hosted by Indonesia in July 2016
- ESCAPs regional role underpinned by ESCAP Resolution 70/12 ‘Strengthening efforts on human settlements and sustainable human development for the Asia-Pacific region’
Thank you for the attention!

Urban Development

By 2020, the urban population of the Asia-Pacific region is expected to surpass 50 percent, and in 2050 it is estimated that over 3 billion people will live in the region’s urban areas.

Learn More

HIGHLIGHTS

PUBLICATIONS

Quick Guide for Policy Makers on Pro-poor Urban Climate Resilience in Asia and the Pacific

11 Feb 2015

Download

More Publications

Integrated Resource Management in Asian Cities: The Urban Nexus

http://www.unescap.org/our-work/environment-development/urban-development/urban-nexus