



ADB

Technical Assistance Cluster Report

PUBLIC

Project Number: 59078-001
November 2025

Resilient River Basin Initiative

This document is being disclosed to the public in accordance with ADB's Access to Information Policy.

Asian Development Bank

ABBREVIATIONS

ADB	– Asian Development Bank
DMC	– developing member country
IWRM	– integrated water resources management
RRBI	– Resilient River Basin Initiative
SD2-AFNR	– Agriculture, Food, Nature, and Rural Development Sector Office, Sectors Department 2
TA	– technical assistance
TASF	– Technical Assistance Special Fund
WFPF-WRTF	– Water Resilience Trust Fund under the Water Financing Partnership Facility

NOTE

In this report, “\$” refers to United States dollars.

Vice-President	Fatima Yasmin, Office of the Vice-President (Sectors and Themes)
Director General	F. Cleo Kawawaki, Sectors Department 2
Senior Sector	Qingfeng Zhang, Agriculture, Food, Nature, and Rural Development Sector
Director	Office, Sectors Department 2 (SD2-AFNR)
Regional Heads, Operations Coordination	Balabhaskara Reddy Bathula, Regional Head, Operations Coordination, East Asia Department
	Bouadokpheng Chansavat, Regional Head, Operations Coordination, South Asia Department (SARD)
	Marzia Mongiorgi, Regional Head, Operations Coordination, Southeast Asia Department
	Jesper Petersen, Regional Head, Operations Coordination, Central and West Asia Department (CWRD)
Director	Jiangfeng Zhang, SD2-AFNR
Team leader	Lance Gore, Principal Water Resources Specialist, SD2-AFNR
Team members	Andrew Achimu, Senior Communications Specialist, Planning Division (DCPD), Department of Communications and Knowledge Management (DOCK)
	Johanna Camille Cayco, Associate Communications Officer, DCPD, DOCK
	Karen Chua, Senior Operations Officer, SD2-AFNR
	Kathleen Anne Coballes; Climate Change Specialist, Climate Change, Resilience, and Environment Cluster (CCRE); Climate Change and Sustainable Development Department (CCSD)
	Zane Andrei Cortez, Operations Assistant, SD2-AFNR
	Christopher Dickinson, Senior Climate Change Specialist, CCRE, CCSD
	Avani Dixit, Senior Climate Change Officer, CCRE, CCSD
	Arystan Galiyev, Senior Project Officer (Natural Resources and Agriculture), Kazakhstan Resident Mission, CWRD
	Alessio Giardino, Senior Climate Change Specialist (Coastal Adaptation), CCRE, CCSD
	Vikas Goyal, Senior Project Officer (Agriculture, Food, Nature and Rural Development), SD2-AFNR
	Tanya Huizer, Senior Water Resilience Specialist, Water and Urban Development Sector Office, Sectors Department 2
	Lan Le, Environmental Economist, SD2-AFNR ^a
	Matthias Leitner, Natural Resources and Agriculture Economist, SD2-AFNR ^b
	Jianing Ma, Counsel, Office of the General Counsel
	David Morgado, Senior Energy Specialist, Energy Sector Office, Sectors Department 1
	Tshewang Norbu, Regional Cooperation Specialist, Regional Cooperation and Integration Unit, SARD
	Martino Pelli, Senior Economist, Economic Research and Development Impact Department
	Eric Quincieu, Principal Water Resources Specialist, SD2-AFNR
	Arun Rana, Senior Project Officer, SD2-AFNR
	Md. Sohel Rana, Associate Water Resources Officer, SD2-AFNR
	Sharlene Jo-Ann Shillingford-Mcklmon; Principal Procurement Specialist, Procurement Division (PFP); Procurement, Portfolio, and Financial Management Department (PPFD)
	Sheryl Yanez, Associate Procurement Officer, PFP, PPFD

Yukitsugu Yanoma, Senior Natural Resources and Agriculture Specialist, SD2-AFNR^c

Asad Zafar, Senior Project Officer (Water Resources), SD2-AFNR

^a Outposted to the Viet Nam Resident Mission, SERD.

^b Outposted to the Georgia Resident Mission, CWRD.

^c Outposted to the Mongolia Resident Mission, EARD.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

CONTENTS

	Page
TECHNICAL ASSISTANCE AT A GLANCE	
I. INTRODUCTION	1
II. JUSTIFICATION FOR THE CLUSTER MODALITY	2
III. THE TECHNICAL ASSISTANCE CLUSTER	3
A. Impact and Outcome	3
B. Outputs, Methods, and Activities	3
C. Cost and Financing	5
D. Implementation Arrangements	5
E. Governance	7
IV. THE PRESIDENT'S DECISION	7
APPENDIX	
Design and Monitoring Framework	8
ANNEXES	
1. Cluster Subproject Descriptions	
2. Terms of Reference for Consultants	

TECHNICAL ASSISTANCE AT A GLANCE

Project Data			
Project number	59078-001	Project name	Resilient River Basin Initiative
Nature of Activity	✓ Research and Development Capacity Development Project Preparation	Modality	Cluster
Country	REG (23 countries)	Executing or implementing agency	Asian Development Bank
Department/Office	SD2/SD2-AFNR	Geographical location	Regional
Sector(s)	✓ Agriculture, natural resources and rural development	Subsector(s)	Agricultural policy, institutional and capacity development Irrigation Water-based natural resources management
Strategic Focus Area	✓ Climate action Digital transformation Regional cooperation and public goods Resilience and empowerment	Sustainable Development Goals	SDG 2.4 SDG 6.4, 6.5 SDG 13.1

Financing

ADB Financing	Amount (\$ million)
Technical Assistance Special Fund	4.20
Cofinancing	Amount (\$ million)
Water Resilient Trust Fund under the Water Financing Partnership Facility	1.00
Counterpart	Amount (\$ million)
None	0.00
Total	5.20
ADB Climate Financing	
ADB	
Adaptation	4.20
Mitigation	0.00
Cofinancing (ADB-administered)	
Adaptation	1.00
Mitigation	0.00
Total	5.20

Currency of ADB Financing: US Dollar

Climate Action	
Disaster Risk Management, Environment and Nature	Disaster risk reduction (DRR)
Safeguards	
Category	Environment: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input checked="" type="checkbox"/> Not Applicable
	Involuntary resettlement: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input checked="" type="checkbox"/> Not Applicable
	Indigenous peoples: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input checked="" type="checkbox"/> Not Applicable
Gender Equality	
Category	<input type="checkbox"/> Gender equality objective (GEN) <input type="checkbox"/> Effective gender mainstreaming (EGM) <input checked="" type="checkbox"/> Some gender elements (SGE) <input type="checkbox"/> Indirect gender benefits (IGB)
Poverty Reduction and Inclusion	
Category	<input type="checkbox"/> Poverty reduction and inclusion focus (PIF) <input type="checkbox"/> Poverty reduction and inclusion elements (PIE) <input checked="" type="checkbox"/> Indirect poverty reduction and inclusion (IPI)
Regional Cooperation and Public Goods	
Category	<input type="checkbox"/> Pillar 1 <input type="checkbox"/> Pillar 2 <input checked="" type="checkbox"/> Pillar 3 <input type="checkbox"/> Not applicable

I. INTRODUCTION

1. The technical assistance (TA) cluster aims to strengthen knowledge on national water resources and water-related food security in the developing member countries (DMCs)¹ of the Asian Development Bank (ADB), while also expanding investment opportunities for river basin management projects and programs. Specifically, the TA cluster will (i) broaden and deepen current research to analyze acute, chronic, and systemic events that pose long-term threats to river basin health; (ii) provide advisory support to DMCs and project teams to identify policy, institutional, and investment opportunities that safeguard the safety, livelihoods, and economic well-being of river basin communities; (iii) strengthen ADB's support to DMCs in developing and preparing new investment projects; and (iv) facilitate knowledge exchange and best practices among river basin managers. The TA aligns with ADB's strategic priorities on climate action, regional public goods, digital transformation, and resilience.²
2. Environmental changes, extreme weather events, and harmful human activities are eroding hard-won gains in economic development, livelihoods, well-being, and water security for millions across Asia and the Pacific. Already the world's most disaster-prone region, it accounts for over 40% of natural hazard-triggered disasters and 84% of the people affected globally.³ Water is the primary channel through which these impacts are felt—manifested in rising floods, storm surges, and prolonged droughts. These pressures are already straining water resources, food security, sanitation, and hygiene systems, and are expected to intensify, placing sustainable and inclusive prosperity at increasing risk.⁴
3. Asia faces diverse and intensifying threats to water security, marked by significant spatial and temporal variability. River basins fed by the Hindu Kush Himalaya, Pamir, Karakoram, and the Tien Shan Mountain ranges—collectively known as Asia's "water towers"—are undergoing accelerated melting of glaciers, snow, and ice. This trend poses serious risks to water supply and agricultural productivity, affecting nearly 2 billion people who depend on these resources.⁵ In contrast, river basins in southern, southeastern, and eastern Asia are increasingly affected by intensified monsoon rainfall, which heightens flood risks, prolongs droughts, and sharpens seasonal wet–dry contrasts. Central and West Asia is experiencing greater variability in annual rainfall patterns, further straining water availability.⁶ These compounding threats vary significantly across the region, underscoring the need for basin-specific strategies tailored to local conditions. Despite this diversity, responses can be effectively coordinated through a unified integrated river basin management framework, providing regionally consistent yet locally tailored solutions. Meanwhile, island nations face distinct water resource challenges and vulnerabilities, further reinforcing the need for context-specific solutions.

¹ Include Armenia, Azerbaijan, Bangladesh, Bhutan, Cambodia, the People's Republic of China, Georgia, India, Indonesia, Kazakhstan, the Kyrgyz Republic, Mongolia, Myanmar, Nepal, Pakistan, the Philippines, Sri Lanka, Tajikistan, Thailand, Timor-Leste, Turkmenistan, Uzbekistan, and Viet Nam. Effective 1 February 2021, ADB placed a temporary hold on sovereign project disbursements and new contracts in Myanmar and effective 15 August 2021, the same was applied to Afghanistan. The TA cluster will include Afghanistan and Myanmar in the analysis, but no activities will happen directly with these countries, and the TA cluster will not actively involve the governments of the two countries in discussing the results.

² ADB. 2025. [Aligning Operations with Strategic Focus Areas and Development Results](#).

³ ADB. 2017. [A Region at Risk: The Human Dimensions of Climate Change in Asia and the Pacific](#).

⁴ High-Level Experts and Leaders Panel on Water and Disasters. 2019. [Principles on Investment and Financing for Water-related Disaster Risk Reduction](#).

⁵ International Centre for Integrated Mountain Development. 2023. [Water, Ice, Society, and Ecosystems in the Hindu Kush Himalaya: An Outlook](#).

⁶ United Nations Educational, Scientific and Cultural Organization (UNESCO). 2025. [The United Nations World Water Development Report 2025, Mountains and Glaciers: Water Towers](#).

4. Tackling these challenges requires an integrated water resources management (IWRM) approach to build resilient river basins. A resilient river basin consistently ensures water security, enabling local communities to flourish while supporting broader national and regional development goals. Achieving water security and sustainable water management involves balancing human needs for domestic use, agriculture, industry, and environmental needs across dimensions of quantity, quality, accessibility, and timing. This must be done in a way that safeguards the environment and effectively mitigates the risks of water scarcity and flooding.

5. The Resilient River Basin Initiative (RRBI) adopts a comprehensive source-to-sea approach, applying landscape and systems-based methodologies to strengthen the resilience and sustainability of river basins in the face of environmental challenges, disasters triggered by natural hazards, and human activities. With a long-term planning horizon, the RRBI supports DMCs in preparing for climate change impacts by leveraging and integrating existing ADB programs for efficient and cohesive scaling. The RRBI aligns with ongoing initiatives across ADB's regions, drawing on collective experience to optimize the use of staff and financial resources.⁷

6. The TA cluster will support the preparation of ensuing projects, focusing on river basin management, water security, and water–food–energy–ecosystem linkages. It will also provide capacity building and knowledge exchanges for ADB staff and DMC counterparts on technical, institutional, and policy aspects relevant to RRBI-supported projects. The TA cluster will also promote both cross-border and intra-country regional and district upstream works and knowledge sharing by bringing together river basin managers, regional knowledge institutes (e.g., Partnerships in Environmental Management for the Seas of East Asia), and international networks. It will build on lessons from previous ADB operations in river basin planning and IWRM to ensure that future investments are aligned with national river basin and water sector strategies. These investments will be informed by robust hydrological and risk-based assessments and will incorporate innovative, climate-resilient measures. Where appropriate, the RRBI will also promote private sector participation in water resources management, storage, and service delivery. Capacity development programs will strengthen the technical, operational, and institutional capacities of river basin organizations, sector agencies, and local stakeholders for effective basin scale water management.

II. JUSTIFICATION FOR THE CLUSTER MODALITY

7. The TA cluster modality will be used to implement a large, multiyear program that supports DMCs in strengthening resilience in river basin management and water security. Implementation will be phased, depending on resource availability. The TA cluster will (i) facilitate a comprehensive and flexible approach to supporting DMC clients; (ii) enable a harmonized, phased, and coordinated strategy for achieving the TA's intended outcome; (iii) support the mobilization of resources from a range of funders and donors;⁸ and (iv) provide flexibility to engage consultants across TA cluster subprojects as needed.

⁷ Ongoing initiatives include the Yangtze River Economic Belt and Yellow River Ecological Corridor in the People's Republic of China; IWRM projects in Bangladesh, Cambodia, India, Indonesia, the Philippines, Sri Lanka, and Thailand; and the TA for Building Adaptation and Resilience in the Hindu Kush Himalayas in Bhutan and Nepal.

⁸ An additional funding proposal is being prepared for submission to the Nordic Development Fund. Additional financing will allow the TA cluster to expand existing subprojects and initiate new ones, including a dedicated subproject focused on the broader South Asian region.

III. THE TECHNICAL ASSISTANCE CLUSTER

A. Impact and Outcome

8. The TA cluster is aligned with the following impact: foster climate and disaster resilience for water and food security.⁹ The TA cluster will have the following outcome: opportunities for strengthened climate and disaster resilience increased.¹⁰

B. Outputs, Methods, and Activities

9. Each TA cluster subproject will deliver all or some of the following outputs, as specified in each TA cluster subproject report.

10. **Output 1: Knowledge solutions for long-term water security strengthened.** Output 1 will strengthen the rationale for investing in resilient river basins through scientific analysis, identification of at-risk areas, and an assessment of impacts on DMC communities, infrastructure, and economics. The TA will review and consolidate existing knowledge, tools, and data systems in collaboration with DMCs, and apply digital analytics where necessary to fill remaining gaps in information.¹¹ The TA will also model the projected health of river basins by 2100, identifying specific basins or basin areas with suboptimal health levels. Overall, the analysis will include (i) identifying gaps and overlaps in existing data and research, with the aim for RRBI to address them; (ii) conducting long-term integrated multi-hazard risk assessments—including climate change impacts such as glacier and snowmelt effects on water availability, flood risks, and agricultural demand;¹² (iii) undertaking national and regional integrated economic assessments; and (iv) identifying hotspots where ADB could support DMCs through targeted infrastructure investments.¹³

11. **Output 2: Approaches for strengthening river basin governance and financing prepared.** Output 2 will focus on strengthening river basin governance through a comprehensive review of existing practices in DMCs related to water resources and disaster risk management. The review will summarize existing practices and identify gaps and opportunities for strengthening and reform, including (i) policies, laws and regulations and their alignment with international best practices in integrating IWRM principles, climate resilience, and sustainable development; (ii) institutional capacities—including technical, administrative, and managerial capabilities—to effectively implement and enforce policies, along with coordination mechanisms at local, national, and regional levels; (iii) adequacy of budget allocations for water management and resilience-building initiatives; (iv) capacity of data and information systems; and (v) community engagement. Output 2 will also identify and map regional and global examples of climate funds and innovative financing mechanisms relevant to river basin management and water security investments in Asia. For priority river basins, it will assess the financing landscape within DMCs to uncover

⁹ ADB. 2024. [Strategy 2030 Midterm Review: An Evolution Approach for the Asian Development Bank](#).

¹⁰ The design and monitoring framework is in the Appendix.

¹¹ For example, in Cambodia, the TA will support the government to consolidate existing models and hydrological data systems and to apply these to demonstrate best practice for river basin management.

¹² The TA's analyses will be conducted at the river basin scale to capture the broader hydrological and environmental context. However, in full respect of national sovereignty and priorities, the resulting findings and recommendations will be tailored and applied at the national level—ensuring that each country's unique policy, legal, and development frameworks are properly considered.

¹³ A hotspot refers to a geospatially identified area within a river basin that is especially vulnerable to water-related risks, including flooding, drought, pollution, and ecosystem degradation. Hotspots can also be priority areas for strategic investments, innovation, and sustainable development.

opportunities for advancing and implementing innovative funding solutions for both capital investments and sustainable operation and maintenance.¹⁴

12. Output 3: River basin management and water security investment opportunities identified. Output 3 will support project teams in preparing river basin management plans and investment roadmaps. Although Outputs 1 and 2 will provide analytical inputs to help identify priority basins, implementation of Output 3 does not need to wait, as several priority basins have already been identified through ongoing discussions with DMCs. In Cambodia, Indonesia, and the Philippines, priority river basins have been confirmed and are aligned with national strategies, government priorities, and ADB's strategies and planning, enabling early mobilization of support for investment preparation.¹⁵ Key activities will include (i) analyzing ongoing and pipeline investments, (ii) mapping opportunities for governance actions and infrastructure investments using insights from outputs 1 and 2, and (iii) supporting DMCs in preparing investment projects to a high level of readiness. Investment pipelines will be assessed, and financing strategies will be recommended—combining ADB loan funds with innovative financing modalities to reduce overall financing costs, informed by the findings of output 2.¹⁶

13. Output 4: Knowledge exchanges on best practices for river basin governance and water security investments enhanced. Output 4 will focus on facilitating knowledge sharing events and programs to (i) disseminate the TA's activities and findings; (ii) convene river basin managers and regional knowledge institutes to exchange experiences and best practices;¹⁷ (iii) promote the use of digital tools—such as decision support systems and digital twinning—for more efficient and effective water management decision-making; (iv) support a tiered development approach for basin twinning programs to strengthen river basin management; (v) provide a technical platform for DMCs and river basins to share information and learn from global best practices; (vi) organize regional and global study tours and participation in

¹⁴ In implementing output 2, synergies will be pursued with other ADB TA initiatives that support climate funds and innovative financing mechanisms. These include (i) ADB. 2024. *Technical Assistance for Enhancing Asia and the Pacific's Readiness for Resilient Disaster Recovery*; (ii) ADB. 2024. *Technical Assistance for Developing a Disaster and Climate Risk Transfer Facility in the Central Asia Regional Economic Cooperation Region (Phase 2)*; and (iii) ADB. 2019. *Technical Assistance for Developing a Disaster Risk Transfer Facility in the Central Asia Regional Economic Cooperation Region*. In Thailand, the TA will support the proposed *Lower East Chao Phraya Irrigation System Improvement – Climate Adaptive Strengthening Investment Project* to assess how insurance and risk-financing mechanisms can de-risk flood adaptation investments by lowering uncertainty for public and private investors and reducing future economic losses.

¹⁵ In Cambodia, the government has requested ADB's support to strengthen river basin master planning and investment roadmaps for the Tonle Sap basin group, with priority investments expected to be financed under the proposed *Second Integrated Water Resources Management Project* (targeted for ADB Board consideration in 2027). For Indonesia, the TA will support scoping of investments for resilient river basins, expanding the approach being promoted under the ongoing *Flood Management in North Java Project*. In the Philippines, the government has requested ADB's support to prepare the next *Integrated Flood Resilience and Adaptation Program* (tentatively scheduled for Board consideration in 2027). The TA will also support the Association of Southeast Asian Nations Secretariat in developing an investment outlook for water resilience in Southeast Asia. This outlook will complement the Association of Southeast Asian Nation's *Strategic Plan of Action on Water Resources Management*.

¹⁶ Indicative investments include drought-resilient irrigation and water storage (impounding and natural reservoirs, efficient and automated irrigation systems, conjunctive groundwater–surface water management, and participatory irrigation management); green–gray flood management that combines nature-based solutions (floodplains, wetlands, sponge cities) with climate-proofed infrastructure; and watershed and river-health restoration through reforestation, agroforestry, biodiversity corridors, and strengthened cooperation to secure sustainable upstream–downstream water flows.

¹⁷ The RRBI will seek to collaborate with and draw upon the expertise and networks of established regional and international organizations, such as the Food and Agriculture Organization of the United Nations, the International Centre for Integrated Mountain Development, the International Water Management Institute, the Network of Asian River Basin Organizations, and the Mekong River Commission. These will support knowledge generation, coordination, and dissemination efforts.

international forums; and (vii) assist project teams with country programming and engagement with DMCs.

C. Cost and Financing

14. The TA cluster financing amount is \$5,200,000, of which (i) \$4,200,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF)—\$1,000,000 from TASF 8, \$2,200,000 from TASF-other sources, and \$1,000,000 from TASF Regional Cooperation and Integration Set-Aside; and (ii) \$1,000,000 will be financed on a grant basis by the Water Resilience Trust Fund under the Water Financing Partnership Facility (WFPF-WRTF) and administered by ADB.¹⁸ ADB will explore additional financing from both internal and external sources to complement the TA cluster funding. Consulting services, studies, surveys, and workshops will be supported through ADB-administered funds and special funds.¹⁹ Further details will be outlined in the respective TA subproject reports.

15. For each TA subproject, the government will provide counterpart support in the form of counterpart staff, office accommodation, and other in-kind contributions. The total TA cluster amount is broken down per output in Table 1.

Table 1: Cost Breakdown per Output

Output	Indicative Cost (\$)	Percentage of TA Amount (%)
Output 1: Knowledge solutions for long-term water security strengthened	1,150,000	22.1
Output 2: Approaches for strengthening river basin governance and financing prepared	200,000	3.8
Output 3: River basin management and water security investment opportunities identified	3,550,000	68.3
Output 4: Knowledge exchanges on best practices for river basin governance and water security investments enhanced	300,000	5.8
Total	5,200,000	100.0

TA = technical assistance.

Source: ADB.

D. Implementation Arrangements

16. ADB will administer the TA cluster through the Agriculture, Food, Nature, and Rural Development Sector Office; Sectors Department 2 (SD2-AFNR). SD2-AFNR will coordinate with its regional teams, ADB regional departments and resident missions and relevant sector offices (e.g., Water and Urban Development Sector Office), and supporting departments (e.g., Climate Change and Sustainable Development Department) to implement the TA cluster. SD2-AFNR will (i) select, supervise, and evaluate consultants including resource persons; (ii) coordinate with DMCs to organize workshops and capacity development events; and (iii) provide staff to act as resource persons. Each TA cluster subproject proposal will be submitted to the appropriate approving authority following ADB's business process for TA cluster processing.²⁰ Subproject activities will start only after approval. Implementation arrangements are summarized in Table 2.

¹⁸ Financing partner: the Government of the Netherlands.

¹⁹ Includes participation of ADB staff when engaged as resource persons, as well as support services.

²⁰ ADB. 2025. Staff Instruction on Business Processes for Technical Assistance.

Table 2: Implementation Arrangements

Aspects	Arrangements		
Indicative implementation period of the TA cluster	November 2025–December 2030		
Executing and implementing agency	ADB		
Consultants	To be selected and engaged by ADB		
	Firms: Framework contract, QCBS, SCQS	International and national experts	\$2,729,200
	Firm: Direct contracting	Joint venture of WUR and FutureWater	\$750,000
	Individuals: Framework agreement, ICS and resource persons	International and national experts	\$800,000
Procurement	To be procured by ADB or consultants		
	Request for quotations	Goods, survey equipment, tools, software, nonconsulting services (survey, workshop facilitation, conference meetings, study tours coordination, etc.)	To be specified in each TA cluster subproject proposal
Advance contracting	Advance contracting will be undertaken for the direct contracting of WUR. Other advance contracting will be specified in respective TA cluster subproject report.		
Disbursement	Disbursement of TA resources will follow ADB's <i>Technical Assistance Disbursement Handbook</i> (2020, as amended from time to time). Disbursement will be activity based, with ADB project officer responsible indicating the fund source for all submitted requests for payments.		
Asset turnover or disposal arrangement upon TA completion	Fixed assets acquired under the TA cluster subprojects will be turned over to the relevant government agencies upon completion of the respective subprojects.		

ADB = Asian Development Bank, ICS = individual consultant selection, QCBS = quality- and cost-based selection, SCQS = simplified consultants' qualifications selection, TA = technical assistance, WUR = Wageningen University and Research.

Source: ADB.

17. Subprojects. The TA cluster will be implemented initially through two subprojects (Annex 1). Each subproject will be designed to support the achievement of the cluster outputs during the implementation period. The indicative implementation period and budget allocation for the subprojects are summarized in Table 3. Additional subprojects will be added as financing becomes available through a change process of the proposed TA.

Table 3: Indicative Implementation Period and Budget Allocation for Subprojects

Item	Subproject Name	Implementation Period	Budget (\$'000)
Subproject 1	Southeast Asia Resilient River Basin Initiative	November 2025–December 2030	4,200
Subproject 2	Water Balance and Crop Production in Major Asian River Basins	November 2025–March 2027	1,000

18. **Consulting services.** ADB will engage consultants following ADB Procurement Policy (2017, as amended from time to time) and its associated staff instructions.²¹ Subject matter experts will be engaged as resource persons as needed. Direct contracting will be used to engage Wageningen University and Research in joint venture with FutureWater as the work involves high mountain hydrology and its impacts on crop production in the Hindu Kush Himalaya region, and their expertise is unique and highly specialized because of their proven track record and existing research on high mountain hydrology and the availability of their compatible software models and methodologies, which they developed. Procurement of goods related to studies and surveys for knowledge or data gathering will be using request for quotations.

19. **Cofinancier requirements.** SD2-AFNR will provide periodic updates to the Partner Funds Division on TA progress, policy discussions, and capacity building activities, and back-to-office reports. The TA will comply with the WFPF-WRTF implementation guidelines and ensure that its visibility requirements are observed.

E. Governance

20. Since ADB serves as the executing agency, the financial management, procurement, and integrity risks during TA implementation are assessed as *low*. However, thorough risk assessments for financial management, procurement, and integrity will be conducted under each subproject TA for any ensuing investments in target countries.

IV. THE PRESIDENT'S DECISION

21. The President, acting under the authority delegated by the Board, has approved (i) the Asian Development Bank (ADB) administering a portion of technical assistance not exceeding the equivalent of \$1,000,000 to be financed on a grant basis by the Water Resilience Trust Fund under the Water Financing Partnership Facility; and (ii) ADB providing the balance not exceeding the equivalent of \$4,200,000 on a grant basis for Resilient River Basin Initiative, and hereby reports this action to the Board.

²¹ Terms of Reference for Consultants (Annex 2).

DESIGN AND MONITORING FRAMEWORK

Impact the TA is Aligned with Foster climate and disaster resilience for water and food security ^a			
Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risk and Critical Assumptions
Outcome Opportunities for strengthened climate and disaster resilience increased	<p>By 2031</p> <p>a. ADB's contribution to water and food security climate and disaster resilience project pipeline increased by 10% (2025 baseline: WPBF 2026–2028: \$2,230,150)^b</p> <p>b. River basin assessments and knowledge products applied to strengthen climate and disaster resilience in policies, investment road maps, and/or project designs of new proposed investments projects (2025 baseline: 0) (DR7, DR8)</p>	<p>a. ADB's annual WPBF, country programming aide-mémoire, or memorandum of understanding</p> <p>b. ADB project documents, including draft reports and recommendations of the President; project monitoring reports; recipient government agencies' reports, and other pertinent documents</p>	R: Government has changed their priority from water and food security
Outputs 1. Knowledge solutions for long-term water security strengthened	<p>By 2030</p> <p>1a. Assessment of the region's approaches to river basin management, tools used, and opportunities for strengthening prepared (2025 baseline: assessment not prepared)</p> <p>1b. Assessment of the long-term water balance and crop production in at least eight river basins prepared (2025 baseline: 0)</p> <p>1c. Planning tools on hydrology and food security and hydro-economics developed (2025 baseline: planning tools not yet developed)</p> <p>1d. Integrated analysis carried out for at least three river basins identifying the hotspots and investment opportunities for medium- and long-term planning horizons (2025 baseline: 0)</p>	1a–d. Consultant reports and technical papers	<p>R: Reduced engagement and/or support from experts and knowledge institutes in participating DMCs</p> <p>R: Reduced interest from DMCs in the identification of opportunities.</p>

Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risk and Critical Assumptions
2. Approaches for strengthening river basin governance and financing prepared	<p>2a. Assessment of regional river basin governance and financing practices and capacities prepared (2025 baseline: assessment not prepared)</p> <p>2b. Recommendations for strengthening river basin governance and increasing financing for capital and operational expenditures incorporated into at least three river basin investment road maps (2025 baseline: 0)</p>	2a–b. Consultant reports	
3. River basin management and water security investment opportunities identified	<p>3a. At least three resilient river basin management and infrastructure action plans and investment road maps prepared (2025 baseline: 0)</p> <p>3b. At least three additional pre-feasibility studies on key investment opportunities prepared (2025 baseline: 0)</p>	<p>3a. Consultant reports and DMC sector assessments</p> <p>3b. Consultant reports</p>	
4. Knowledge exchanges on best practices for river basin governance and water security investments enhanced	<p>4a. Capacity development and knowledge sharing programs implemented with DMCs, knowledge partners, and river basin organizations, for at least 200 participants, of which at least 30% are women (2025 baseline: 0)</p> <p>4b. At least three additional knowledge products on river basin resilience published (2025 baseline: 0)</p>	<p>4a. Summary of the workshops and user satisfaction survey of the participants</p> <p>4b. Publications</p>	

Key Activities with Milestones
Output 1: Knowledge solutions for long-term water security strengthened
<p>1.1 Engage firm(s) for undertaking the water balance and crop production assessments (Q1 2026)</p> <p>1.2 Engage individual consultants to provide capacity supplementation as needed (Q4 2025–Q4 2030)</p> <p>1.3 Engage firm(s) that will assist ADB with TA management and contribute to outputs 1 to 4 (Q1 2026)</p> <p>1.4 Broad assessment of the region's approaches to river basin management and opportunities for strengthening completed (Q4 2026)</p> <p>1.5 Water balance modelling and crop production assessment completed (Q4 2026)</p> <p>1.6 River basin assessments for selected basins completed (Q2 2027)</p> <p>1.7 Completion of hydro-economic model assessments for priority river basins (Q2 2027)</p> <p>1.8 Technical assessment of resilient river basin strategies completed (Q4 2028)</p>
Output 2: Approaches for strengthening river basin governance and financing prepared
<p>2.1 Engage a firm or individuals to assess river basin governance and financing options to support resilient river basin management (Q2 2026)</p> <p>2.2 Broad assessment of governance and financing solutions for resilient river basin management interventions completed (Q1 2027)</p> <p>2.3 Overview of international experiences with innovative financing solutions and their applicability to strengthen river basin resilience prepared (Q1 2027)</p>

2.4 Recommendations for governance strengthening and financing options in the priority river basins provided (Q2 2027)

Output 3: River basin management and water security investment opportunities identified

3.1 Resilient River basin management strategy and investment roadmaps prepared for the priority river basins (Q2 2027)

3.2 Project concept papers prepared for priority investments (Q3 2027)

3.3 Draft loan approval documents prepared for priority investments (Q4 2030)

Output 4: Knowledge exchanges on best practices for river basin governance and water security investments enhanced

4.1 Engage individual consultants and resource persons as needed (Q4 2025–Q4 2030)

4.2 Collaborate with international and national knowledge and research institutes on integrated river basin management (Q4 2025–Q4 2030)

4.3 Convene and participate in relevant regional and international workshops and forums to gather additional insights and disseminate RRBI's activities and findings (Q4 2025–Q4 2030)

4.4 Convene regular internal ADB community of practice meetings (Q4 2025–Q4 2030)

4.5 Provide technical support to country and project teams during country programming and project preparation missions (Q4 2025–Q4 2030)

4.6 Prepare technical reports and journal papers on RRBI findings and recommendations (Q4 2030)

TA Management Activities

Engaging consultants, convening, and participating in internal and external knowledge sharing events, reporting, monitoring and evaluation, and engaging with governments

Inputs

ADB: \$4,200,000 (\$1,000,000 TASF 8, \$2,200,000 TASF-other sources, and \$1,000,000 TASF Regional Cooperation and Integration Set-Aside)

Water Resilience Trust Fund under the Water Financing Partnership Facility: \$1,000,000 (grant)^c

ADB = Asian Development Bank, DMC = developing member country, DR = development result, Q = quarter, R = risk, RRBI = Resilient River Basin Initiative, SDG = Sustainable Development Goal, TA = technical assistance, TASF = Technical Assistance Special Fund, WPBF = work program and budget framework.

^a ADB. 2024. [Strategy 2030 Midterm Review: An Evolution Approach for the Asian Development Bank](#).

^b ADB. 2025. *Work Program and Budget Framework*, 2026-2028. Unpublished.

^c Financing partner: the Government of the Netherlands. Administered by the Asian Development Bank.

Contributions to ADB's Development Results and Alignment with SDGs

A summary of the TA contributions to ADB's development results and alignment with SDGs are presented in the Contributions to Strategy 2030 Development Results page in eOperations. This information may be requested from the TA team upon request.

Source: Asian Development Bank.