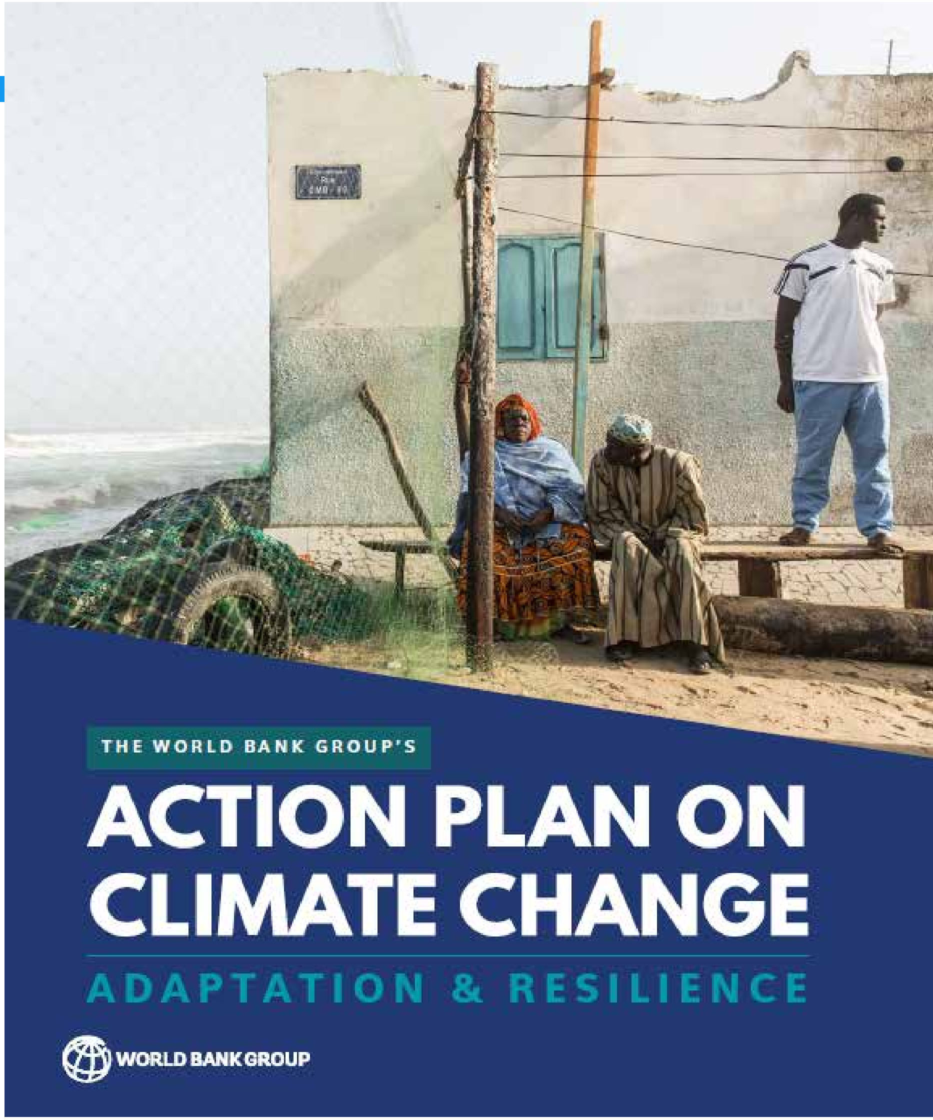

The Adaptation & Resilience Action Plan

is organized around:

1. Mainstreaming
2. Finance
3. Metrics

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Financing Climate Change Adaptation

1. There is a financing gap. There is a need to expand funding, access, and effectiveness of climate adaptation finance.
2. To close the gap, diverse private, public, and blended/aligned finance sources are all needed.
3. However, financing barriers are not the only barrier. A process of identifying, by country and sector, other barriers and actions will reduce financing needs.
4. Financial instruments are private, public, and blended/aligned, and include:
   - ex ante risk reduction regulations and investments;
   - contingency (insurance-type) risk management instruments and other disaster relief instruments.

   There are supply and demand issues for each instrument and sub-market.

Governance and Climate Change: Responsibilities and Opportunities

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Climate Change Governance and Government Failure

- **Tragedy of Commons:** externality, differential adverse impacts, inter-generational transfers of costs and benefits
- **Time Frame**: discounting, beyond electoral cycle and typical planning horizon, credible commitment
- **Government**: unclear institutional mandates, multiple actors, horizontal and vertical coordination challenges
- **Decision-making**: cascade of uncertainties, unintended consequences, lock-ins and path dependence
- **Policy Choices:** perceived tradeoffs, missed co-benefits
- **International Agreements**: transboundary, collective action, shape policy and institutions

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Critical Role of Ministries of Planning and Finance

“*We need a new framework that integrates climate and disaster risk in all aspects of finance, planning and budgeting*” António Guterres, UN Secretary General, Climate Finance Ministerial Meeting Ann

Bali

“*Increase WB engagement with, and support to, Finance and Planning ministries to design and implement transformative policies, strengthen relevant institutions that catalyze climate action, and help to align resources with climate change priorities by …. developing and operationalizing a Resilient Public Finance Management framework*” World

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Mainstreaming climate change into PFM

Functions	Tools
Public Investment Management: Integration of climate change considerations in public investment appraisal and asset management.	PIM Assessments, Guidance on Project Appraisal
Revenue Mobilization: Tailored, transparent and politically viable environmental tax reforms	Carbon Tax Guide
Public Procurement: Integration of climate change considerations in public procurement policies and procedures	Sustainable/Green Procurement, Emergency Procurement
Risk Management: Integration of climate change in proactive fiscal risk management strategies	Disaster Risk Financing, IMF-WB CC Policy Assessments.
Expenditure Policy: Assess, monitor and report on climate change impacts of public expenditures, integrate climate considerations in fiscal planning	Public Expenditure and Institutional Reviews; INTOSAI Audit Guidance
Fiscal Relations: support design of IGRs that address moral hazards and create	

DISASTERS AND GOVERNANCE

- Most disaster risk management literature focuses on mobilizing financing for response, recovery and reconstruction, with emphasis only recently shifting to the adaptation of public investments and the institutional challenges small states face in accessing climate finance **- <u>It's not only about the money!</u>**

- Resilience considerations are traditionally treated primarily at the project level rather than being streamlined into public investment planning and budgeting at the national portfolio level **- <u>Disasters hit networks!</u>**

- Critical government services (communications, payment systems, public procurement, customs, etc.) collapse and weaknesses in public financial management systems limit the rapid, transparent, and effective mobilization, execution, and audit of funds in the aftermath of a disaster **- <u>"Ghost governments"!</u>**

- Loss of administrative data and collapse of information systems that underpin public sector functionality limits the ability of governments to respond to emergencies and facilitate rapid recovery **- <u>"Failed states"!</u>**

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RESILIENT GOVERNANCE

A resilient governance framework facilitates:

- ***Adaptation.*** **How?**
  - Public Investment and Asset Optimization Plan that streamlines risk analysis at the portfolio level and identifies the appropriate protection mechanisms for different classes of public assets
- ***Response.*** **How?**
  - Systems and protocols that facilitate the institutional and operational arrangements for liquidity, payments, and procurement in the event of a disaster
- ***Recovery & Reconstruction.*** **How?**
  - Government Continuity Framework to fortify the core information systems (National ID, financial systems, archives and records, etc.) and the institutional arrangements (communication and coordination mechanisms) for the continued delivery of critical public services

Resilient Governance – Adaptation: Public Investment Management

Modeling Cost-Benefit Analysis with Climate Uncertainties

Hazard Analysis

- Develop a representative extreme value distribution for the climate variable
- Create exceedance probability curves using this distribution.

Vulnerability Analysis

- Estimate economic/financial loss functions.

Simulations and Risk Analysis

- Combine the loss function and exceedance probabilities of rainfall/hazard to create an exceedance probability curve for losses.
- Calculate expected annual losses due to climate hazard.

Incorporating climate uncertainties in CBA model

- Expand the CBA Model by estimating the distribution of probabilities for hazard functions.
- Simulate real options incrementally, by comparing the mean expected loses and distributions of the economic loses, with and without the present values of the cost of real option (such as retrofitting for resiliency purposes, or redesigning the structures and sizes of components of the investment).

Resilient Governance – Response:
Post-Disaster PFM Systems & Protocols

Post-Disaster Financial Management Toolkit

Rapid diagnostic of the PFM system to determine the bottlenecks that hinder a government's response to natural disasters. The toolkit focuses on:

- Legal and Institutional Frameworks
- Budget Appropriation Procedures
- Financial Management Controls
- Procurement Protocols

Following a disaster, PFM systems should ensure:

Accountability: Established standards for decision-making and actions

Efficiency: Resources are used to deliver timely and high-quality services

Flexibility: Fiscal rules & institutions allow for flexibility in response and recovery

Reliability: Emergency financial protocols are executed consistently

Resilience: Financial resources are directed to natural, socioeconomic & institutional resiliency

Responsiveness: PFM processes are sequenced to deliver results in a timely & organized manner

Transparency: Openness & clarity for citizens to have confidence in decision-making processes

Resilient Governance – Recovery & Reconstruction:
Government Continuity Planning

Digital Governance for Resilience Approach