

URBANIZATION, WATER and SANITATION ISSUES in SOUTH and SOUTH-WEST ASIA (SSWA) in the CONTEXT of 2030 AGENDA for SUSTAINABLE DEVELOPMENT



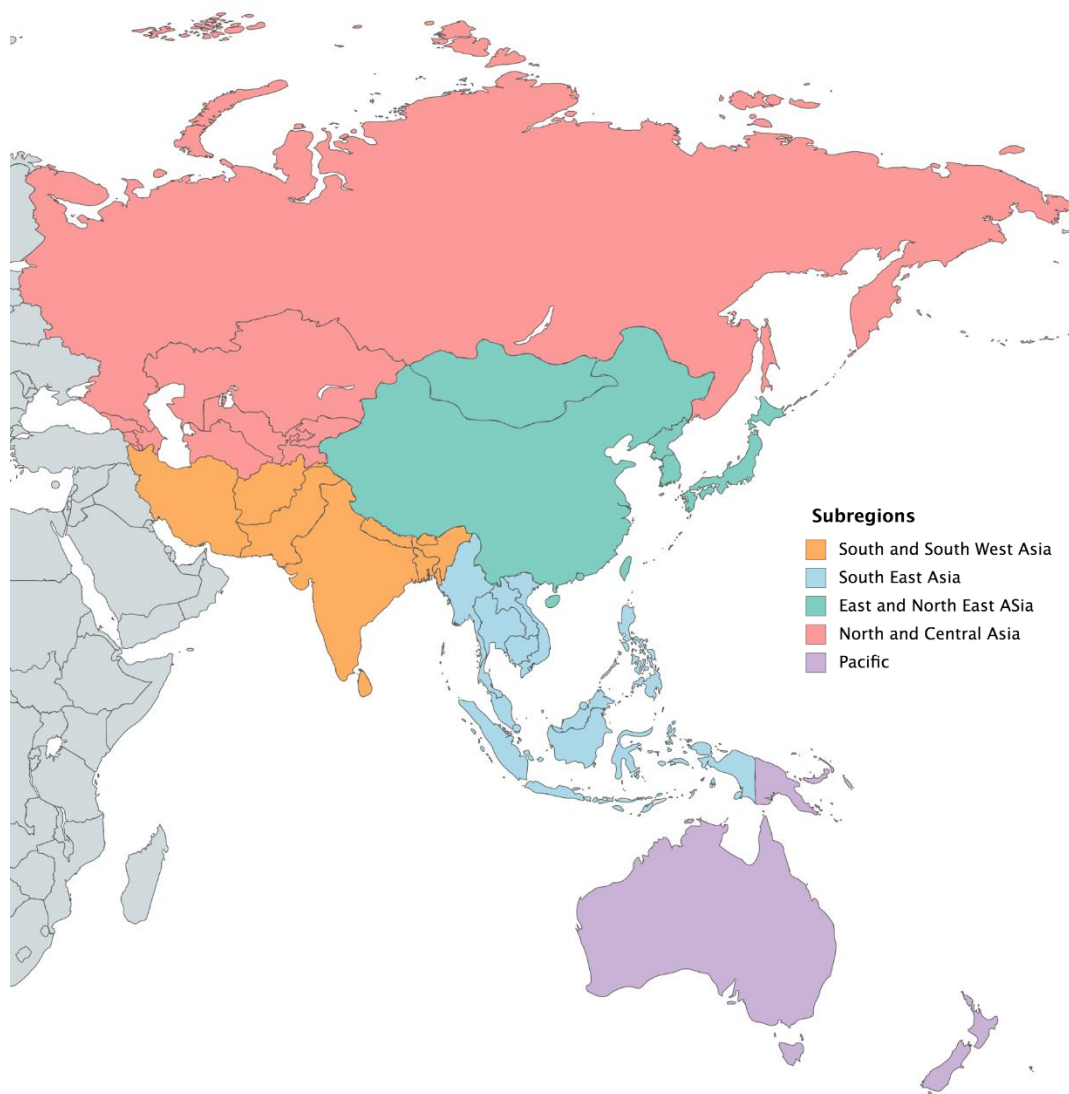
Sub-regional Workshop on Urban Water and Sanitation Services in South & South-West Asia

Organized by: MoUD, MoWSS, KVDA and UNESCAP

Kathmandu, Nepal

9-10 August 2017

ESCAP Sub-regions



Sustainable Development Goals of 2030 Agenda (2015)

The 2030 Agenda for Sustainable Development comprises **17 Sustainable Development Goals (SDGs)** across a range or sectors, supported by 169 targets to guide and assess implementation.



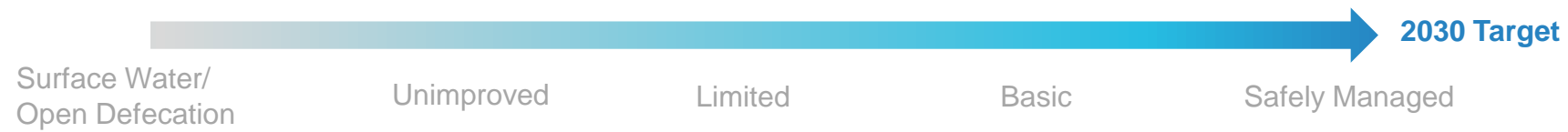
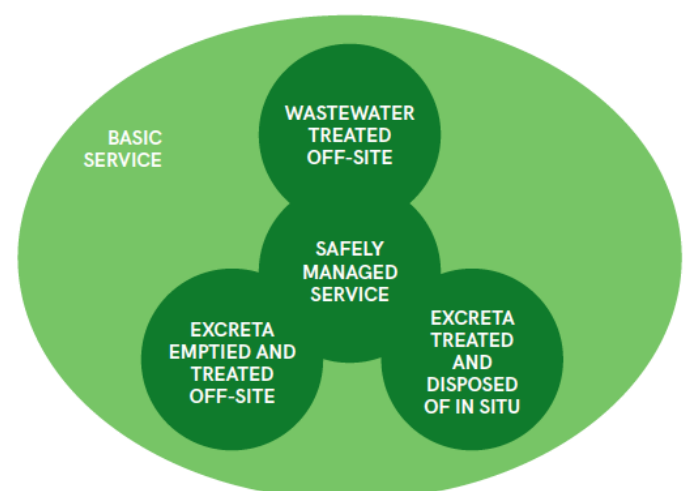
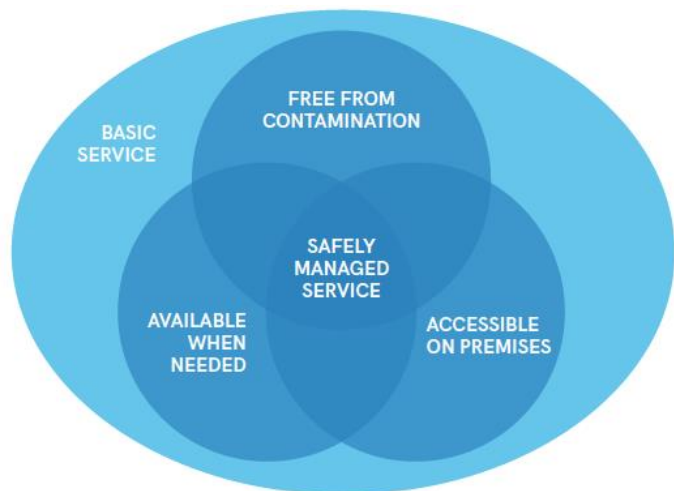
For details, please visit at <https://sustainabledevelopment.un.org/sdgs>

Sustainable Urban Development (SDG 6)

6 CLEAN WATER AND SANITATION



Targets and Indicators



Sustainable Urban Development (SDG 11)

11 SUSTAINABLE CITIES AND COMMUNITIES



Targets and Indicators

Housing
& basic services



Transportation



Participatory
Planning



Preserving
Heritage



Natural Disaster
Resilience



Reduced
Environmental
Impact



Public
Green Spaces



Regional
Land Use
Planning



Climate Change
Resilience



Support
LDC

Relationship between SDG 6 and SDG 11

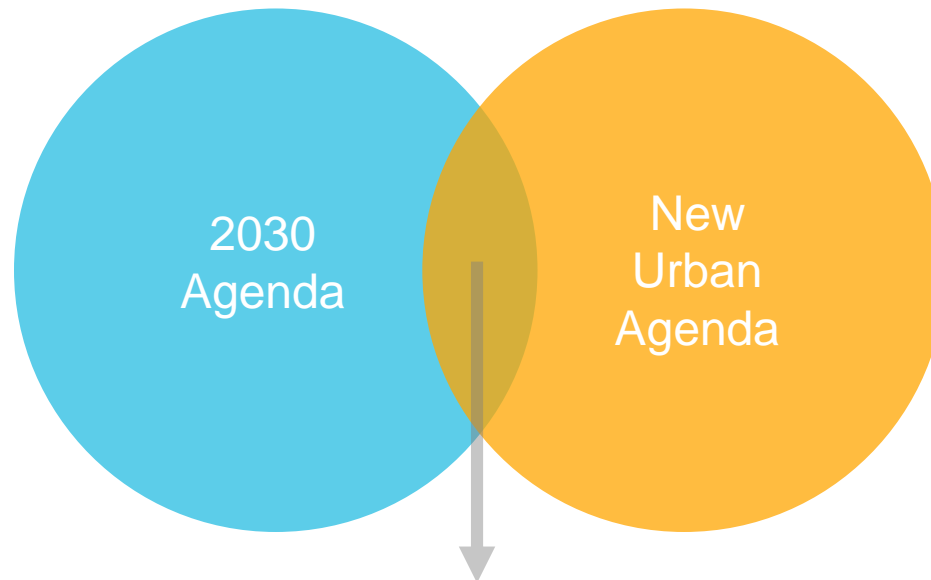
Inefficient infrastructure or insufficient environmental management
leads to less inclusive and resilient cities



Increasing urbanization leads to increased natural
resource consumption and increased strain on infrastructure

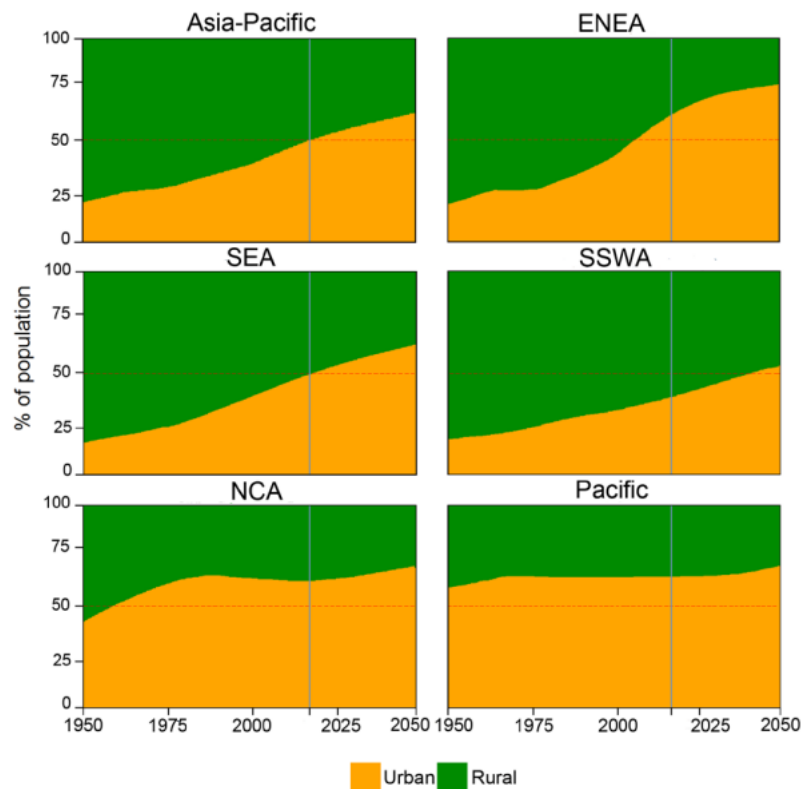
New Urban Agenda (2016)

The New Urban Agenda (NUA) is a roadmap for building cities that can serve as engines of prosperity and centres of cultural and social well-being while protecting the environment.



Cleaner, resilient, inclusive cities that provide basic services to all citizens through improved urban rules, regulations, planning, design, and finance.

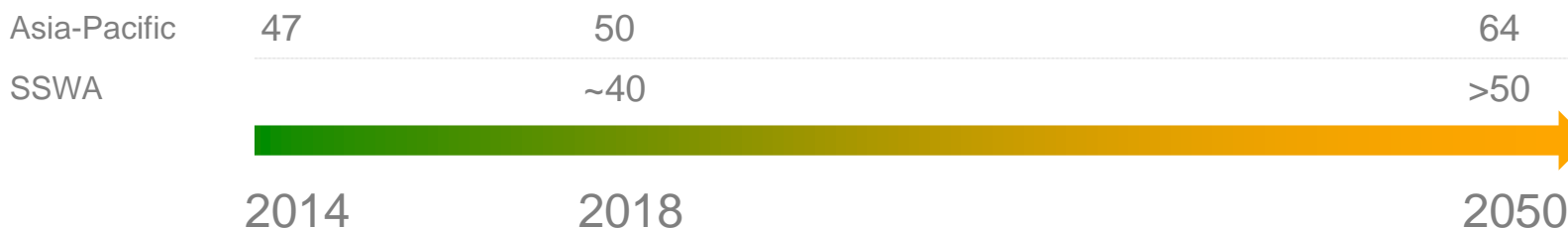
Regional Trends: Urbanization



- **3.6 million** people arrive in Asia-Pacific's cities **every month (1.5% annual growth)**
- Growth rates are highest in **peri-urban areas**
- **Smaller cities** occupy larger share of urban population (**54%**)

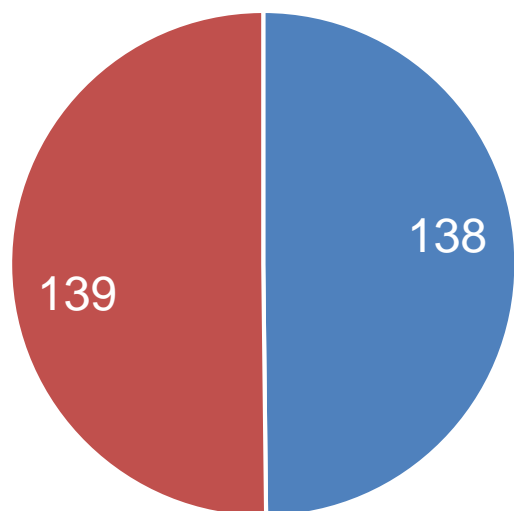
Source: *UNESCAP Statistical Yearbook for Asia and the Pacific, 2015*

Urban Population (% of Total)



Regional Trends: Safe Drinking Water and Sanitation

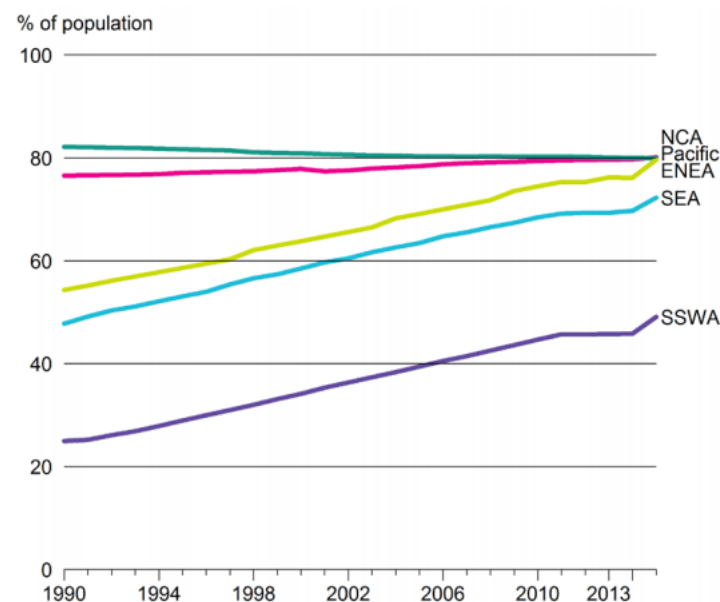
Population (Millions) Lacking Access to Safe Drinking Water



■ SSWA ■ Other Subregions

277 million people in Asia-Pacific lack access to safe drinking water.
50% of these people live in South and South-West Asia

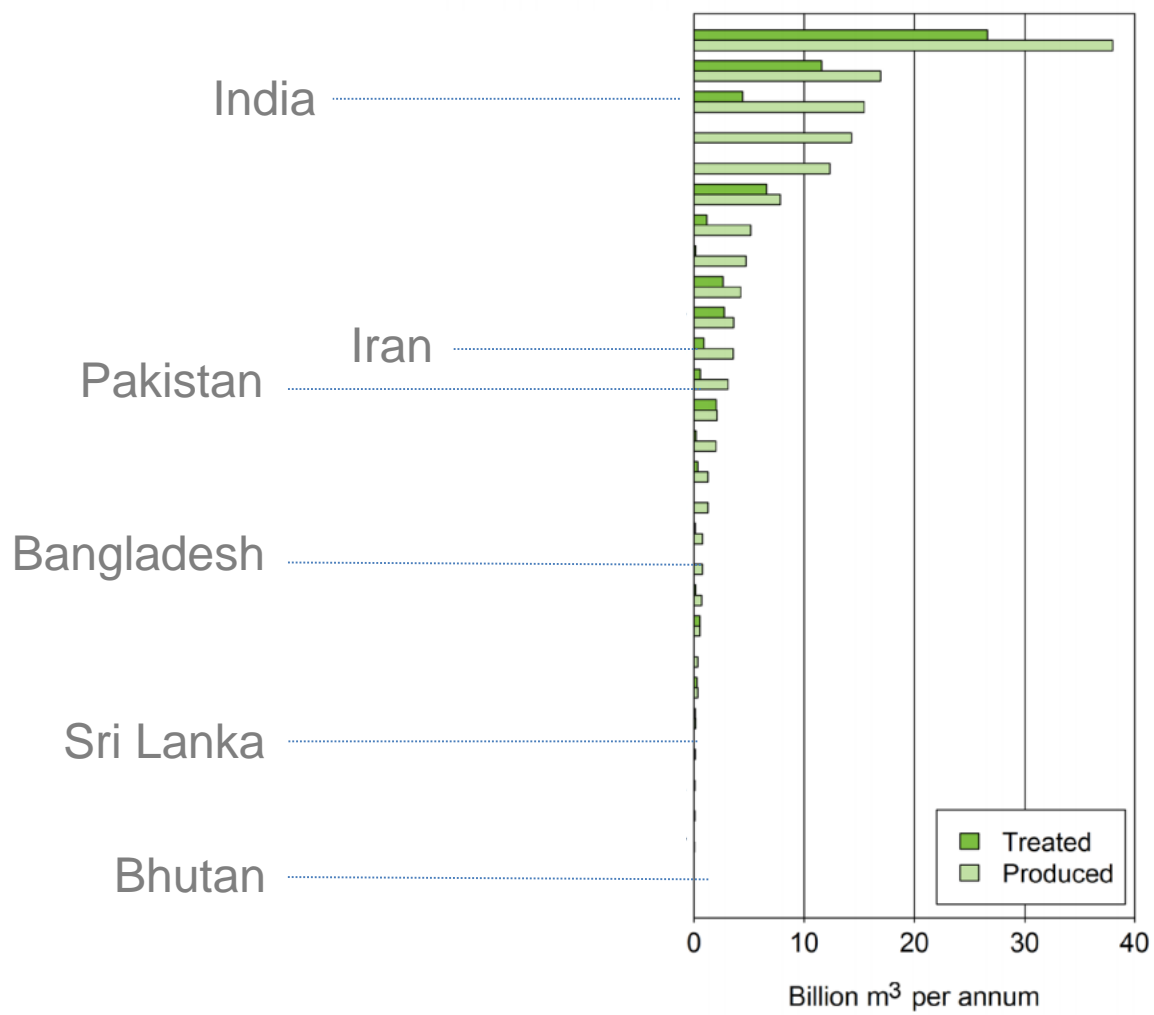
Sanitation Coverage (%) in Asia-Pacific Subregions, 1990-2015



In 2015, **50%** of people in South and South-West Asia still lacked access to basic sanitation



Regional Trends: Wastewater Treatment



Municipal
Wastewater
Production
And Treatment

80-85% of all
wastewater
generated in
developing countries
is discharged directly
into surface water
bodies without any
treatment



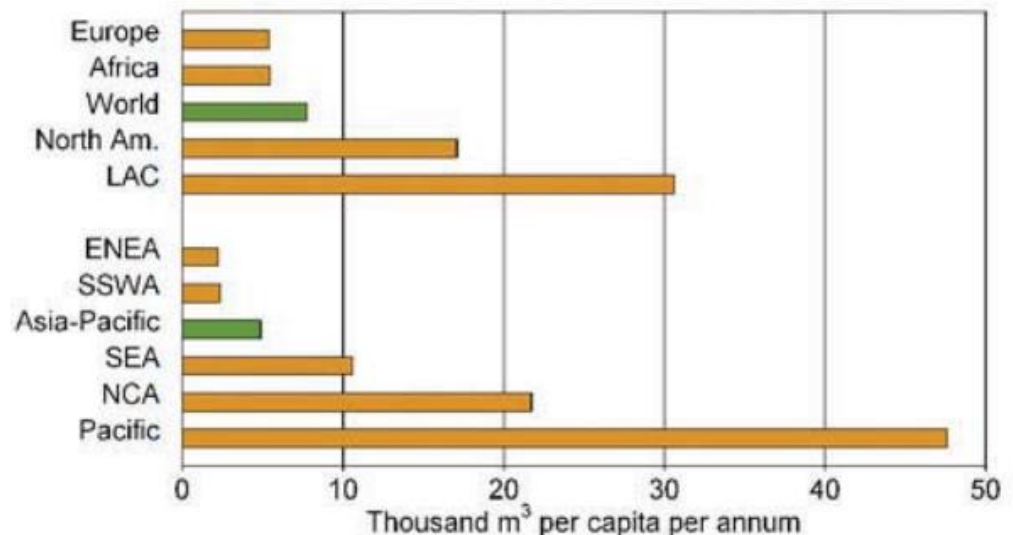
Regional Trends: Water Availability

Total water resources = Surface water + Groundwater + Soil moisture

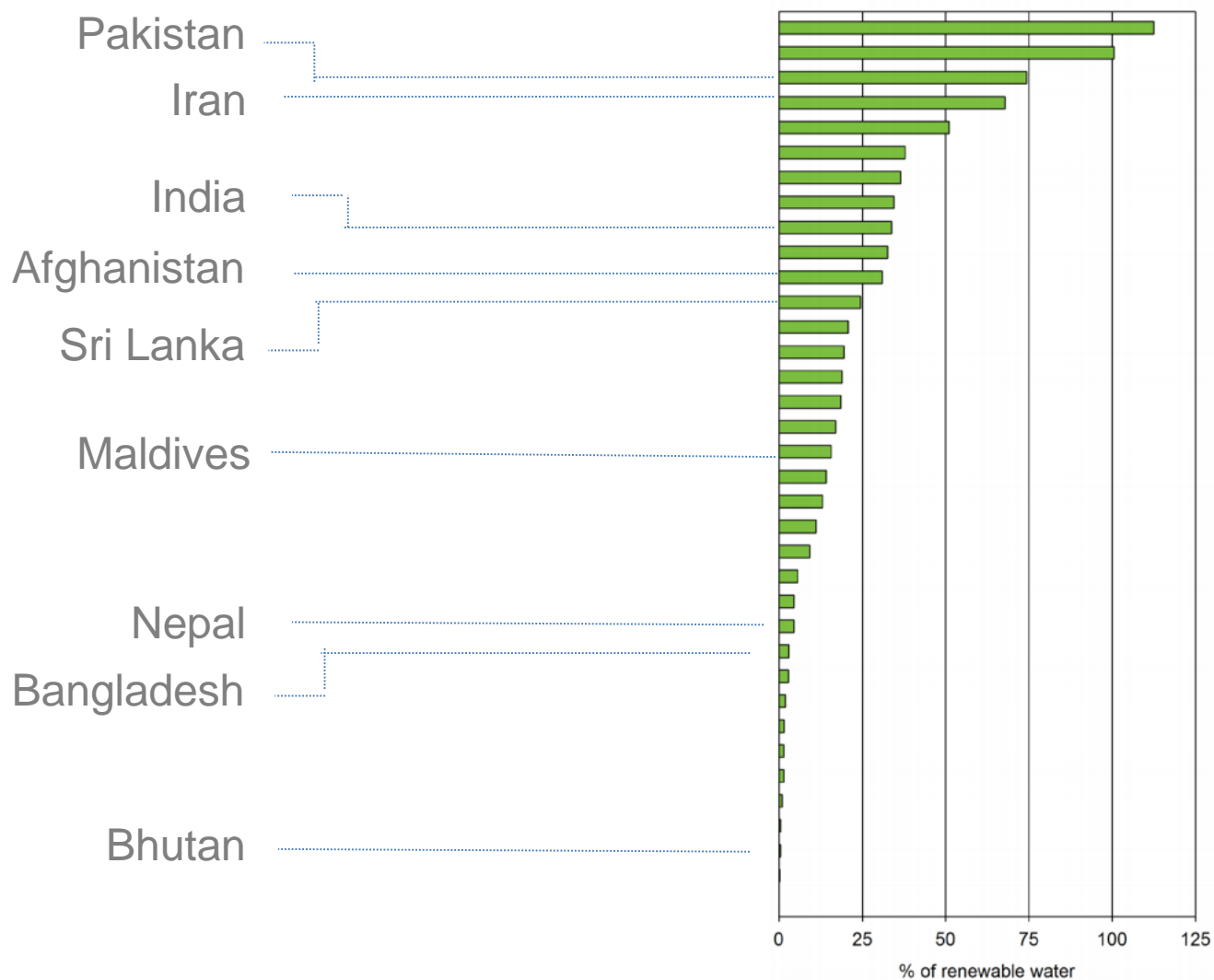
Groundwater withdrawals in many countries **exceed safe yields**.

Excessive extraction impacts water security and is vulnerable to **earthquakes and droughts**.

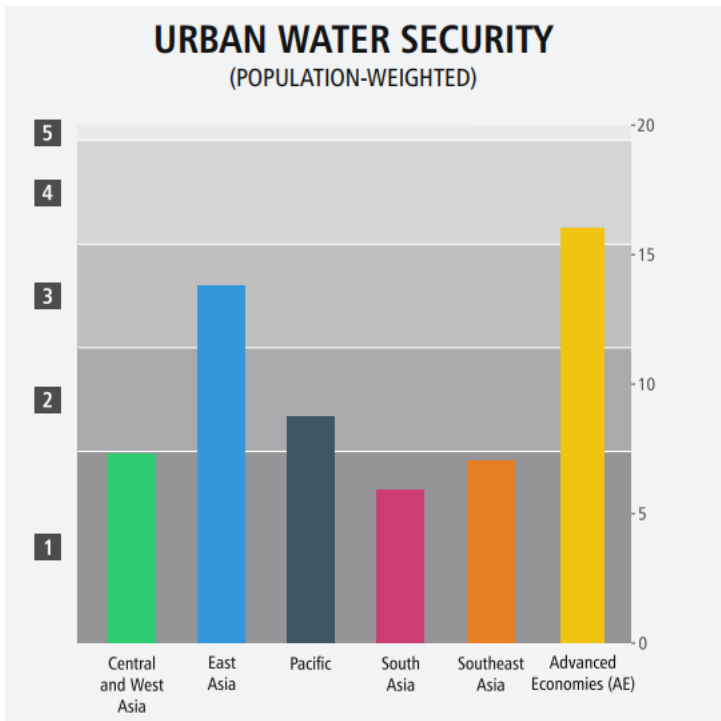
Annual per capita availability of water resources, world regions and Asia-Pacific Subregions, 2011



Regional Trends: Freshwater Withdrawal



Regional Trends: Urban Water Security



1

Access to piped urban water supply (% population)

2

Economic damage due to floods and storms (% GDP)

3

Urban wastewater collected (% population)

4

River health (taken from KD4)

Regional Trends: Urban Water Security

Figure 22: Piped Water Supply

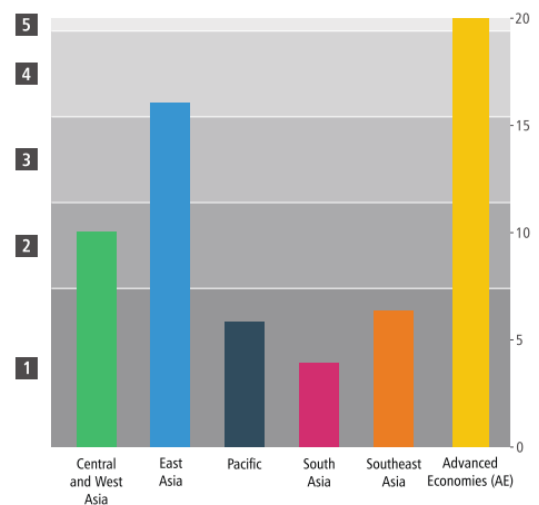


Figure 23: Wastewater Treatment

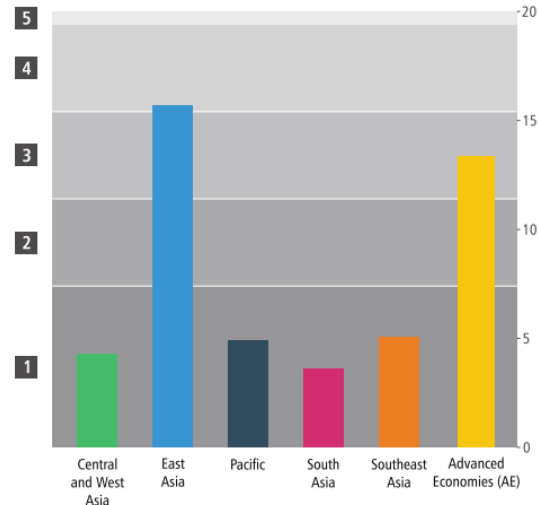
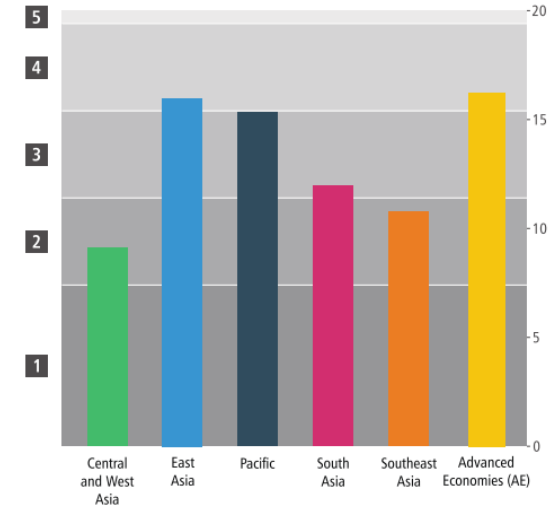


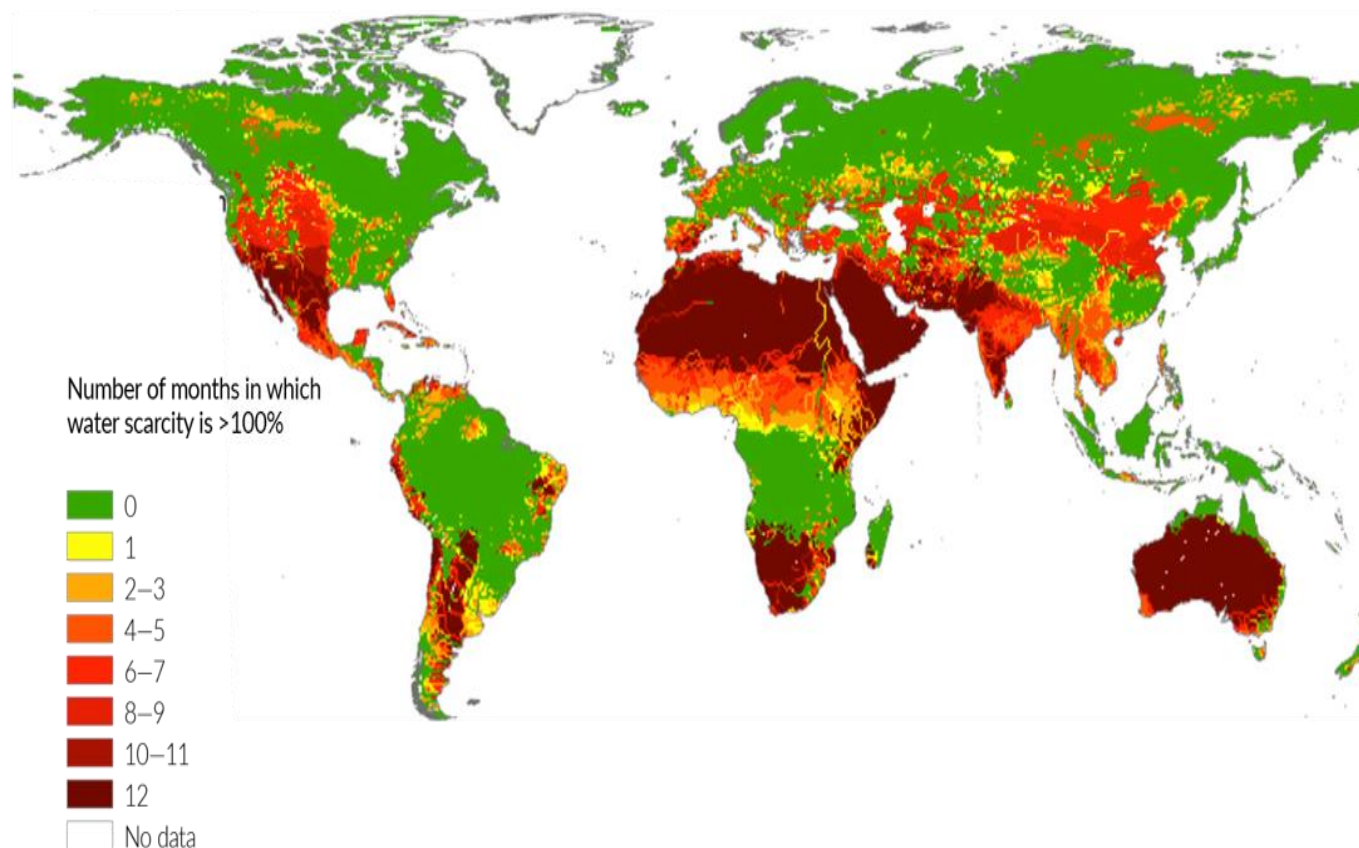
Figure 24: Drainage



Challenges

Increasing Water Scarcity

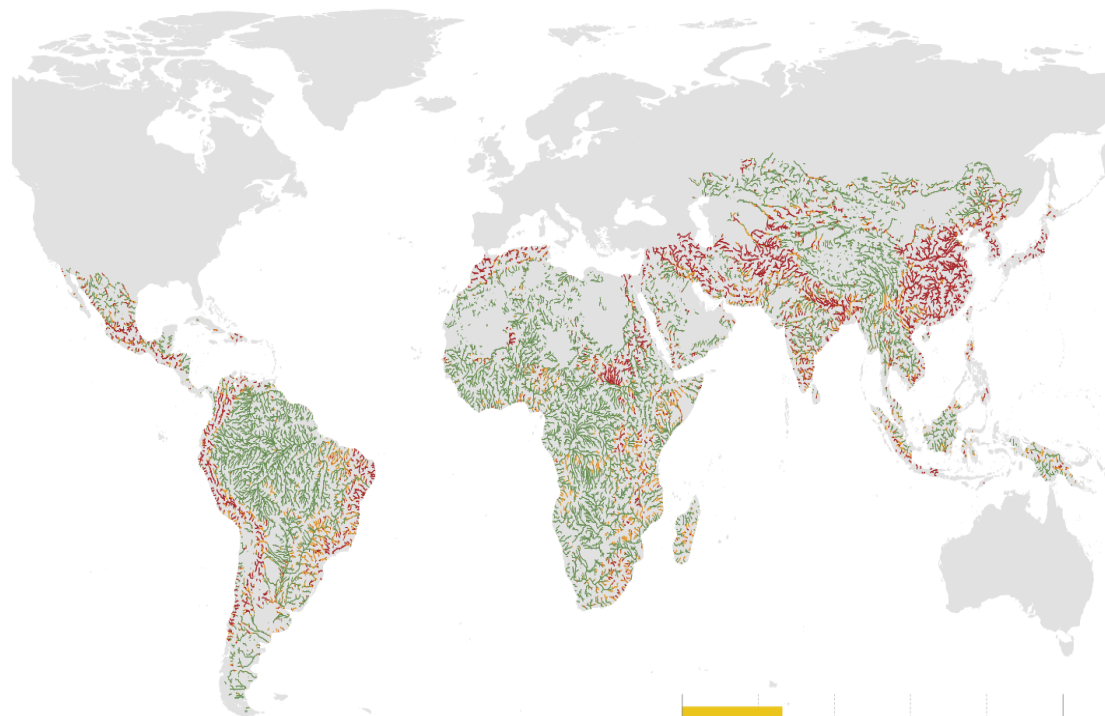
Two thirds of the world's population currently live in areas that experience water scarcity for at least one month a year



Challenges

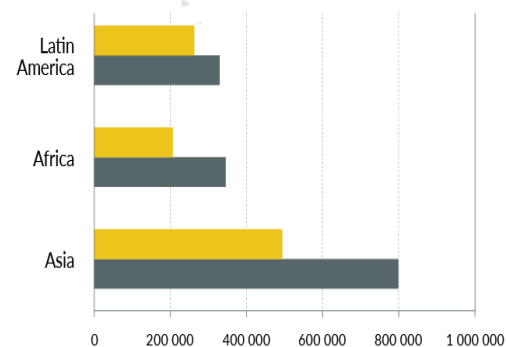
Degradation Of Water Quality

Severe pathogen pollution affects around one-third of all river stretches in Latin America, Africa and Asia, putting the health of millions of people at risk



February 2008-2010
FC [cfu/100ml]

- Not computed
- Low pollution (=200)
- Moderate pollution ($200 < x = 1000$)
- Severe pollution (> 1000)

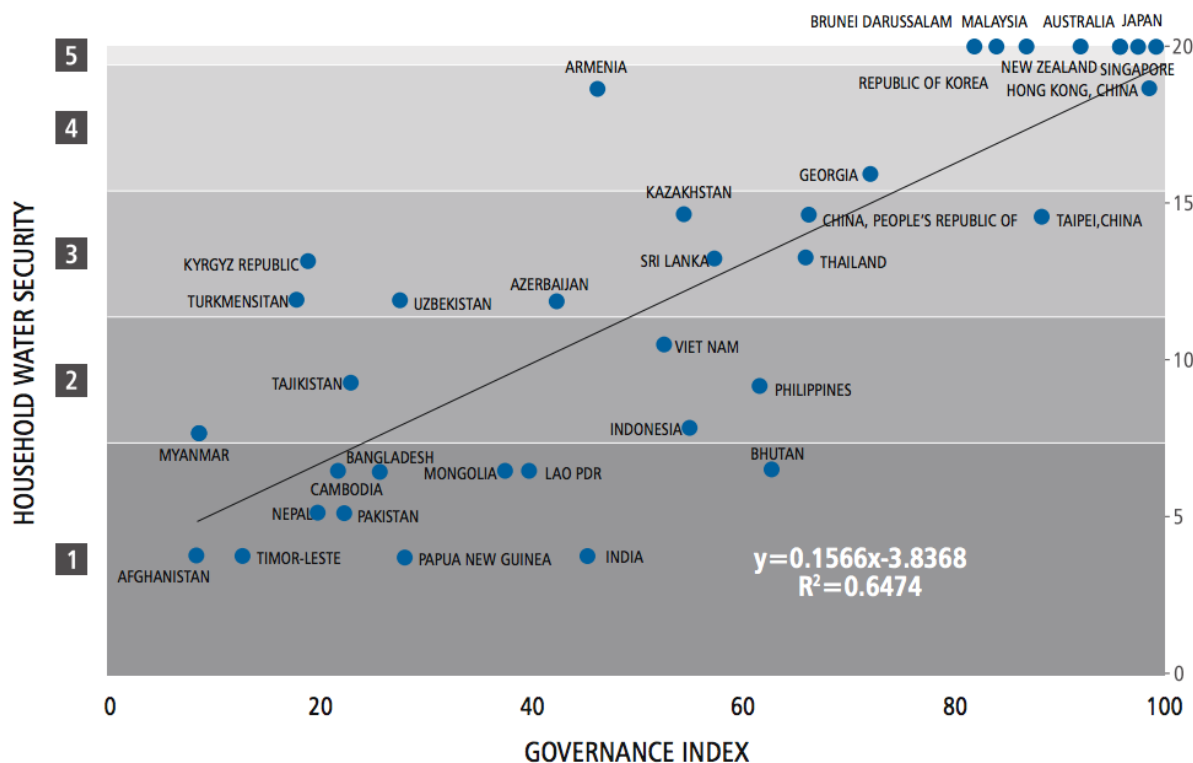


Challenges

Poor Governance

Strong leadership and sustained commitment through capacity building and monitoring are critical to achieving goals.

Figure 13: Household Water Security and Effectiveness of Governance



Source: ADB Asian Water Development Outlook 2016

Benefits of Investing in Water and Sanitation Services

Public Health

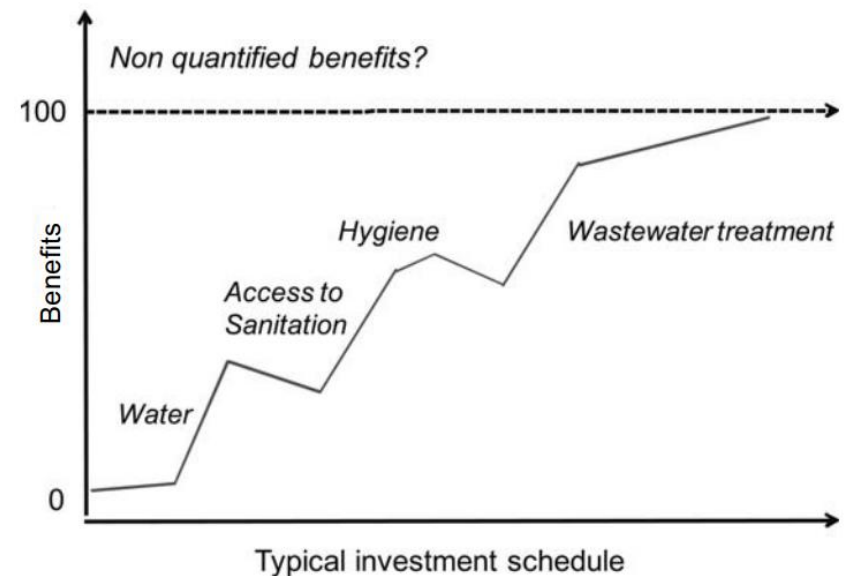
- **30% of child deaths** in the developing world are related to water-borne diseases

Economy

- **\$7 return** for every \$1 dollar invested.
- Impact on fisheries, tourism, and property markets

Environment

- USA estimates benefits of water pollution legislation at **\$11 billion annually**.
- Cambodia, Vietnam, Philippines estimate **\$2 billion annual loss** for lack of wastewater treatment.

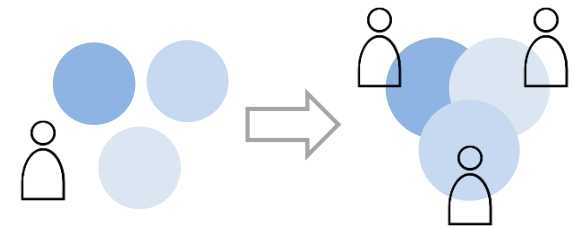


Moving Forward: Management and Best Practices for Urban Water

Promote Eco-efficient water infrastructure



Shift from piecemeal to integrated and centralized to decentralized/multipurpose policies



Integrate water supply, rainwater harvesting, storm water management, wastewater treatment, recycling and flood control measures



Provide good governance with strong leadership as well as cooperation and coordination at the national, regional and local levels



ESCAP's Projects in the Region

Development
of the national
roadmaps/policy
papers on eco-
efficient water
infrastructure

Installation of
the pilot integrated
rainwater harvesting,
storm water/
wastewater treatment
and recycling

Organization of
national
advocacy/capacity
building workshops

Organization of
regional workshop/
participation in
regional/international
forums

Project results:

Enhanced capacity of policy makers to formulate and apply policy options that (i) improve the quality of growth; (ii) help achieve IADGs and MDGs in the area of water resources management

Pilot Implementation of Low Carbon Green Growth Roadmap for Asia and the Pacific

ECO-EFFICIENT INFRASTRUCTURE DEVELOPMENT: TOWARDS A GREEN AND RESILIENT URBAN FUTURE

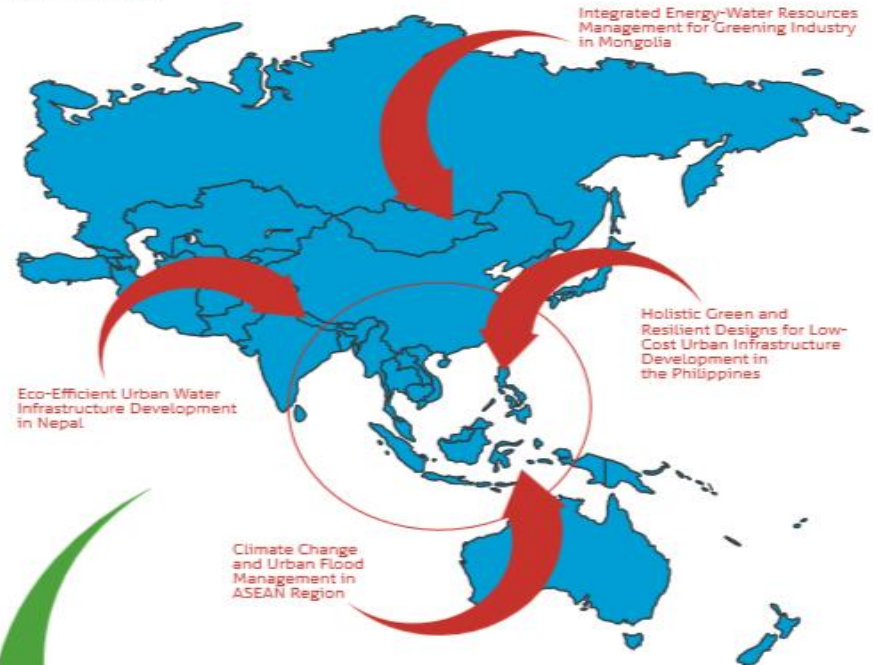
Pilot Implementation of Low Carbon
Green Growth Roadmap for Asia and the Pacific



The Asia-Pacific region is rapidly urbanizing. While this transformation is benefitting many economies it has placed enormous pressure on natural resources and the urban environment. In large part this is a result of inefficiencies and exploitation of resources without necessary attention to limits or costs. If the region is to benefit from its urban future however, it must shift towards eco-efficient and climate resilient models underpinned by the need to build more sustainable, equitable and resilient cities.

The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) has implemented a project titled "Pilot Implementation of Low Carbon Green Growth Roadmap for Asia and the Pacific" with the aim to enhance capacity of developing countries on policy development for eco-efficient resource management, and sustainable and resilient urban infrastructure development in the region. The project was funded by the Government of the Republic of Korea through Korea-ESCAP Cooperation Fund (KECF).

OVERVIEW



Duration: Two years (December 2012 – December 2014)

Target Countries: Mongolia, Nepal, Philippines and ASEAN

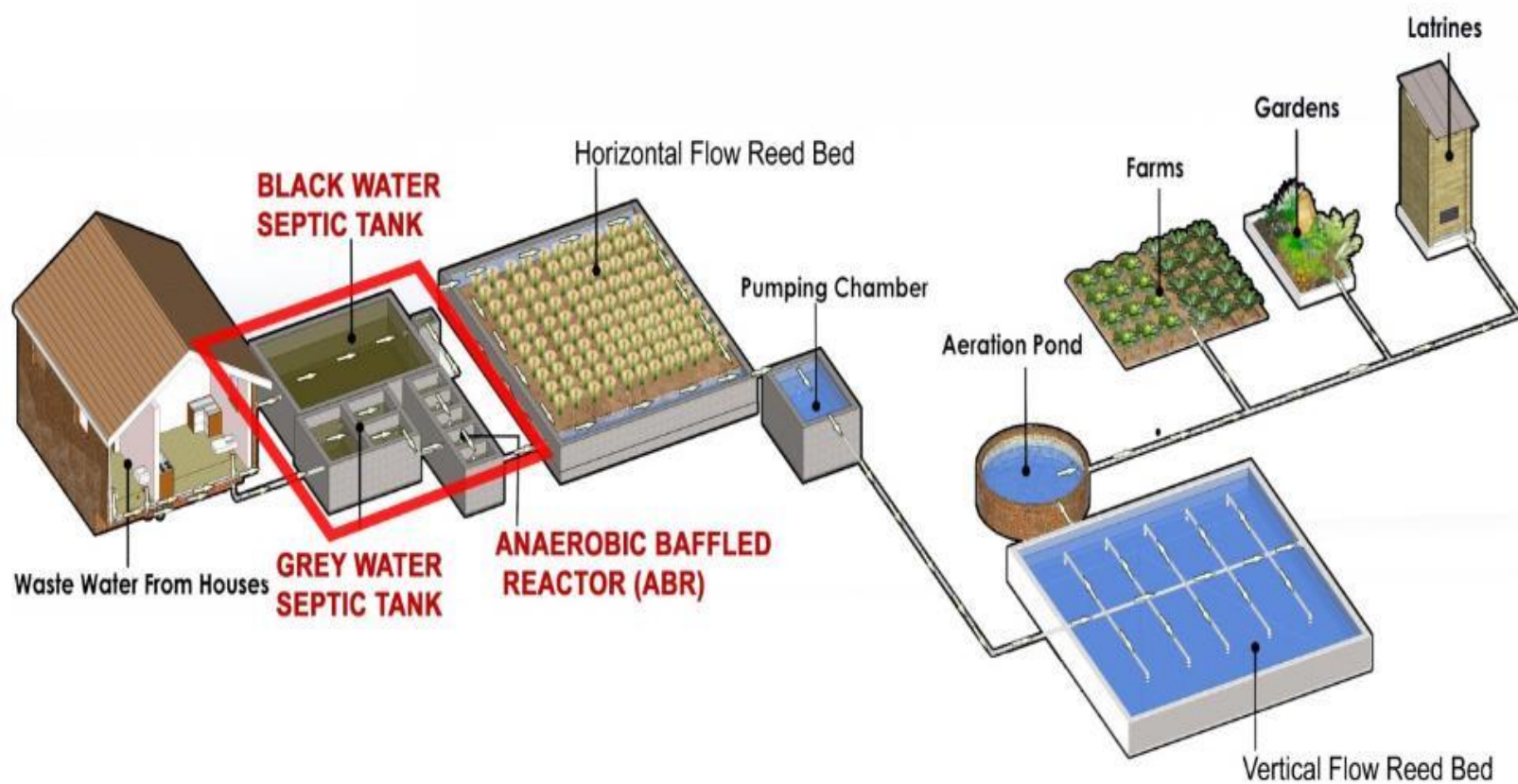
Target Group: Policymakers of key ministries involved in environment, economic and urban development; local communities and national-level stakeholders

Implementing Office: Sustainable Urban Development Section, Environment and Development Division, ESCAP

Project results
**ENHANCED CAPACITY
OF POLICY MAKERS**
to formulate and apply policy options that

- (i) improve the quality of growth
- (ii) help achieve IADGs and MDGs in the area of water and energy

Decentralized Wastewater Treatment and Recycling System at Sathya Sai Shiksha Sadan, Tokha, Kathmandu



Thank You

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<http://www.unescap.org/our-work/environment-development>

<http://www.unescap.org/resources/managing-urban-water>