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# Water Security and Resilience in Asia and the Pacific

An overview of ADB's Water Sector Portfolio, Projects and Programs

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BUSINESS  
OPPORTUNITIES 

# Outline

**Water Security in  
Asia and the  
Pacific**

**Sector Challenges**

**ADB's Water Sector  
Portfolio**

**ADB's Actions to  
Support Water  
Resilience in Asia and  
the Pacific**

# Asia Pacific Water Sector Challenges



**Climate change is being primarily felt through water** through intensification of the water cycle. The region accounts for 40% of disasters triggered by natural hazards and 84% of the people they affect



**Wetlands destruction is driving biodiversity loss.** More than 30% of the global biodiversity has been lost because of the degradation of fresh-water ecosystems.



**Food security depends on water security.** Agriculture consumes an average of 70% of freshwater. Irrigation is the primary driver of groundwater pollution. Growing demand for food will increase pressure on water resources.



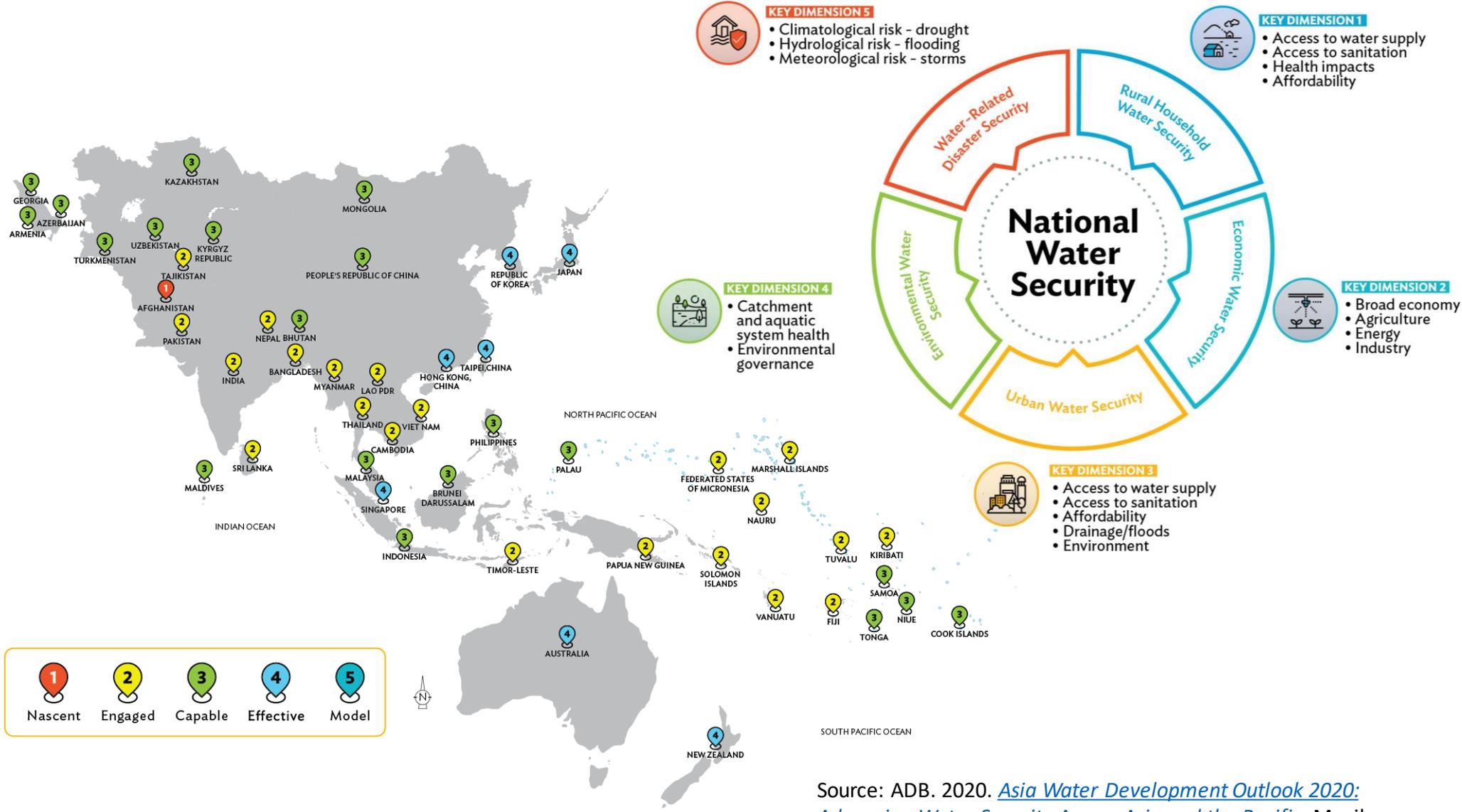
**Water quality is deteriorating.** 80% of urban wastewater is discharged untreated. Saline intrusion and arsenic are also growing threats to groundwater quality.



**Inadequate access to basic water supply and sanitation services.** 500 million people without access to basic water supplies, 1.14 billion people without access to sanitation.

# State of Water Security in Asia and the Pacific

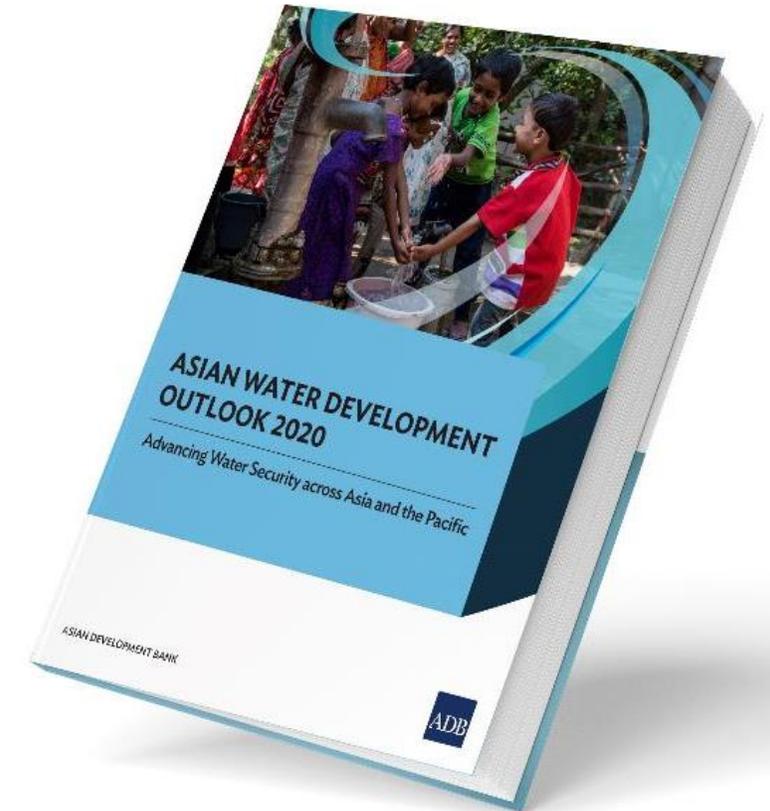
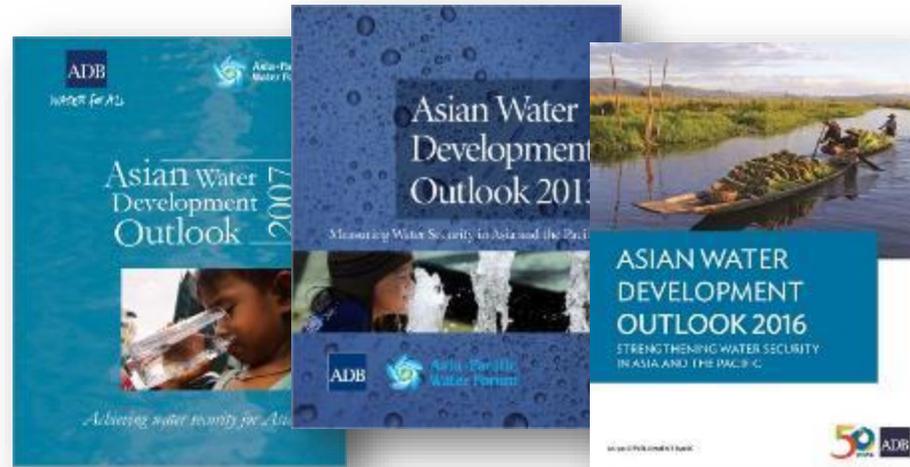
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Source: ADB. 2020. *Asia Water Development Outlook 2020: Advancing Water Security Across Asia and the Pacific*. Manila

# Water Security in Asia and the Pacific: The AWDO Journey

ADB Flagship Publication



## AWDO 2020 Objectives

- **Communication tool** on water security for Asia and the Pacific
- **Inform and guide policy reforms** and investments
- Show water security progress - 2013, 2016, 2020

AWDO 2020 Partners



# Asia Pacific Water Sector Challenges



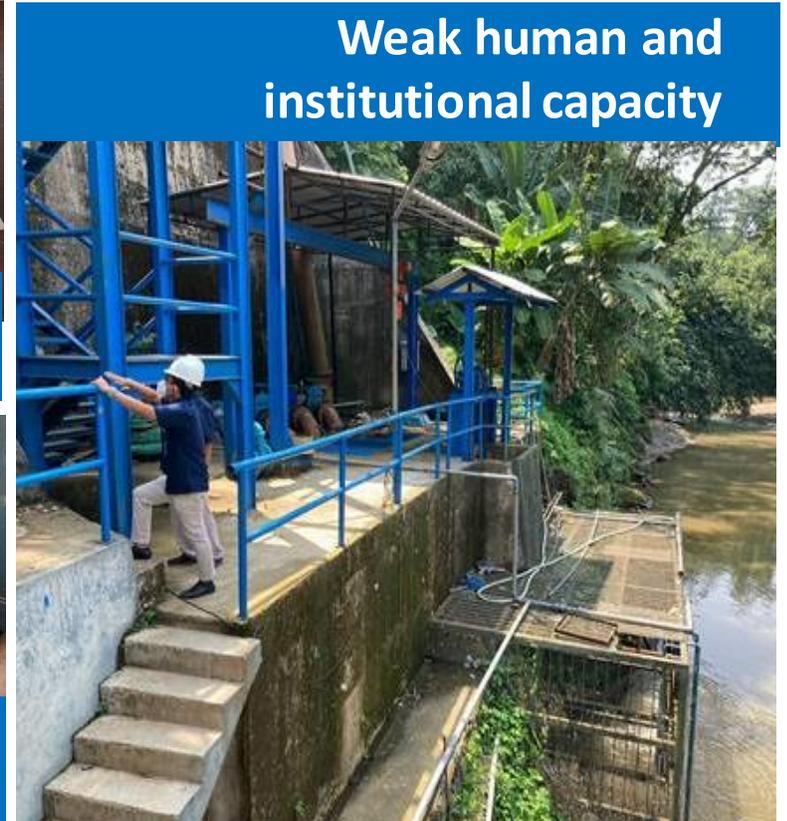
**Poor governance**



**Low financial sustainability**



**Low uptake of digital technologies**



**Weak human and institutional capacity**

# What is ADB doing to meet Asia's Water Challenges?

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## 1. Mainstreaming and expanding climate adaptation in projects and policies

- Building resources and capacities of ADB staff and water entities on the ground for climate actions, green infrastructure, Paris Agreement alignment, and operating in the 'new normal'

## 2. Strengthening enabling environment and availing modalities and tools

- Improving operational sustainability, increase private financing, and local resource mobilization

## 3. Streamlining processes and practices

- For cross-sector, cross-theme, cross-region collaboration for integrated planning and implementation.

## 4. Expanding digitalization and technological innovations

- Partnering with both public and private sector, as an entry point for increasing private sector participation, transboundary cooperation, and asset management

## 5. Conducting upstream sector diagnostics

- Deepening entity-level and country-level engagements and providing demand-driven knowledge services



# Vision: Advancing a Water-Secure and Resilient Asia and the Pacific

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Poverty



Gender



Climate, Disasters and Environment



Liveable Cities



Food Security and Rural Development



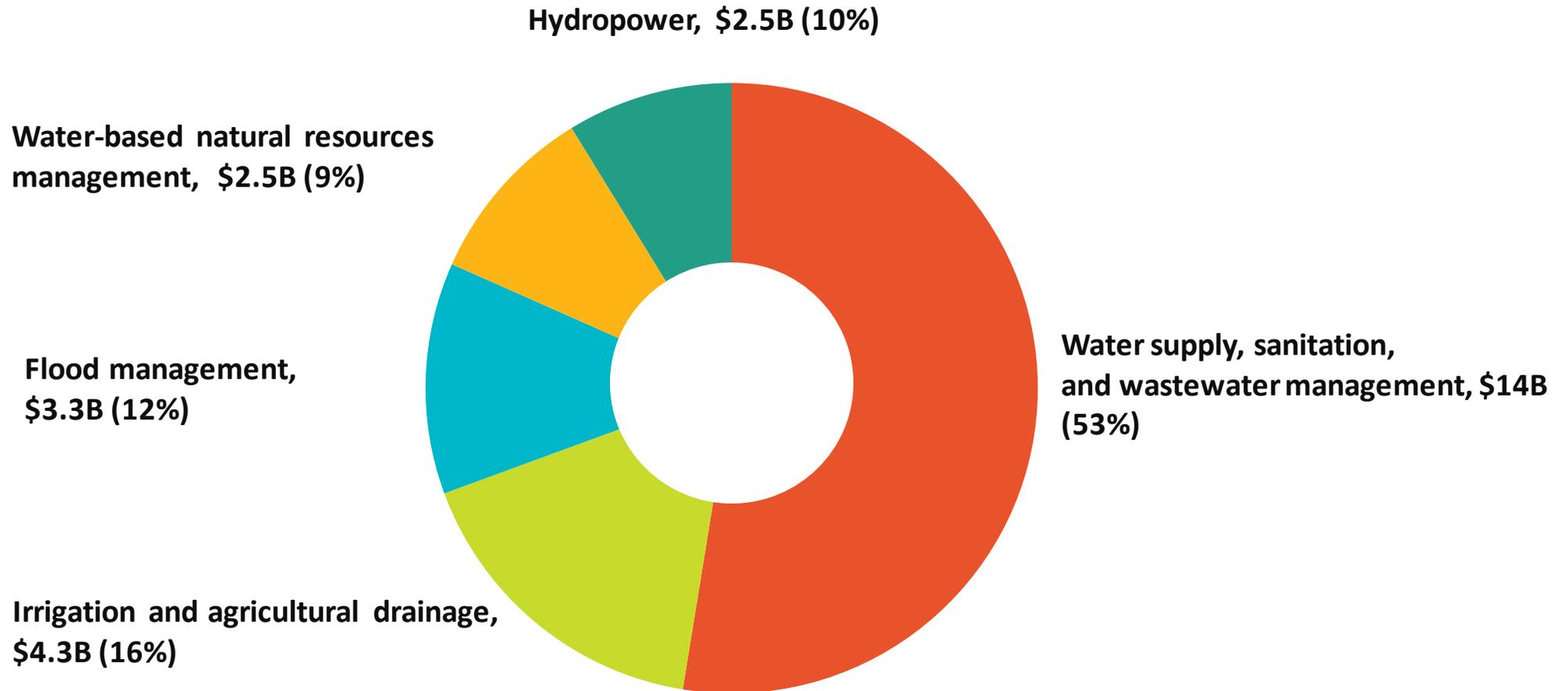
Governance



Regional Cooperation

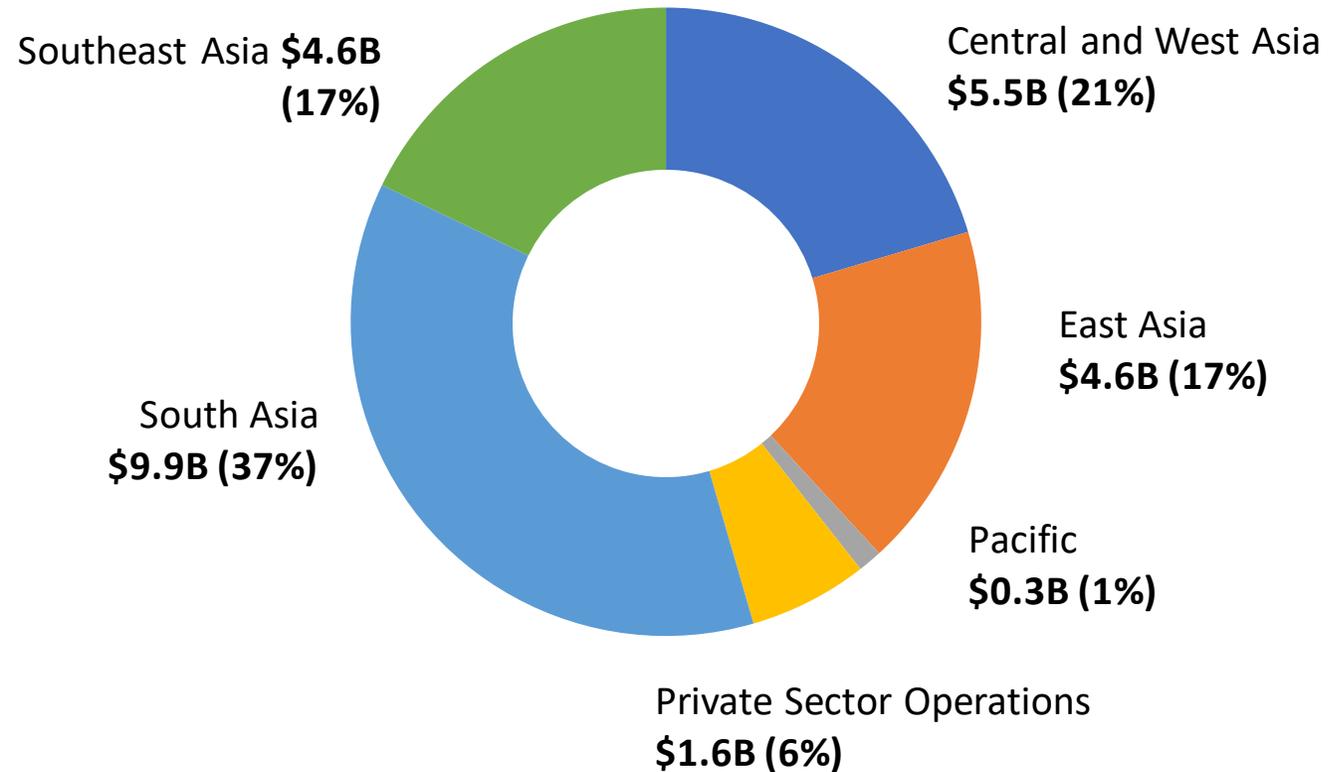
# ADB's Water Sector Portfolio

The total 2011-2022 water sector portfolio is around **\$26.6 billion**, directly supporting water security and resilience for at least **650 million people**.



# ADB's Water Sector Portfolio

## Regional Breakdown



NOTE: Discrepancies in total due to rounding-off.

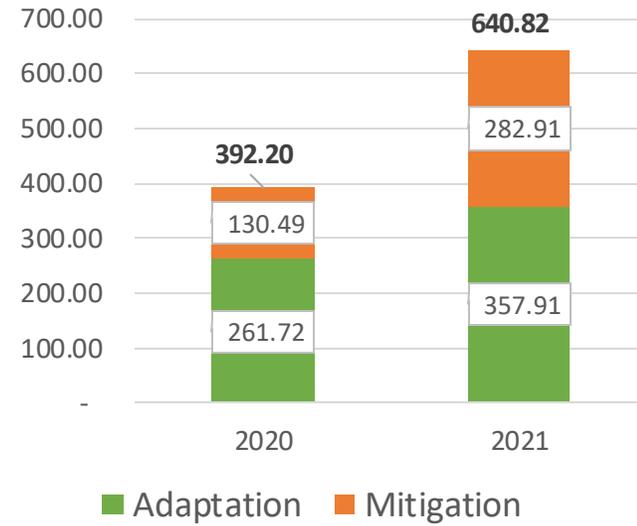
**\$26.6 billion**

Amount of the total 2011-2022 water sector portfolio



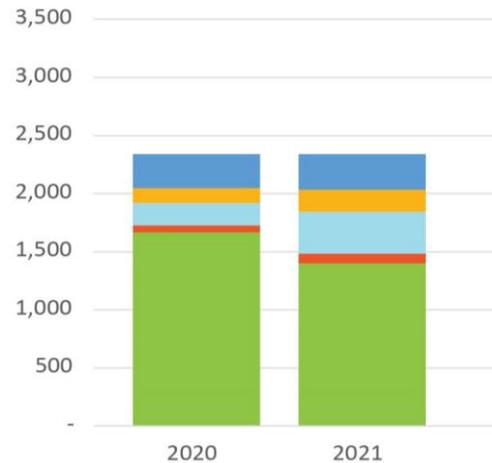
### Climate Financing

(in \$ million, Denominator size same in 2020 & 2022 ~2.3B)



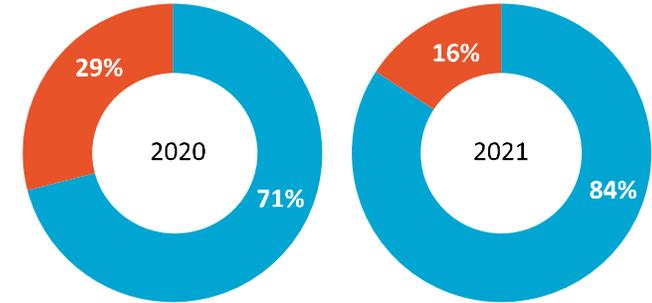
### Toward a Diversified and Adaptation Focused Portfolio

(\$ million)



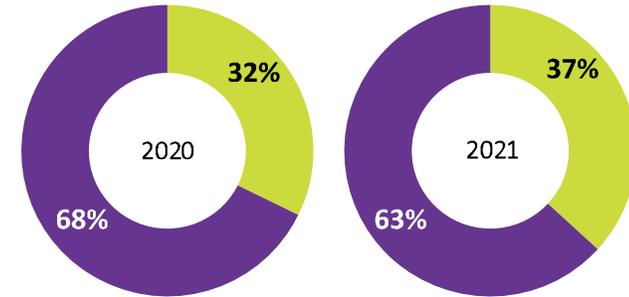
- Hydropower
- Water resources management
- Flood management
- Irrigation & agricultural drainage
- Wastewater, sanitation, and wastewater management

### Deepening Gender Mainstreaming



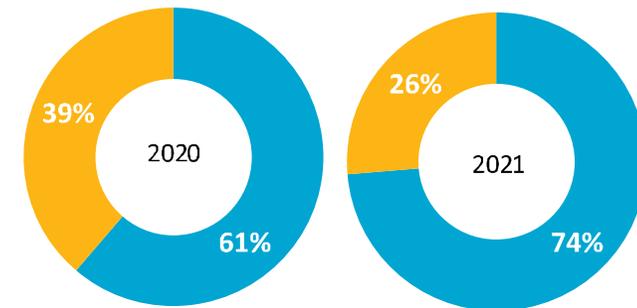
- No gender elements and Some gender elements
- Effect on gender mainstreaming and Gender equity theme

### Boosting Private Sector Participation



- With private sector participation (PSP) component
- Without PSP component

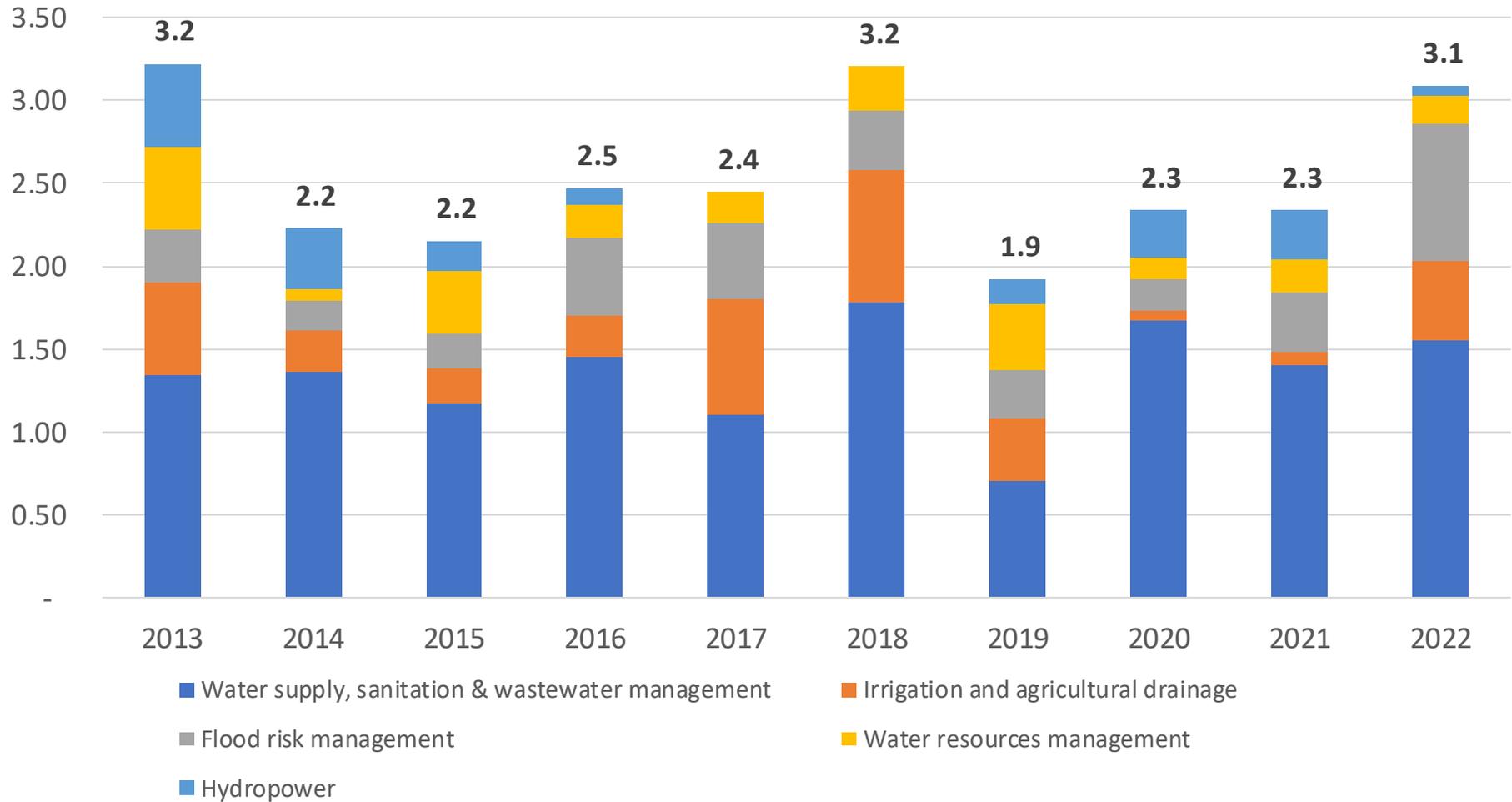
### Increasing Digitalization



- With digitalization component
- No digitalization components

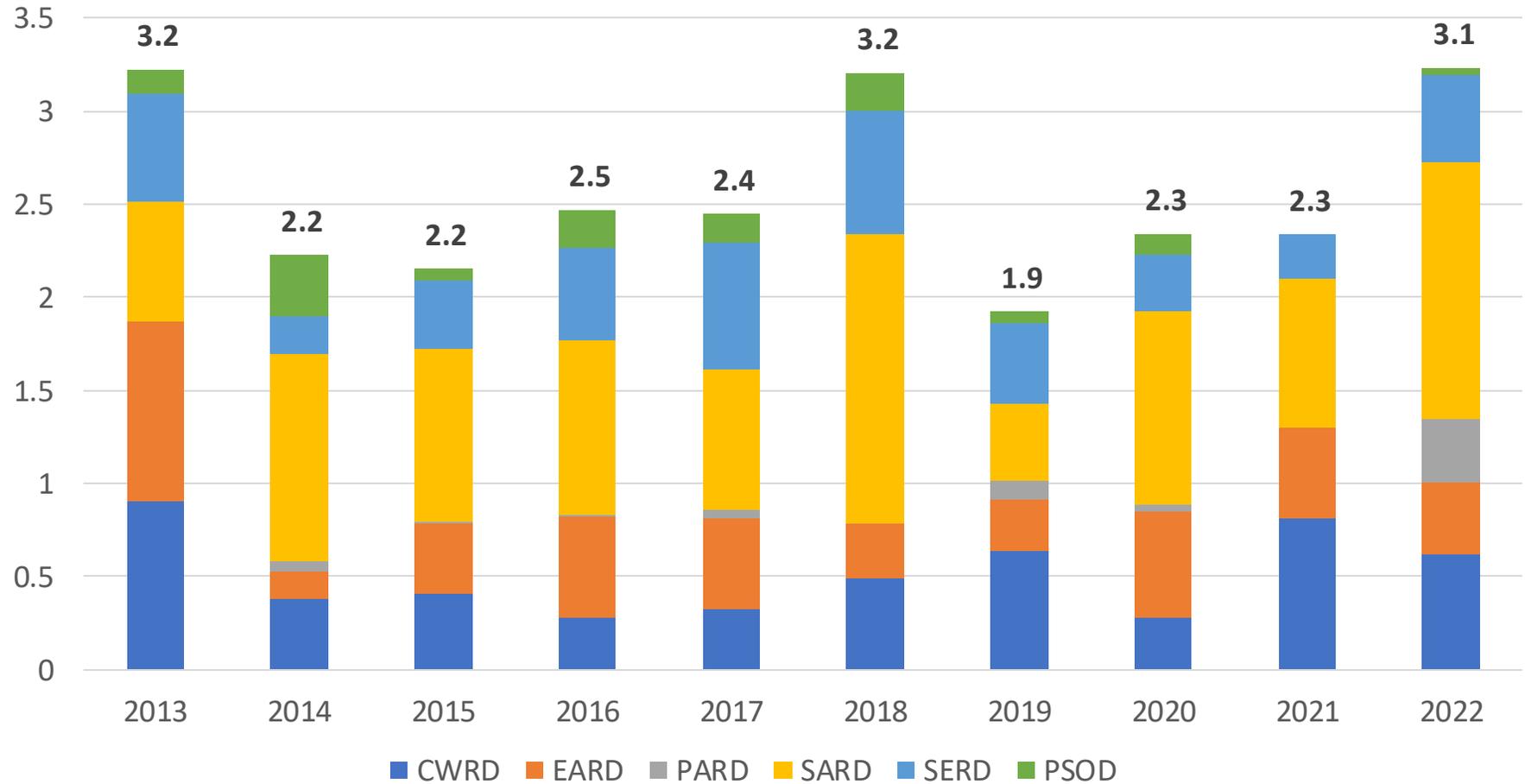
# WSG Lending History and Pipeline by Subsector

(in \$ Billion)



# WSG Lending History and Pipeline by Operations Department

(in \$ Billion)

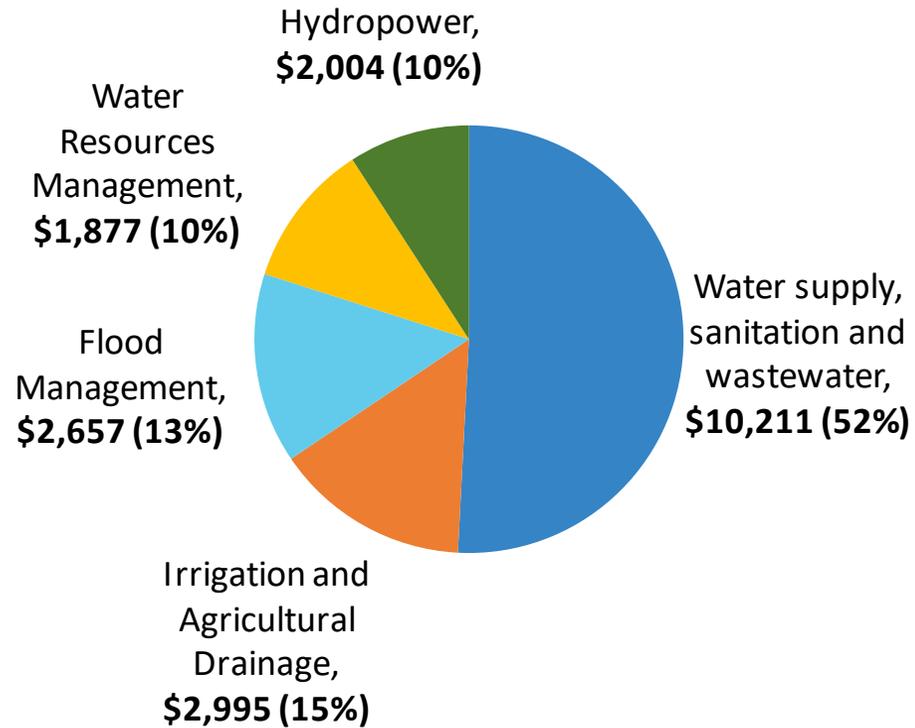




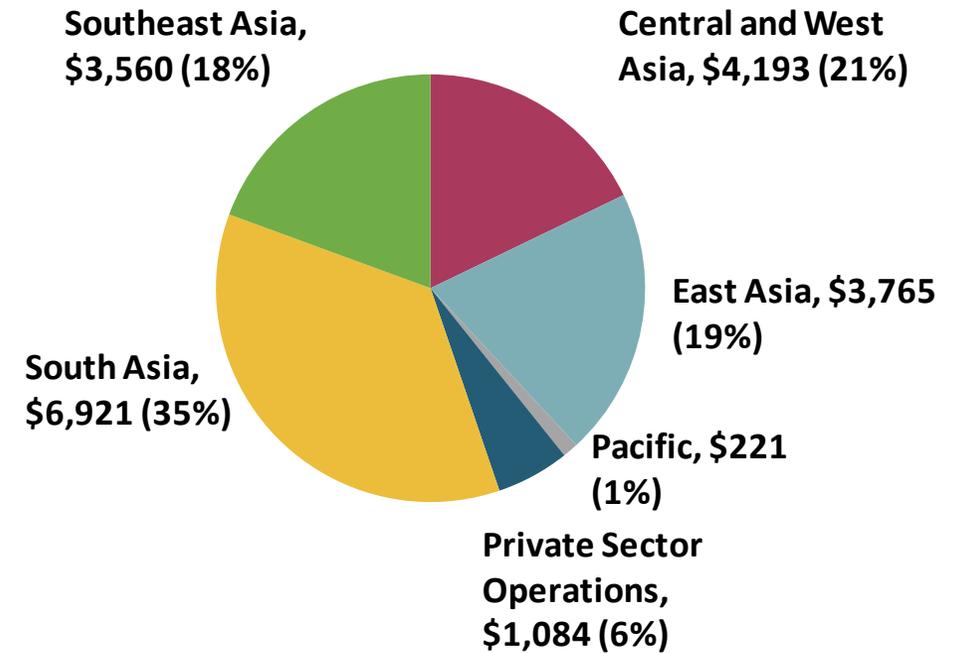
# ACTIVE WSG PORTFOLIO - \$19.74 billion

(in \$ Million)

## SUBSECTOR



## OPERATIONS DEPARTMENT



# ADB's Water Sector Pipeline, 2022

## (water component greater than USD100m)

Dept	Div	DMC	Project Title	Water Component (\$ million)
CWRD	CWUW	UZB	Smart Water Management Improvement Project	100
SARD	SAUW	IND	Ahmedabad Peri-urban Livability Improvement Project	117
SARD	SAUW	IND	Tamil Nadu Urban Flagship Investment Program - Tranche 3	125
SERD	SEUW	TIM	Dili West Water Supply Project	127
SARD	SAUW	BAN	Chattogram Hill Tracts Inclusive and Resilient Urban Water Supply and Sanitation Project	130
SARD	SAUW	BAN	Coastal Towns Climate Resilience Project	135
SARD	SAUW	BAN	Dhaka Environmentally Sustainable Water Supply Project-Additional Financing	140
EARD	EAER	PRC	Fujian Xianyou Mulan River Basin Integrated Ecological Improvement & Envntl Management Project	150
CWRD	CWER	UZB	Climate Adaptive Water Resources Management in the Aral Sea Basin Sector Project	153
SARD	SAER	BAN	Flood and Riverbank Erosion Risk Management Investment Program (Tranche 2)	157
CWRD	CWUW	PAK	Punjab Water Supply and Sanitation Project	200
SERD	SEER	PHI	Integrated Flood Resilience and Adaptation Project 1	214

# ADB's Water Sector Pipeline, 2023

(water component greater than USD190m)

Dept	Div	DMC	Project Title	Water Component (\$ million)
SARD	SAER	BAN	Flood and Riverbank Management (SDP) from Aricha to Chauhali Project	195
SARD	SAER	IND	Brahmaputra Flood and Riverbank Erosion Risk Management Project in Assam	200
SARD	SAUW	IND	Rajasthan Secondary Towns Development Sector Project-additional financing	200
SARD	SAUW	NEP	Integrated Water Supply and Sewerage Management Project	200
SARD	SAUW	SRI	Climate Resilient and Sustainable Water Supply Improvement Project	200
SERD	SEER	VIE	Climate Adaptive Integrated Flood Risk Management Project	200
SARD	SAER	BAN	Rural Connectivity Improvement Project (second additional financing) - BAN: (RCIP-AF2)	205
EARD	EAER	PRC	Chishui River Basin Ecological Protection and Green Development	250
SERD	SEUW	VIE	Ho Chi Minh City Climate Resilient Urban Services Project	287
SARD	SAUW	BAN	Dhaka Sewerage System Development Project	300
SERD	SEUW	INO	Citywide Inclusive Sanitation Project	310
SARD	SAER	IND	Jamrani Drinking Water Multipurpose Project	380
SARD	SAER	SRI	Mahaweli Water Security Investment Program-Tranche 1 (additional financing)	400
SARD	SAEN	NEP	Dudh Koshi Hydropower Project	513

# ADB's Water Sector Pipeline, 2024

(water component greater than USD150m)

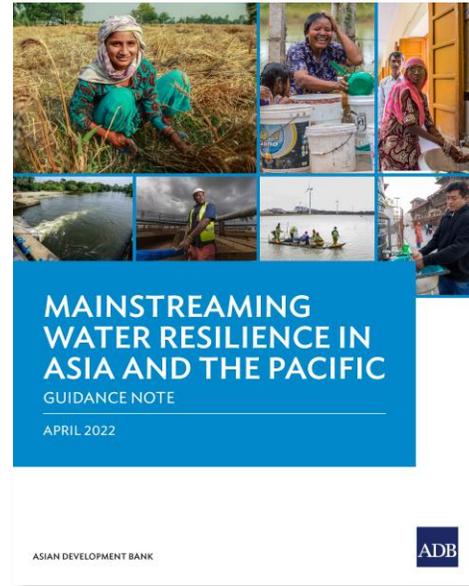
Dept	Div	DMC	Project Title	Water Component (\$ million)
SARD	SAEN	NEP	Lower Seti Hydropower Project	150
CWRD	CWER	PAK	Kurram Tangi Integrated Water Resources Development Project	200
CWRD	CWUW	PAK	Khyber Pakhtunkhwa Cities Improvement Project 3	200
CWRD	CWUW	PAK	Federal and Punjab Urban Development Projects	200
SARD	SAUW	BAN	Urban Sector Reform Program (Subprogram 1)	200
SARD	SAEN	BHU	Dorjilung Hydropower Project	200
SARD	SAER	IND	Climate Adaptation in Vennar Subbasin in Cauvery Delta Project Phase 2	200
SARD	SAUW	IND	Jharkhand Urban Water Supply Improvement Project Phase 2	200
SARD	SAER	IND	Karnataka Integrated and Sustainable Water Resources Management Investment Program Phase 2	200
SERD	SEER	PHI	Integrated Flood Risk Management Sector Project Phase 2	200
SARD	SAER	BAN	Integrated Water Resources and Flood Management Sector Project	300
SERD	SEUW	VIE	Second HCMC Climate Resilient Urban Services Project (HCMC CRUS2)	300
SARD	SAER	IND	Ara Canal Water Productivity Improvement Project	341
CWRD	CWEN	PAK	Hydropower Development Project WAPDA	400

# ADB's Actions to Support Water Resilience in Asia and the Pacific

Asia and Pacific the most disaster affected region in the world, home to more than 40% of global calamities and 84% of people they affect.

ADB water sector group's latest initiatives on building resilience of water entities:

- **RUWR: aRe yoU Water Resilient** (Introductory video: [RUWR](#))
- **Guidance Note on Mainstreaming Water Resilience in Asia and the Pacific**
- **Water Resilience Hub for Asia and the Pacific (add link)**



Putting **climate adaptation as the driver** and at the core of projects and policies

**Building resources and capacities of water entities on the ground** for climate action and **green, inclusive, and resilient post-pandemic recovery of Asia and the Pacific**

# THANK YOU!

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