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Living with water in cities of tomorrow

Asia and the Pacific Perspectives

INR. 2.3 EU, AR, AP

Water in Cities

14th April 2015 in Gyeongju – 11.20 – 19.00

PUB WaterHub, June 10th 2015



SusDev Solutions
SDSAP



Challenges

- The Asia-Pacific is urbanizing at unprecedented speed.
- Urban population of 43%
- Asia holds half of the world's cities including 6 of the world's 10 largest cities.
- Half of Asia's population will be living in cities by 2020.
- China alone will have a billion urban people in 15 years from now
- Unprecedented" urban expansion of some 150,000 people a day over the next two decades.
- Sharp increase in water use
- Depletion of Groundwater sources
- Food security
- Climate change – extreme events
- Rapid urbanization – water footprints
- Massive Pollution of Vital Water Resources, eutrophication, pesticides, endocrine disruptors
- Biodiversity loss
- **At the transition between MDGs and SDGs**



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Urban Water Solutions

Urban water needs and challenges require multi-sectoral, inclusive and comprehensive strategies.

Several strategies including eco-biotechnologies are notable in the region such as:

- Urban nexus (water-energy-food) planning;
- Integrated stormwater management and green buildings (stormwater management and road tunnels in Malaysia);
- Water sensitive urban design (Australia);
- System approach to optimize operations (Singapore);
- Eco-efficient water infrastructure development (Indonesia and the Philippines) and
- Urban wetlands (Kolkata, India).

Efforts to rehabilitate urban water resources include the increasing use of wastewater for peri-urban agriculture and for energy production.



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Key Messages

- The underlying cause of water scarcity, lack of sanitation, water pollution and urban flood in Asia and the Pacific is due to social inequalities further accentuated by economic disparities across the region.
- Failing water services linked with water and traffic theft are becoming key issues for urban poor as well as for the governments.
- There are several demonstrated eco-biotechnologies which need attention of investment banks and local developers for big scale implementation.



Moving forward with the SDGs

- Develop a base of use of ecobiotechnologies in the management of urban water systems (Technical, economic, financial, social)
- A socially inclusive system led by strong political support and stakeholder empowerment
- A fully enforced legal system defining clearly responsibilities between stakeholders and regulators
- A clear and secured financial commitment for water security and sanitation across the region supported at all levels.



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Link with the Thematic concluding session on Water and Cities

The goal : “WATER SECURE CITIES”

- By bringing together water professionals, urban planners and social sciences.
- To develop cities in an integrated way, and embrace water as a key contributor to *Healthy, Livable, Risk-resilient, Regenerative Cities*.
- It is about embracing the 5Rs principles for long term Water Secure Cities:
 - **Reduce** the amount of water being used
 - **Reuse** the water with different qualities for different usages
 - **Recover** the energy imbedded in water
 - **Re-cycle** the nutrients in the wastewater and
 - **Replenish** the surrounding environment so that the resources used are regenerated
- By applying *The Theory of Change*

Conclusion: what was accomplished

- **Action 1:** Three regional meetings related to “Water in Asia’s Cities of the Future”.
- **Action 2:** a Regional Focal Group on Urban Water Management constituted of 22 institutions including International organisations, Regional organisations, Local governments, Governmental institutions, Academia.
- **Action 3:** The final version of the white paper “*Water and Cities: Implementing Ecotechnologies for Urban Water Security in Asia-Pacific Region*”.
- **Action 4:** A series of projects are and will be conducted by UNESCO Office Jakarta on the theme.
- **Action 5:** The session was conducted at the 7th World Water Forum.



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Thank you for your attention.