





Asian Development Bank Headquarters, Manila, Philippines

8th ADB Business Opportunities Fair

Water and Urban Sector – SDCC Susumu Fujioka & Joris van Etten

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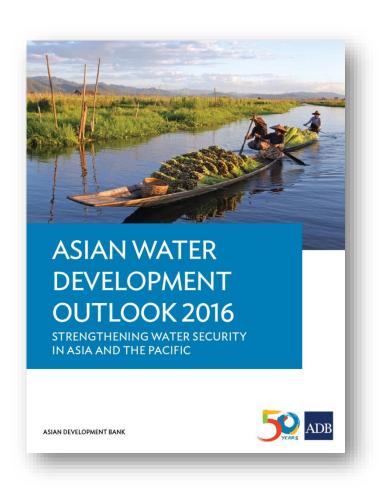
Water Sector Outline

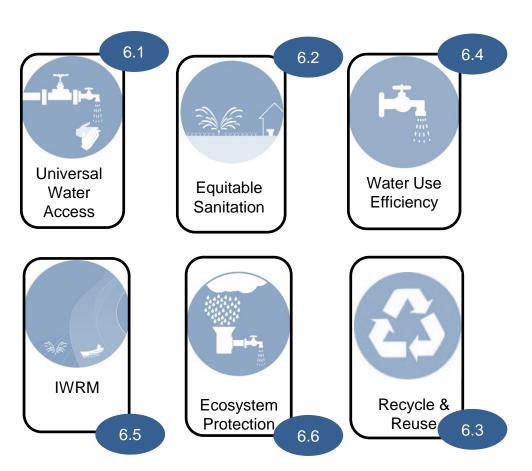
- Context
 - Asia's Water Challenges
 - ADB's "Water for All" Policy
- Overview of the Water Sector Investments

General Business Opportunities



Asia's Water Challenge







ADB's "Water for All" Policy



- National water sector reform
- Integrated management of water resources
- Delivery of water services
- Conservation of water and increasing system efficiencies
- Regional cooperation
- Knowledge sharing
- Governance and capacity building



What do we want to achieve by 2020?

- 500 million people provided access to safe drinking water supply and improved sanitation
- 95 million people provided more efficient and productive irrigation and drainage services
- 170 million people with reduced risk of flooding
- integrated water resources management (IWRM) introduced in at least 30 river basins



ADB's targets in Water Investment

- ADB's annual water lending increased from \$2.0-\$2.5 billion to \$3.0-\$3.5 billion
- Share of sanitation and wastewater increased to 25% of total water lending
- Urban water utilities on-track towards corporate governance principles and practices
- PSP/PPP projects provide finance of not less than \$500 million per year





Investment Areas for ADB's Water operations

Rural Water - improving services for health and livelihoods in rural communities such as water supply and sanitation, and irrigation and drainage

Urban Water - sustaining economic growth in cities through investments in water supply, sanitation and wastewater management, and environmental improvement

Basin Water - promoting IWRM and healthy rivers through investments in infrastructure and management of multifunctional water regulation and hydropower facilities, flood management, watershed and wetlands conservation



ADB's Water Investments

 Total investment portfolio (1968-2016): \$46 billion

Rural Water: \$11 billion

Urban Water: \$21 billion

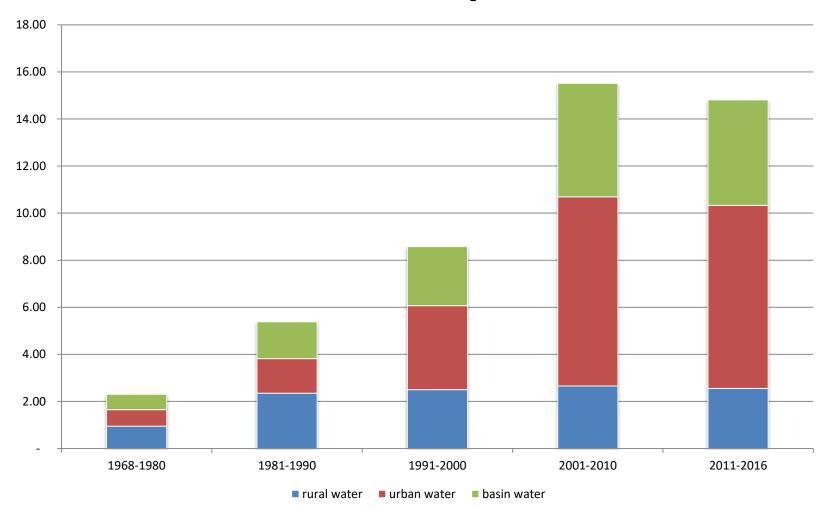
• Basin Water: **\$14 billion**

2017-2018 Pipeline

\$4.7 Billion

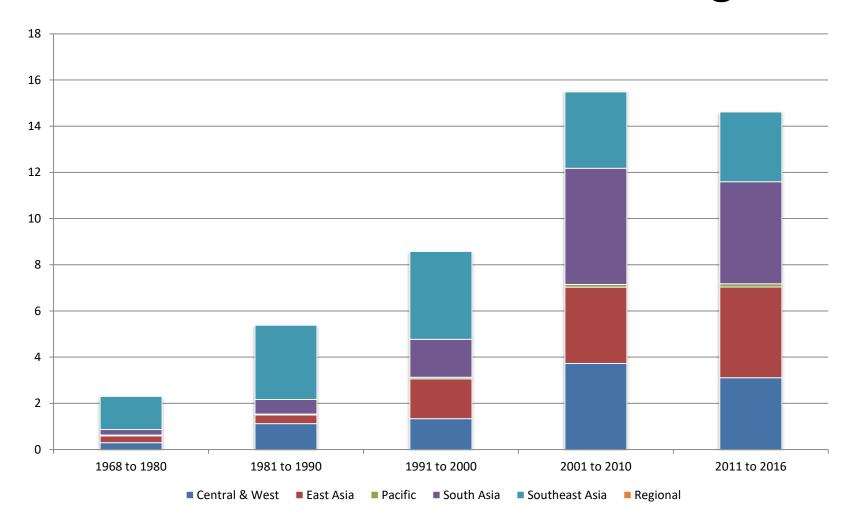


Water Investments - per subsector





Water Sector investments – Per Region





ADB's Knowledge Work

Key Knowledge Products

- Asia Water Development Outlook 2016
- Asia Water Futures and Solutions (2017)
- Water Accounting and Productivity pilot projects
- Water-Energy Studies

Key Knowledge Events

- Eye on Asia Event at the Stockholm World Water Week
- ADB Water Forum (2017)



Opportunities for Consulting Services

(estimated amount for 2017 – water sector)

- Project Preparation Technical Assistance (PPTA): \$65 million
- Other Technical Assistance: \$7 million



Business Opportunities

A menu of solutions will form the basis for operational interventions over the next 5 years:

- Water use efficiencies across the range of users
- Expanded wastewater management and wastewater reuse
- Embedded integrated water resources management
- Expanded knowledge development
- Technology and innovation
- Enhanced partnerships with the private sector



Urban Sector Outline

- Priority Areas for ADB's Urban Work
- Project Cycle Entry Points
- Servicing clients to improve efficiency
- 2017 Planned Initiatives



Priority Areas for ADB's Urban Work



Cross- Sectoral and Thematic Collaboration

Social development, informal settlements, health and housing



Urban Mobility

Mass rapid systems, walkability, air quality control and climate change mitigation



Urban Information Systems

Urban land use planning, data analytics, mobile technology and earth observation



Water Supply and Sanitation

Non-revenue water reduction, fecal sludge management and solid waste management



Ecosystem-based adaptation & Green Technology

Climate change adaptation, disaster risk management, flood management, drainage and bioengineering



Smart Cities

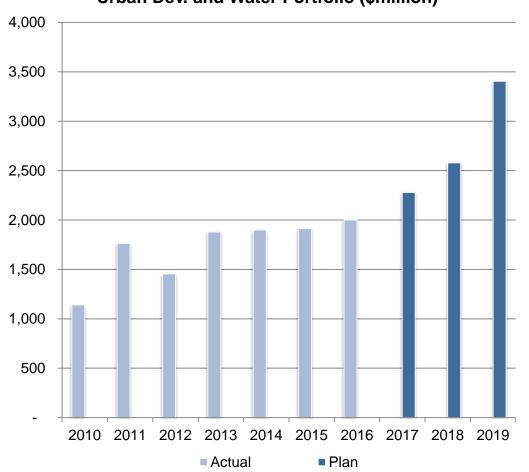
ICT, E-governance, greenfield development, digital and municipal finance

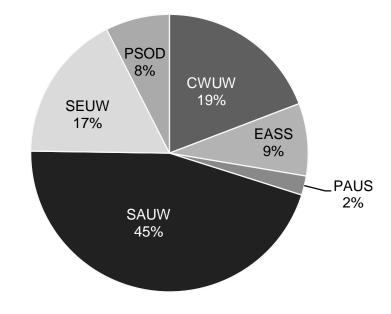




2016 Operations Achievement





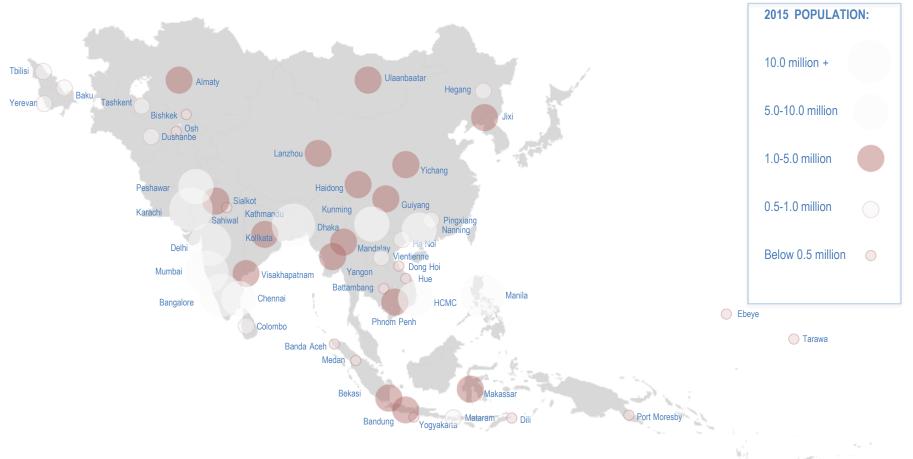


2016 Achievement

- \$2.00 billion = Total Lending (18 loans)
- \$0.15 billion = PSOD
- \$0.28 billion = Climate Financing
- 1 High-level Technology bid out (Jaffna Desalination Plant)



ADB's Urban Footprint





Project Cycle -- Entry Points



Maintenance

Water Operators
Partnership Program
Peer-to-Peer
Twinning
Arrangement



Policy Dialogue

PRC: Country Partnership
Strategy
Country Programming Mission



Pre-Concept

TAJ: Dushanbe Water Supply Improvement Project Pre-feasibility Support



BAN: City Region

Development Investment

Program

Feasibility Studies (with

financial support from CDIA)

Implementation Concept

BAN: Dhaka
Environmentally
Sustainable Water
Supply Project
Construction
Engineering and
Inspection



Pilot

BAN: Coastal Towns
Environmental Improvement
Project (AF)
Application using Investment
Grant (through UCCRTF)



Approval

FIJ: Urban Water and Wastewater Management Investment Program Detailed Engineering and Design



Preparation

MYA: Mandalay Urban Services Improvement Project-2 Planning with partners





Planning with partners support (through European Space Agency)

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





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







ADF

Using improved construction techniques







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







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







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2016 Spotlight Projects (Central Asia and South Asia)



IND: Visakhapatnam-Chennai Industrial Corridor Development Program Loan: \$245 million (T1) & \$125 million (P)



Economic Corridor and Cross-Sector Collaboration

GEO: Urban Services
Improvement Investment Program
Loan: \$99 million



Earth Observation and Utility Partnership

UZB: Tashkent Region Water Supply System Development Project Loan: \$121 million



Utility Management and Regulation

BAN: Dhaka Water
Supply Network Improvement Project
Loan: \$275 million





2016 Spotlight Projects (East Asia, South East Asia and Pacific)



FIJ: Urban Water and Wastewater Management Investment Program Loan: \$42 million GCF: \$57 million



Climate Change Adaptation and Urban Services

PRC: Qinghai Haidong Rural Eco Development Loan: \$150 million



Ecosystem Protection

PRC: Integrated Wastewater
Management Project
Loan: \$150 million (PSOD)



Waste-to-Energy

PHI: Angat Water Transmission
Improvement Project
Loan: \$123 million



Advance Technology



2016 Financing Partnership Facility Support



MYA: Water Operators
Partnership Program in Mandalay



Utility Twinning
Water Operators Partnership
Program

PHI: Water District Development Sector Project



Water Supply
Urban Environmental
Infrastructure Fund



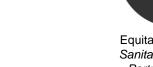


IND: Kolkata Environmental Improv. Investment Program

PRC: Yichang Elderly Care Development Program



Inclusive Development
Cities Development for
Asia





CAM: Second Rural Water Supply

and Sanitation Project (AF)

Improv. Investment Progra

Climate Change Adaptation *Urban Climate Change Resilience Trust Fund*

2017 Planned Urban Initiatives

PAK: Khyber-Pakhtunkhwa Intermediate Cities Investment Program Pre-concept



Economic Corridor and Cross-Sector Collaboration
UCCRTF and CDIA

IND: Smart Cities Investment Program Pre-concept



E-governance, Urban Mobility and Utility Management UCCRTF and CDIA

VIE: Ho Chi Minh City Wastewater and Drainage Improvement Project Loan: \$400 million



Climate Change Adaptation Planning, Design and Advance Technology UCCRTF KIR: South Tarawa
Water and Wastewater
Management Project
Loan: \$15 million (+GCF)



Climate change adaptation, advance technology and urban services WFPF

PRC: Yangtze River
Economic Belt Industrial
Transformation Project
Pre-concept



Cross-sector collaboration between natural resources, transport and cities

CDIA and WFPF





2017 Planned Cross- Sector / Thematic Work



FIJ: Revitalization of Informal Settlements and Environment in Suva



Urban Health Health Sector Group

SRI: Local Government
Enhancement Sector Project (AF)
Loan: \$60 million



Digital Finance Finance Sector Group

TAJ: Dushanbe Water Supply Improvement Project Loan: \$20 million



E-governance ICT Thematic Team

VIE: Secondary Cities

Development Project (Green Cities)

Loan: \$170 million







