

## 10th BUSINESS OPPORTUNITIES FAIR 2019

ADB





## **Tom Panella**

Chief of Water Sector Group Sustainable Development & Climate Change Department, ADB 27 March 2019

# Water is (i) cross-cutting and (ii) links the water-food-energy security nexus





Under the current project classification system, water operations is reported in: WUS - Water and other Urban Infrastructure and Services ANR - Agriculture, Natural Resources, and Rural Development ENE - Energy



# Strategy 2030: Seven Operational Priorities





Holistic and Integrated Approach



# **Strategy 2030: Water and the Seven Operational Priorities**



<b>Operational Priorities</b>	How water contributes	Related SDG
1. Addressing remaining poverty and reducing inequalities	Access to water supply/sanitation for the poor, agricultural, and employment	6.1; 6.2; 2.3
2. Accelerating progress in gender equality	Access to water supply/sanitation, improved security through safe sanitation, and labor reduction	5a; 6.1, 6.2
3. Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability	Flood, drought and other water-related disasters	1.5; 13.1
	Nature-based solutions, and payment for ecosystem services	6.6; 14.b; 15.2
	Water-food-energy security nexus, integrated water resources management, and water quality	6.3 <i>,</i> 6.5 15.1



## **Strategy 2030: Water and the Seven Operational Priorities**



<b>Operational Priorities</b>	How water contributes	Related SDG
4. Making cities more livable	Access to water supply/sanitation, flood risk management, and water quality	6.1; 6.2; 6.3; 11.b
5. Promoting rural development and food security	Access to water supply and sanitation, watershed management, and irrigation /agricultural water productivity	2.3; 2.4; 6.1, 6.2, 6.4; 15.1
6. Strengthening governance and institutional capacity	Strengthening public and private water institutions for improved water management and service delivery	6b
7. Fostering regional cooperation and integration	Increasing water security, strengthening cooperation on watershed management and transboundary water benefits	6.5.3; 6a

# **One ADB Water Approach**





### ...six cross-cutting themes

finance and transactions



governance & sustainability



resilience & disaster



high-level technology & innovation





water-foodenergy security nexus & productivity







#### Total - \$3,362.60 million

 Flood management (12%)
 Irrigation and drainage (23%)
 Water resources management (8%)
 Water supply, sanitation, & wastewater management (56%)

- Central and West Asia (15%)
  East Asia (15%)
  South Asia (51%)
  - Southeast Asia (20%)



# Water in 2018 Investments: Urban Portfolio ADB

**57.5% is water** Includes sovereign and private sector



 Urban Slum Development (0.9%)
 Renovation and Protection of Cultural Heritage (0.3%)
 Other Urban Services (4.6%)

Urban Policy (5.1%)

Other Sectors (21.1%)







Total - \$2,714.3 million

Central & West Asia Department, \$222.70 M (8%)
 South Asia Department, \$962.07M (35%)
 Private Sector Operations Department, \$100.00 M (4%)
 Southeast Asia Department, \$624.50 M (23%)
 East Asia Department, \$805.00 M (30%)

10









#### Total - \$4,216.51 million

Flood management (15%)
Hydropower (20%)
Irrigation and drainage (23%)
Water resources management (9%)
Water supply, sanitation, & wastewater management (34%)

- Central and West Asia (39%)
- East Asia (8%)
- Pacific (3%)
- South Asia (19%)
- Southeast Asia (31%)



Flood management (19%)
Hydropower (3%)
Irrigation and drainage (16%)
Water resources management (7%)
Water supply, sanitation, & wastewater management (55%)

Central and West Asia (10%)
East Asia (6%)
Pacific (6%)
South Asia (59%)
Southeast Asia (20%)



wastewater management (45%)

Southeast Asia (20%)



## **Trends and Opportunities**



#### Information technology, cloud computing, and internet of things

Tools: Satellites, Drones, LiDAR, SCADA, BlockChain, mobile phones Applications: Monitoring, Mapping, Planning, Productivity, Regulation, Decision Support (Prioritizing, Optimising, recasting)

#### **Processes**

Water treatment for supply (desalination); wastewater treatment for water reuse and energy and nutrient recovery (circular economy), fecal sludge management

#### More efficient water use

new irrigation techniques for more crop per drop and climate change, nonrevenue water reduction, intelligent control, managed groundwater recharge

#### Working with nature/ecology-based management

coastal defence (mangroves, sediment trapping), flood detention (room for the river), water storage (upper watershed management and urban/peri urban – sponge cities)water quality improvement (helophyte filters), low impact design (LID)/sustainable urban development (SUDS)