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12TH ASIAN DEVELOPMENT BANK BUSINESS OPPORTUNITIES FAIR 2024

9-10 OCTOBER 2024 9 A.M. to 5 P.M. ADB HEADQUARTERS, MANILA

THEMATIC SESSION: CLIMATE CHANGE

Climate Change and Sustainable Development Department 10 OCTOBER 2024

The impacts of climate change are already being felt in the Asia-Pacific

2018

INDIA

Flood (Aug)

\$3.3 billion

(504 deaths)



Impacts from disasters in Asia and the Pacific* (2015-2023)



851.6 million People affected



Fatalities



446.3 billion **Total losses**

Total losses for DMCs only

2015

PHILIPPINES Typhoon Chan-hom (Jul)

\$1.9 billion (5 deaths)

VIET NAM

Drought (Dec-Feb 2017) 8.3 billion

(1.8 million affected)

PRC

Typhoon Mujigae (Oct)

\$5.2 billion

(20 deaths; 78,300 affected)

VANUATU

Cyclone Pam (Mar)

\$0.55 billion

(188,000 affected)

\$48.9 billion

2016

PRC Flood

(Jun-Jul) \$26.8 billion

(289 deaths; 60 million affected)



SRI LANKA

Flood (May) \$1.5 billion (203 deaths)

INDIA

Cyclone Vardah (Dec) \$1.2 billion (24 deaths)



Cyclone Winston (Feb)

\$0.73 billion (540,558 affected)

\$63.1 billion

PRC

2017

Flood (Jun-Jul) \$7.2 billion

(78 deaths)

PRC

Typhoon Hato (Aug)

\$4.2 billion (8 deaths)



THAILAND

Flood (Jan)

\$1.2 billion

(96 deaths)

\$30.4 billion

PRC

Tropical storm Rumbia (Aug) \$6.3 billion

(53 deaths)

PRC

Flood (May-Jul)

\$2.0 billion (112 deaths)

\$26.3 billion

INDIA

2019

Flood (Jul-Sep) \$11.4 billion

(1,900 deaths)



Cyclone Hanna (Jul-Sep)

PRC

\$11.4 billion (72 deaths)

INDONESIA

Flood (Dec)

\$1.4 billion

(66 deaths)

\$36.6 billion

PRC

Flood (May-Jul)

2020

\$19.2 billion (280 deaths)

INDIA

Cvclone Amphan (May) \$15.3 billion (90 deaths)

INDIA

Floods. Landslides (June) \$8.5 billion (1,922 deaths)

PAKISTAN

Flood (Aug-Sep) \$1.7 billion (410 deaths)

TONGA

Cyclone Harold (Apr)

\$0.13 billion (25,00 affected)

\$65.1 billion

PRC

2021

Flood (Cyclone Cempaka) (Jun-Aug) \$17.8 billion

(352 deaths)

PRC

Drought

(Jan-Dec)

\$3.3 billion

INDIA

Cyclone Yaas

(May)

\$3.2 billion

(19 deaths)

\$39.3 billion

INDIA

2022

PRC

Drought

(Jul-Aug)

\$7.6 billion

(6.1 million

affected)

Flood (May-Oct) \$4.2 billion (2,035 deaths; 1.3 million affected)

PAKISTAN

Flood (Jun-Sep) \$10 billion reconstruction

cost (1,739 deaths; 33 million

affected)



\$18.5 billion

MYA Cyclone

2023

Mocha (May) \$2.2 billion

(145 deaths, 0.9 million affected)

PRC

Floods (May) \$0.08 billion

(0.5 million affected)

PHI

Cyclone Doksuri (July) \$0.11

billion

(45 deaths, 2.5 million affected)

\$2.5 billion

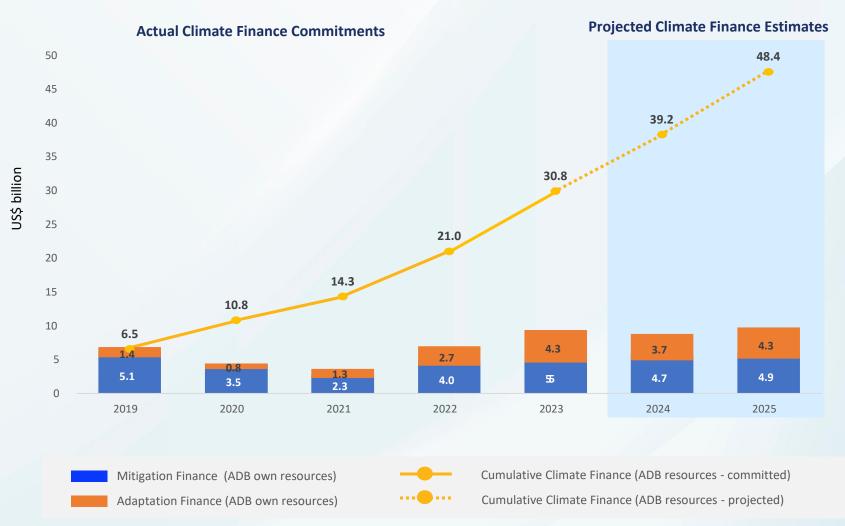
1. The amounts for total losses refer to the monetary amount of damage to property, crops and livestock at the year of the event. (Center for Research on the Epidemiology of Disasters)

* All ADB regional members. INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission





Large increase in ADB's Climate Finance up to 2030





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ADB as the Asia-Pacific's Climate Bank

Strategy 2030 Mid-term Review: Five Strategic Focus Areas

Strategy 2030



Climate action

Private sector development

Regional cooperation and public goods

Digital transformation

Resilience and empowerment



ADB's New Operating Model (NOM)







NOM Shifts



Corporate Results Framework includes climate related indicators





Climate Adaptation and Resilience

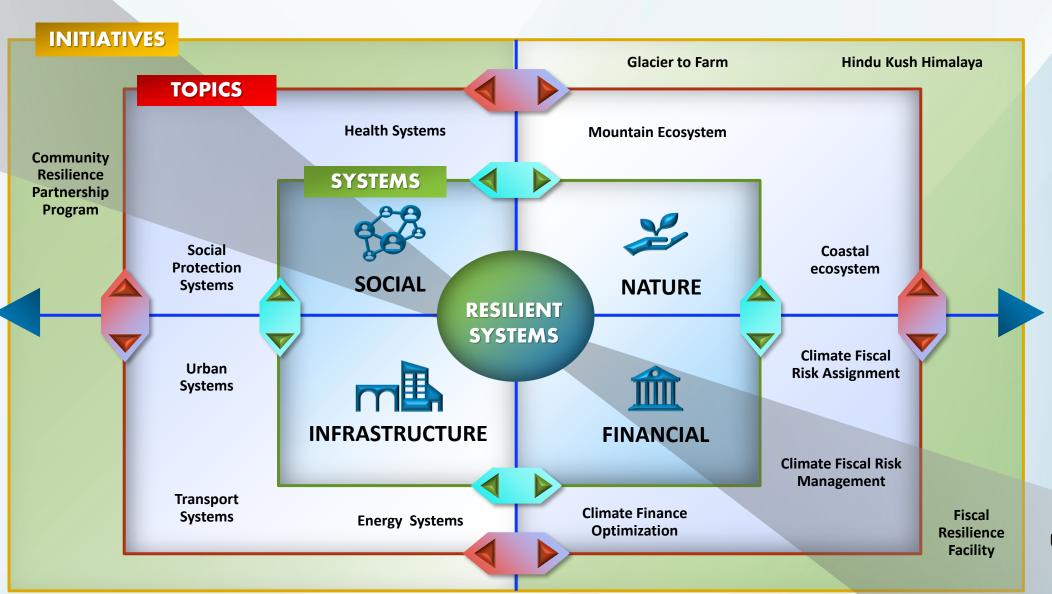


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Upcoming
Lao PDR
Climate
Adaptive
Social
Protection
Project





Upcoming Mongolia Climate Change PBL

OPERATIONS





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Typology

Water and Sanitation

Transport

Energy

Education

Type 1
Adapted
Projects

Health
Social Protection
Agriculture Irrigation Finance

Type 2a
Shared Objective of
Adaptation and
Development

Coastal resilience
Flood risk management
Landslide protection

Type 2b
Enabling
Adaptation

Incremental

Transformational



Low Carbon Development, Just Transition and GHG Accounting



Asia and the Pacific is at the center of the global climate transition

- Asia and the Pacific is one of the world's most emissions-intensive regions (41% higher than rest of world)
 - Jobs and physical assets are highly exposed to decarbonization (more than rest of world)
 - The energy mix has been relatively steady for three decades, with a 70% contribution from coal
 - Global value chain integration (trade) is a driving factor for Asia's emissions intensity (more than any other region)
- Asia and the Pacific is also home to many of the transition's opportunities
 - High renewable energy generation potential and large critical minerals reserves
 - A majority of global clean energy jobs are already in Asia and the Pacific (and not only in People's Republic of China)
 - Overall unemployment is low, favoring capital-intensive and human capital-intensive development pathways (However, youth unemployment is on the rise)





Asia and the Pacific is at the center of the global climate transition – cont

- Extreme diversity among countries:
 - Income, poverty, and inequality levels
 - Economic structure, sectoral composition of GHGs, emissions trajectory, and climate finance access
 - Population size, density, and demographic structure
 - Geography
- Key patterns relevant to just transition emerge at a subregional level
 - Transition risk: South Asia has high total exposure to decarbonization (jobs and assets)
 - Physical risk: South and Southeast Asia are the most exposed subregions
 - Informal employment: South and Southeast Asia have the highest rates
 - RE generation concentrated in PRC, India, and SE Asia; PRC and SE Asia lead in RE manufacturing
 - Manufacturing is most economically important in South, East, and SE Asia (including both emissions-intensive and green value chain manufacturing)
 - Restoration economy: SE Asia has the greatest potential in the AFOLU sector
 - Fossil fuel exports are predominant in West Asia





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Asia & Pacific's Transition to Net Zero

Greenhouse Gas Mitigation

Improved Standard of Living

Finance

People

Economies

Consultation and Societal Buy In Economic Opportunity

Systems
Transformation
to Net Zero

ADB's Climate Shift

Providing direct support to countries to strengthen the enabling environment



Working with ADB operations on projects and special initiatives



ADB internal processes, frameworks and quidance



External engagement and partnerships







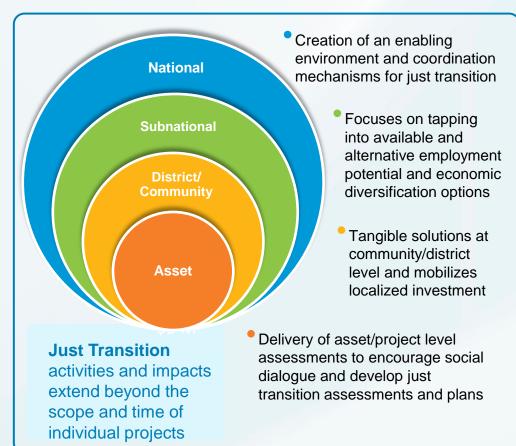
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ADB and Just Transition

Just Transition is a multi-dimensional approach which maximizes social, economic, institutional, and societal opportunities of climate action while minimizing and carefully managing negative direct, indirect and induced consequences.



ADB's Climate Shift

Providing direct support to countries to strengthen the enabling environment



Working with ADB operations on projects and special initiatives



Pioneering just transition finance



Institutionalizing
Just Transition in
ADB



External engagement and partnerships









Disaster Risk Management

ADB's DMCs face significant and rising disaster risk



- Extreme weather and geophysical events, epidemics and pandemics have caused significant loss of life, assets and economic productivity in ADB's DMCs
- Particularly detrimental impact on poorest and most vulnerable.
- The impacts of climate change change are expected to deepen vulnerability and further increase disaster risk unless urgent action is taken to reduce risk.

Types of ADB Disaster Risk Management Support

Investment in risk reduction and preparedness

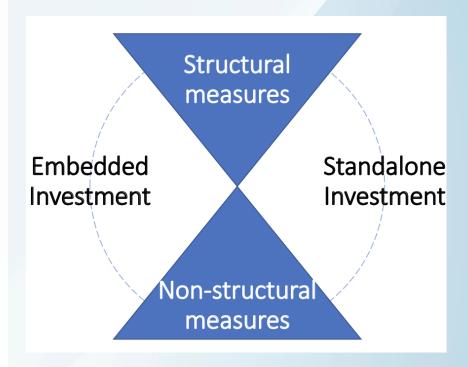
- Structural and non-structural measures
- Mostly embedded in multiple relevant sectors (urban, AFNR, transport, etc)

Post-disaster support

- Technical support for post-disaster needs assessment
 - Fast-tracked early recovery
 - Longer-term reconstruction

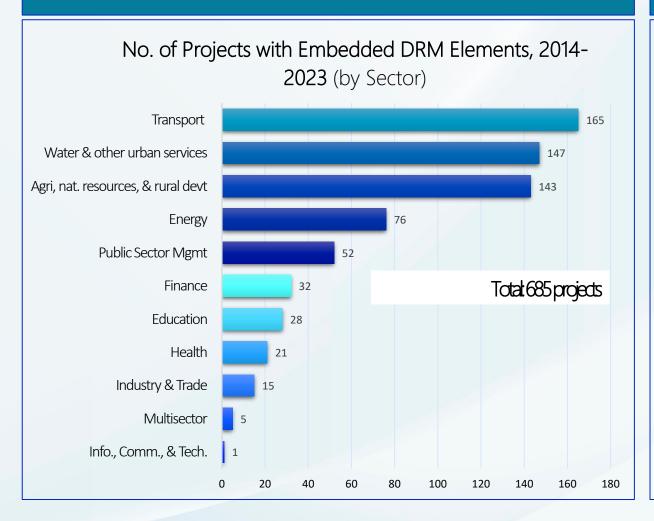
Knowledge and upstream development

- Capacity development
- Upstream DRM enabling environment enhancement
- Knowledge solution documentation and dissemination

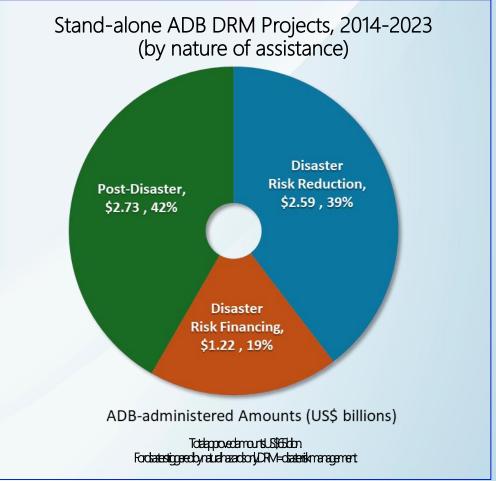


Disaster Risk Management Investments, 2014-2023

Five-fold increase of sector projects that embedded DRM components



Growth of disaster risk financing (DRF) in standalone DRM projects; innovative seismic risk reduction projects alongside flood risk management





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The DRM Action Plan 2024-2030: Four main workstreams

1

IMPROVE DISASTER KNOWLEDGE AND RISK-INFORMED PLANNING TOOLS

Improve disaster risk information and assist DMCs in setting up risk informed decision-making tools

2

INCREASE INVESTMENTS IN DISASTER RISK REDUCTION

Emphasize "embedded" and multi-sector DRM projects, use PBLs to promote policy coherence in DMCs, and support enabling environment for non-structural DRR measures

3

INCREASE INVESTMENTS IN DISASTER PREPAREDNESS AND DISASTRE RISK FINANCING

Support DRF diagnostics, design and implementation of DRF instruments, and disaster preparedness through PFM, and promote greater investments in EWS

4

SUPPORT EFFECTIVE AND RESILIENT RECOVERY IN DMCs

Support post-disaster needs assessment and recovery plans, assist DMCs in recovery preparedness, and support longer-term resilient recovery, "build back better"





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Environment







Framework for Enhancing Environmental Sustainability Under Strategy 2030

BIODIVERSITYLOSS and ECOSYSTEM DEGRADATION

РОШИПОН

CLIMATE CHANGE

MDB Statement on Nature

Global Biodiversity Framework

Global Biodiversity Framework

Paris Climate Agreement

INCREASING NATURE-POSITIVE INVESTMENTS

BIODIVERSITY & ECOSYSTEM MANAGEMENT

INCREASING NATURE-POSITIVE INVESTMENTS

POLLUTION CONTROL & CIRCULAR ECONOMY

HEALTHY OCEANS

ECOSYSTEM RESTORATION (Regional Flyway)

AIR QUALITY

CIRCULAR ECONOMY

NATURE-BASED CLIMATE SOLUTIONS



QUALITY INFRA / NATURE-BASED SOUTIONS

FINANCE/GOVERNANCE





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Three interconnected mutually reinforcing pillars

All three pillars interlink, addressing climate change, disaster risk, and environmental sustainability through strategic alignment of policies and operations.

NATURE-BASED CLIMATE SOLUTIONS

- Nature as a climate solution
- Enhanced resilience, reduced degradation, carbon sequestration, and green opportunities
- Policy dialogue, financial solutions, operational support, and capacity building

- Conservation, restoration, and sustainable management of ecosystems
- Reduce negative drivers, mainstream into sectors, develop nature-positive projects, track impacts
- Landscape and seascape approach to deliver larger impacts

BIODIVERSITY & ECOSYSTEM MANAGEMENT

POLLUTION CONTROL & CIRCULAR ECONOMY

- Reduce and prevent pollution, promote resource efficiency, and support circular economy
- Support energy transition, improve transport systems, reduce residue burning, address legacy pollution
- Enhance policies, align with treaties, leverage crosssectoral initiatives





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Operationalization of the Environment Action Plan

Upstream

- Integrate environmental sustainability into Country Partnership Strategies (CPS) and regional plans, enhancing global alignment.
- Strengthen effective environmental governance by improving policies, laws, and regulations.
- Enhance key internal operational and business framework and processes.

Midstream

- Identify and integrate key environmental features into pipelines, public finance management, and procurement.
- Conduct regional diagnostic studies and prioritize nature-positive investment projects.
- Promote cross-sector coordination, regional cooperation, and innovative finance for environmental sustainability.
- Promote the integration of ecosystem services and natural capital into economic valuation of projects.

Downstream

- Increase quality and quantity of projects that address and enhance environmental sustainability.
- Integrate environmental features beyond safeguards in investments.
- Develop and leverage innovative financial instruments to boost environmental sustainability.
- Provide technical inputs and design support for investment projects with nature-based solutions (NbS) components.

Cross-cutting

- Partnerships & stakeholder engagement
- Capacity building & training

- Knowledge generation & sharing
- Digital technologies & artificial intelligence



ADB projects and addressing climate change: Examples







Bangladesh: Climate and Disaster Resilient Small-Scale Water Resources **Management Project**

TOTAL FINANCING: \$225.0 million

DATE OF APPROVAL: 19 September 2023

OUTCOME

Climate- and disaster-resilient agricultural productivity and profitability in selected geographic areas increased

OUTPUTS

- Participatory subproject development and management improved
- Small-scale water resources infrastructure with climate and disaster resilient features developed or enhanced
- Agribusinesses enhanced at the upazila (subdistrict) and water management cooperative association levels, and vulnerable people's livelihoods supported

INNOVATIVE FI EMENTS

(i) modern pump-pipe irrigation systems; (ii) nature-based solutions to stabilize steeper embankments; (iii) use of drones for surveys, crop monitoring, and precision agriculture; and (iv) an improved asset management system

Vision:

 Sustainable and inclusive development resilient to disaster and climate change achieved

Objectives/Aims:

- Emphasize the importance of modernizing flood and drought risk management, drainage improvement, and irrigation systems
- Enhance the climate and disaster resilience of smallscale water resources (SSWR) infrastructures and services
- Improve agricultural productivity and profitability through effective, participatory, and sustainable SSWR management in the selected project locations







Bangladesh: Climate and Disaster Resilient Small-Scale Water Resources Management Project

Key Experts:

Consulting firms/NGOs:

- -Project implementation support
- -Project-based professional staff
- -To support:
 - (i) subproject agribusiness, aquaculture and women's development and livelihoods;
 - (ii) management information system upgrade and roll out;
 - (iii) baseline and impact monitoring; and
 - iv) market assessment study for
 - 10 commodities

Key Activities:

Project Implementation Support Consultant

- (i) Task 1: Project Implementation Support
- (ii)Task 2: Subproject Development Support
- (iii) Task 3: Resources Management

Project-based Professional Staff

- Participatory rural appraisals
- Geotechnical investigations
- Topographic surveys
- NGO services for folk drama events
- Market assessment study for 10 commodities (covering rice, grains, legumes, vegetables, and aquaculture)
- NGO services for agribusiness development and women's livelihoods







Vanuatu: Luganville Resilient Urban Water Supply and Sanitation Project

TOTAL FINANCING: \$68.12 million

DATE OF APPROVAL: Q3 2024

OUTPUTS

- Climate- and disaster-resilient water supply facilities upgraded and expanded,
- Urban sanitation and hygiene facilities and services improved,
- Climate- and disaster-resilient and gender equality and social inclusion-responsive multipurpose shelters provided,
- Capacity to sustain resilience of urban service delivery improved

INNOVATIVE ELEMENTS

New emergency shelters will serve as multipurpose buildings for the surrounding communities during non-emergency times to promote viability of facility.

Outcome:

Luganville has:

- improved inclusivity, effectiveness, and sustainability of well-maintained infrastructure and services; and
- enhanced resilience and adaptive capacity to climate change and disasters (Vanuatu 2030 and Vanuatu National Water Policy 2017-2030)

Objectives/Aims:

Improve access to integrated and resilient urban water supply, sanitation services, and multipurpose emergency shelters in greater Luganville.







Vanuatu: Luganville Resilient Urban Water Supply and Sanitation Project

Key Experts:

Project Implementation Assistance Consultants \$6M (EOI expected Q1 2025)

- Project Management
- Technical expertise
- Construction supervision
- Behavior change and community engagement
- Capacity building

Project Manager \$1M

Disaster Risk Reduction Specialist \$0.1M

Water Supply Operations and Maintenance \$14M (EOI expected Q2 2025)

Civil Works Packages:

Water Supply Improvement Works \$24M (EOI expected Q1 2025)

Septage Treatment Facility Improvement Works \$1M (EOI expected Q2 2025)

Construction of Public Toilets and School Sanitation Facilities \$3M (EOI expected Q2 2025)

Construction of Multipurpose Hazard Resilient Shelters \$8M (EOI expected Q3 2025)

Key Activities:

- (i) Construction of transfer pipelines, bore field, chlorination system, pump stations, and reservoirs
- (ii) Upgrade water distribution network
- (iii) Improve operations and maintenance of water supply network
- (iv) Design and implement non-revenue water program, property connections improvement
- (v) Construct septage treatment facility, public, and school sanitation facilities
- (vi) Map sanitation service delivery chain and develop strategy for strengthening sanitation collection, transport and disposal
- (vii) Construct multipurpose hazard resilient shelters
- (viii) Establish disaster committee in Luganville Municipal Council
- (ix) Implement capacity building and community engagement



Thank you

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