

Climate Resilient Fiscal Planning

Session 2: Mobilizing finance for
adaptation and resilience

CFMCA Asia Regional Meeting
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SETTING SCENE – WHAT ARE THE STAKES

1. **Countries in Asia and the Pacific are at the frontline of climate change.** Critical ecosystems like the Hindu Kush Himalaya's and coastal regions face the impact of irreversible change like glacial retreat and sea level rise. Heatwaves and variable precipitation patterns impact communities and economic growth.
2. As a result of slow mitigation and adaptation, **climate-related losses and damages are increasing.** The updated costs of adaptation for developing countries are estimated to be in a plausible central range of **US\$215 billion to US\$387 billion per year** this decade.
3. The adaptation finance needs of developing countries are **10-18 times as great as international public finance flows** – over 50 per cent higher than the previous estimated range.
4. **Investing in adaptation and mitigation now will minimize climate costs in the future.**
 1. **For every billion invested in adaptation against coastal flooding leads to a USD 14 billion reduction in economic damages.**
 2. USD 16 billion per year invested in agriculture would prevent approximately 78 million people from starving or chronic hunger because of climate impacts.
5. However, progress on climate adaptation is slowing on all fronts when it should be accelerating to catch up with rising climate change impacts.



PROGRESS IS BEING MADE – BUT UNEVENLY AND TOO SLOWLY

Potential adequacy and effectiveness of adaptation planning in 2023



Criteria and indicators for potentially adequate and effective adaptation planning

Percentage of countries



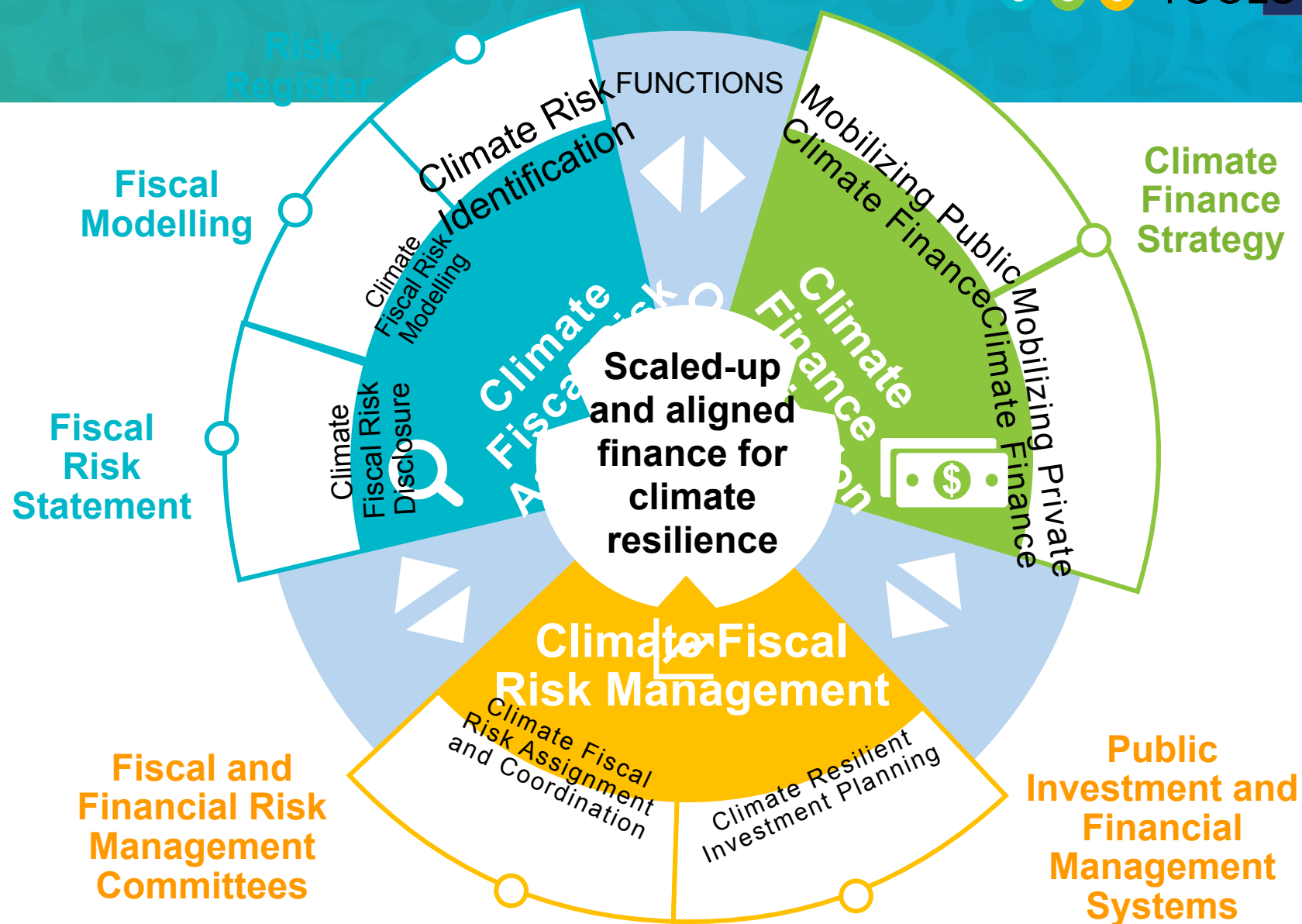
Note: As the criteria for allocating the “Indicator met” and “Indicator in progress towards being met” metrics were tightened for indicators 5.1–5.3, changes in the allocation of the “Increase in indicators being met” since 2021 metric cannot be displayed in this figure.

Climate Resilient Fiscal Planning Can Enable Central Finance & Planning Agencies to Scale-up & Align Finance with Adaptation

1. Effective investment in adaptation is critical to build resilience to the increasing impacts of climate change.
2. This will require **scaled-up** and **better programmed finance** to sustain economy-wide investment in adaptation as opposed to the current fragmented and incremental investments.
3. Climate resilient fiscal planning can enable CFAs to **mobilize** and **align** public and private finance for investment in adaptation.

Framework for Climate Resilient Fiscal Planning

The Framework identifies 3 functions to enable central finance and planning agencies to [scale-up](#) and [align](#) finance with adaptation and resilience.



Understanding climate-related risks and their transmission channel can help in formulating evidence-based fiscal strategy in response to climate change

Assessing direct and indirect impacts of climate risk for fiscal sustainability

- Coverage of **risks and impacts**
 - » Identification of risks - use of risk narratives
 - » Quantification of risk metric
- **Sensitivity and stress testing** to address climate change uncertainties and assess resilience of public finance
- **Forward looking implications** of how risks to public finance may evolve with climate change

Case studies:

1. Armenia's climate fiscal risk assessment
2. Simplified disaster stress testing in Micronesia to assess the resilience of debt sustainability.
3. USA climate related fiscal sustainability analysis to identify potential future impacts of key climate risks on federal spending by mid and late century.

Embedding climate-related fiscal sustainability assessment into practice

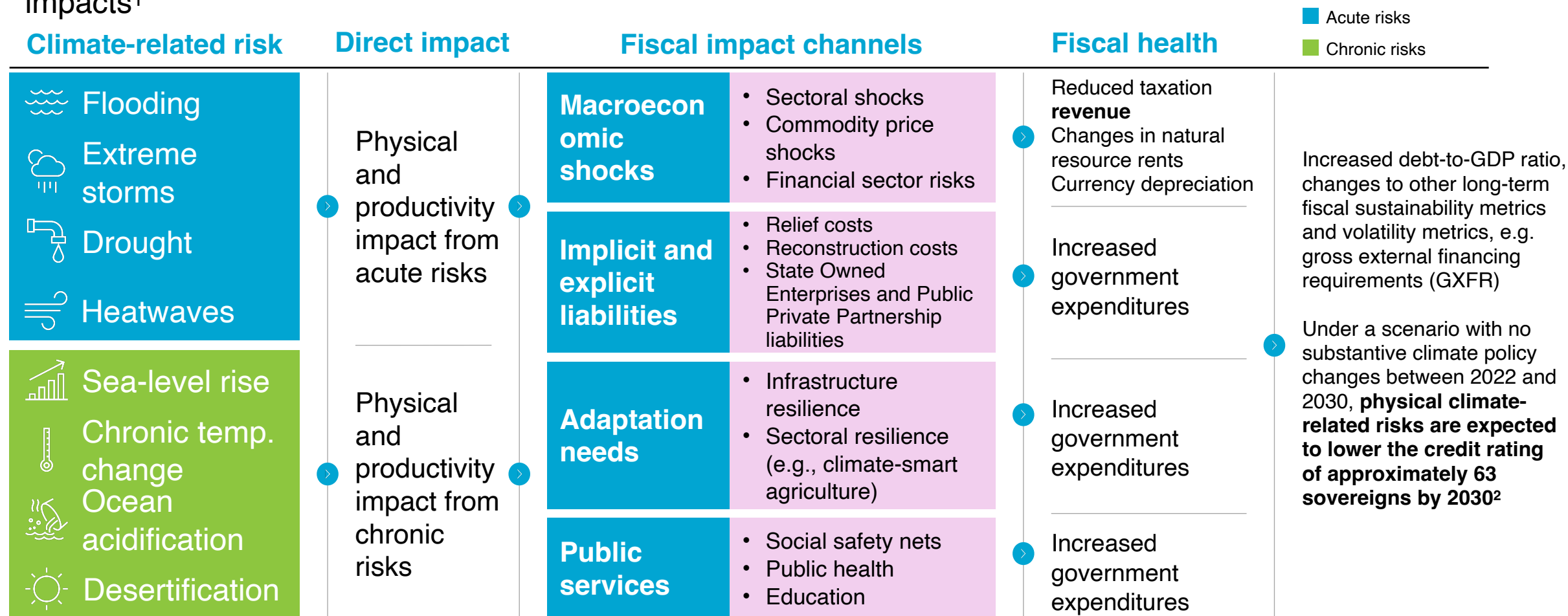
- **Public disclosure** to ensure climate risks are considered within a broader suite of systemic risks and are managed alongside other priority fiscal risk
- **Integration into macroeconomic modelling** (e.g., I-O model, CGE model) to identify primary and secondary impacts of climate risk on key economic variables and support consistent view of climate risk across ministries

Case studies:

1. Philippines annual fiscal risk statement impact of disasters, investment needs and ongoing risk management initiatives.
2. Denmark uses dynamic CGE model combined with models from sectors to assess impact of climate policies on GDP, wages and investments.
3. Pakistan's macrostructural model has included economic impacts of heat stress and floods on labor and productivity and how adaptation investments and reduce risks.

Climate-related risks can impact fiscal health through a range of impact channels

Both acute and chronic climate-related risks can affect public fiscal health directly and through knock-on impacts¹



Increased debt-to-GDP ratio, changes to other long-term fiscal sustainability metrics and volatility metrics, e.g. gross external financing requirements (GXFR)

Under a scenario with no substantive climate policy changes between 2022 and 2030, **physical climate-related risks are expected to lower the credit rating of approximately 63 sovereigns by 2030²**

1. Indirect impacts can include short-term impacts on economic output and public services, and the longer-term impacts from increased poverty and reduced investment resources
 Note: Explicit liabilities are obligations the government is required by law or contracts to settle, whereas implicit liabilities are costs that the government is likely to be responsible for due to public or political expectations or pressure (IMF, 1999). 2. Klusak, Agarwala, Burke, Kraemer, & Mohaddes, 2021ff. It may be shared outside ADB with appropriate permission.

Climate fiscal risk management includes risk assignment and investment in climate action to reduce, transfer and retain climate related fiscal risks.

Fiscal Risk Management

- **Risk assignment** to provide clarity on contingent liability, create incentives to invest in adaptation and understand overall fiscal exposure
- **Risk management** to align investment programs with climate action by integrating adaptation and mitigation priorities into public investment and fiscal planning systems. .

Case studies:

1. South Africa's explicit contingent liability in PPP contract
2. Mongolia's draft guidelines for public investment programming
3. Bangladesh, Bhutan, Nepal, Pakistan, Philippines climate budgeting



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Climate planning and budgeting for climate change



	Tools	Usage	Countries	Remarks
Fiscal Framework	CPEIR CCFF	Tools used to develop PFM roadmaps and/or determination of financing needs	Bangladesh, Cambodia, Nepal, Indonesia, Fiji, Pakistan, Thailand	Mostly at national level; Nepal, Pakistan also at sub-national level
Budget Preparation	Planning Guidelines, Climate Cost Benefit Analysis; Budget Circulars, MTBFs/ MTEFs	Climate sensitive investment planning and budgeting	Bangladesh, Cambodia, Nepal, Indonesia, Fiji, Tonga, Thailand	Mostly at national level; Fiji, Tonga community infrastructure, CCBA pilots in Thailand, Cambodia UNCDF support through LOCAL for locally led adaptation through climate resilience grants (global project)
Budget Execution, Reporting & Accounting	Climate Budget Tagging, Climate Expenditure reports	Systematic approach to code and track climate allocation and expenditure	Bangladesh, Nepal, Indonesia Under development in Fiji, Tonga, Maldives, Sri Lanka	Mostly at National level; Indonesia extending to regional and local governments
Audit & Scrutiny	Climate Performance Audits Parliamentary	To strengthen oversight and accountability of climate finance	Audits in Bangladesh (Nepal under development) Handbooks in Nepal, Indonesia	Mostly at national level

Many of these tools have been replicated by countries in other parts of the world, supported by many development partners – CPEIRs in 31 countries, CCFFs in 13 countries, CBT in 26 countries (UNDP Global Review of Climate Public Finance Reforms, 2022)

Increasing adaptation needs require large-scale resource mobilization from both public and private sources. Ministries of Finance can play two key roles in mobilizing adaptation finance and investment:

Mobilizing efficient public adaptation investment and financing

Budget Allocation

- Signalling action on adaptation in a pre-budget circular
- Incorporating climate-related risk information and scenarios in long-term budgets
- Tracking adaptation expenditure

Investment prioritization

- Cost-benefit & cost-effectiveness analysis
- Multi-criteria assessments
- Adaptive pathways & scenario analysis

Case studies:

1. People's Survival Fund, The Philippines
2. Nepal's climate budget tagging system
3. Armenia's Climate responsive Public Investment Management

Mobilizing private and international sources of finance

- Long-term **adaptation plans** complemented by financing strategy to communicate adaptation finance needs
- Leverage private sector actions in adaptation by developing specific **financing instruments** that de-risk and facilitate private investments, such as through blended finance and guarantees
- **Access to international climate finance** such as through issuance of green, resilience or blue bonds

Case studies:

1. Chile 2019 Financial Strategy on Climate Change.
2. SDG Indonesia One provides blended finance for investment in SDG linked projects.
3. Cape Town Green Bond in response to financing need stemming from 2015-2017 drought.
4. Fiji Sovereign Green Bond with more than 90% of proceeds allocated to climate resilience.
5. Mongolia & Indonesia (proposed) green loans for adaptation

Examples

For reference

Climate Resilient Fiscal Planning in Armenia

CLIMATE FISCAL RISK ASSESSMENT

- Climate risks & macroeconomic indicators identified
- Econometric model, stress-testing & scenarios used to assess climate fiscal risks
- Climate risks disclosed in fiscal risk statement
- Strengthen climate information services – risk register
- Strengthen sectoral climate fiscal risk modelling
- Disclose climate risks and response measures in periodic fiscal risk statements

Under a 'volatile' scenario GDP per capita could decline by 18% relative to baseline by 2072. In the absence of fiscal policy response, this could increase public debt to 140% of GDP.

CLIMATE FISCAL RISK MANAGEMENT

- Institutional arrangements for climate fiscal risk assignment & investment planning established
- NAP & SAP developed
- Climate PIM developed
- Develop climate risk assignment framework
- Develop risk-layering framework
- Strengthen capacity to apply climate PIM
- Develop climate budget

Interagency coordination council for climate change & investment committee established. Fiscal risk council to be established.

CLIMATE FINANCE OPTIMIZATION

- Fiscal consolidation to improve revenue generation & expenditure ongoing
- Green finance roadmap, taxonomy and climate risk analysis led by CBA to incentivize private investment in adaptation
- Develop climate finance strategy to mobilize additional sources of climate finance

Were GoA to invest up to \$1 billion in adaptation investments to 2030, equivalent to an additional 2%–4% of annual expenditure, actual debt would increase from just under 50% to about 56% of GDP by the end of the decade