6th ADB Business Opportunities Fair

Water Infrastructure - RSDD

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Outline

- Asia's Water Challenge
- ADB's "Water for All" Policy
- Overview of Sector Investments
- General Business Opportunities
- Summary

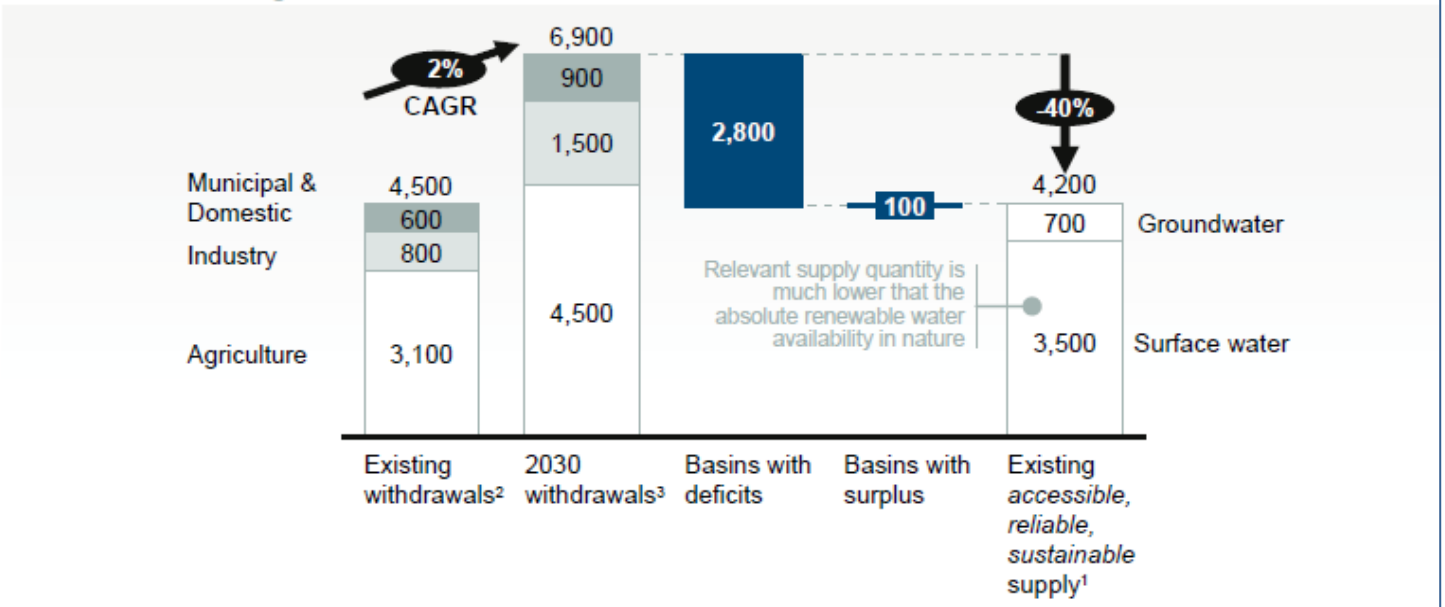
Asia's Water Challenge

- Water stress is evident
- Water demand-supply gap will be 40% by 2030
- PRC and India will have a 1 trillion cubic meter water shortfall by 2030
- Efficiency gains and supply-side interventions will make a difference
- Water quality is increasingly becoming an issue
- Water scarcity is likely to accelerate

Water is becoming more scarce

Aggregated global gap between existing accessible, reliable supply[1] and 2030 water withdrawals, assuming no efficiency gains

Billion m³, 154 basins/regions



1 Existing supply which can be provided at 90% reliability, based on historical hydrology and infrastructure investments scheduled through 2010; net of environmental requirements
2 Based on 2010 agricultural production analyses from IFPRI
3 Based on GDP, population projections and agricultural production projections from IFPRI; considers no water productivity gains between 2005-2030

SOURCE: Water 2030 Global Water Supply and Demand model; agricultural production based on IFPRI IMPACT-WATER base case

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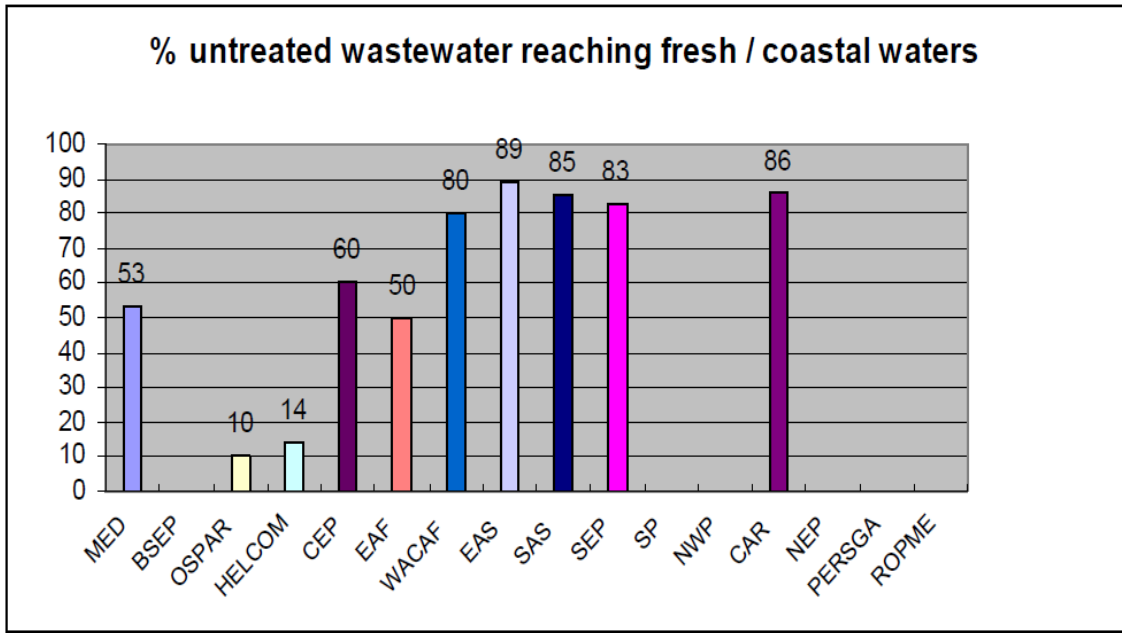
Wastewater service is lagging

- While progress in meeting quantitative targets is significant and are welcome, there are continuing concerns over the quality and sustainability of the services.
- It is estimated that 85%–89% of Asia's wastewater is discharged untreated—polluting groundwater, rivers and coasts



Basic issues remain

- High non-revenue water
- Huge gap in service coverage
- Poor asset management
- Sanitation way behind water supply
- Limited sustainability

What this means for Asia

- Several countries coming under water stress when the region is making the most impressive development gains
- Expanded economic growth is putting pressure on environment
- 80% of Asian freshwater is going to agriculture – efficiency remains low
- Significant implications for energy generation, food production, and industrial development

Water Governance

- Governance structures need radical change
- Economic value of water needs explicit recognition
- The food-energy-water nexus link is key to inclusive water resources planning and allocation
- We must see water services as a “business”
- Tough issues like water losses must be tackled

ADB's "Water for All" Policy

- The complexity of Asia's water issues demands we focus on the following specific responses:
  - Expanding analytical work and enhancing knowledge
  - Advancing inclusive water
  - Sector policy reforms
  - Strengthening support to priority areas

- Water Financing Program (2006)

- ADB Water Operational Plan (2011–2020)

WATER for ALL

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The Plan

- Challenges
  - Increased competition over limited freshwater
  - Large volumes of untreated wastewater
  - Climate change

- What do we want to achieve?
  - Increased access to safe water supply, improved sanitation
  - More efficient and productive irrigation
  - Increased water security
  - Improved governance

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Driving the Plan

- Analysis and knowledge
- Inclusive policy reforms
- Support to priority areas
- Identifying solutions

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

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5 Priority Thrusts for Water Investment

- Water use efficiency
- Expanded wastewater management
- Integrated water resources management
- Expanded knowledge and more innovation
- Private sector participation

Water Sub-Sector Investments

Note: Amounts in US$ million

Subsector	1968-1980	1981-1990	1991-2000	2001-2010	Total
Rural Water	**947**	**2,350**	**2,496**	**2,652**	**8,445**
Irrigation and Drainage	929	2,267	2,253	2,121	7,570
Rural Water Supply and Sanitation	18	83	243	532	876
Urban Water	**702**	**1,469**	**3,570**	**8,035**	**13,776**
Urban Water Supply and Sanitation	702	1,469	3,020	6,593	11,785
Waste Water Management	0	0	550	1,441	1,991
Basin Water	**649**	**1,562**	**2,507**	**4,820**	**9,538**
Flood Management	32	261	471	1,349	2,113
Water Resources Management	0	131	342	1,196	1,668
Watershed, Wetlands & Ecosystem Management	5	335	324	42	705
Hydropower	613	836	1,370	2,233	5,052
Total	**2,299**	**5,381**	**8,572**	**15,507**	**31,759**

Water Sector Investments in the Region

Region	1968-1980	1981-1990	1991-2000	2001-2010	Total
Central & West	295	1,121	1,331	3,726	6,473
East Asia	293	373	1,730	3,302	5,699
Pacific	36	38	64	119	256
South Asia	239	634	1,643	5,030	7,547
Southeast Asia	1,436	3,215	3,805	3,310	11,765
Regional	-	-	-	20	20
TOTAL	**2,299**	**5,381**	**8,572**	**15,507**	**31,759**
% Share to Total ADB	28%	22%	15%	19%	18%

Note: Amounts in US$ million

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ADB's Water Investments

- Total investment portfolio (1968-2014): $40.88 billion

- Rural Water $10.01 billion
- Urban Water $21.54 billion
- Basin Water $9.33 billion

2015–2016 Pipeline

$6.82 Billion

Rural Water: rural water supply and sanitation; irrigation and drainage
Urban Water: urban water supply, sanitation, and wastewater management
Basin Water: water resources development and management; flood management; wetlands, watershed, and ecosystem protection and preservation; and hydropower generation

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Opportunities for Consulting Services
(2015 estimated amount)

- Project Preparation Technical Assistance (PPTA): $25 million
- Other Technical Assistance: $22 million

Business Opportunities

A menu of solutions will form the basis for operational interventions over the next 10 years:

- Water use efficiencies across 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

What do we want to do by 2020?

- ADB's water lending at $2–$2.5 billion annually or a total of $20–$25 billion by 2020
- 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

What do we want to achieve by 2020?

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

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