



# ADB's Initiatives for High Quality Water Infrastructure

Use of High Level Technology  
- Urban Development and Water

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## A. Entry points for quality infrastructure



Creates or improves ways of serving client needs in terms of efficiency and productivity



Addresses climate mitigation, adaptation, and resilience to disaster risks



Introduces innovation in processes, methods or techniques



Use of new or improved equipment / materials in construction and operations



Reduces environmental costs and/or social costs



Improves economic efficiency including low life cycle cost, durability, and long term performance efficiency



Creates market opportunities for scaling up



Maximizes synergies and increases scale and impact through cross-sector collaboration

## B. Servicing clients to improve efficiencies



- Use of geographical information systems for asset management and strengthening
- GEO: Urban Services Improvement Investment Program
- Collaboration with UNESCO-IHE on remote sensing for water accounting and productivity
- Collaboration with the European Space Agency on use of remote sensing in urban, water resources and food security
- Collaboration with University of Tokyo and JAXA on climate change and disaster risk assessment

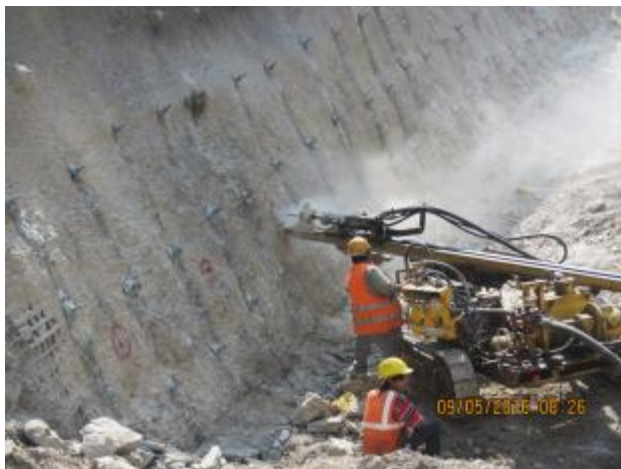
## C. Introducing innovation in processes



- Waste to energy recovery – sludge in wastewater systems
- FIJ: Urban Water Supply and Wastewater Management Project
- IND: Rajasthan Urban Infrastructure Development Project
- MYA: Mandalay Urban Services Improvement Project



## D. Using improved construction techniques



- Heavy engineering works for water transmission
- NEP: Melamchi Water Supply Project
- IND: Kolkata Environmental Improvement Investment Program
- VIE: Water Supply Improvement Investment Program
- PHI: Angat Water Transmission Improvement Project

## E. Reducing environmental and/or social costs



- Use of Reverse Osmosis / semipermeable membranes for potable water supply
- AZE: Water Supply and Sanitation Investment Program
- SRI: Jaffna-Killinochchi Water Supply Project
- Pacific Islands, various small plants



## F. Preparing better quality projects



Creating cross-departmental and sectoral teams to plan and design projects with high readiness



Using better quality consultants in order to help with project preparation and design



Using appropriate procurement methods to engage quality contractors and high quality plant and equipment



Moving away from least cost analysis and into life cycles, resilience and value for money



Capturing the prevalent and future market trends through new skills and partnerships



Modifying time, quality and delivery systems through procurement reforms

## G. Modified Implementation methods

### ***Matters of consideration***

- Project readiness
- Financing modality
- Lowest cost approaches
- Life-cycle costs and benefits

### ***Implementation methods***

- Increase project readiness
- Partnership of public and private financing
- Procurement reforms
- Turkey, EPC and DBO
- Financial incentives



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Thank You

Urban Sector Group  
Asian Development Bank