ADB

Adaptation Solutions

Building Resilience to Climate Change: Adaptation Technical Resources

As stipulated in its climate change strategy—*Addressing Climate Change in Asia and the Pacific: Priorities for Action*—ADB is pursuing an accelerated effort to assist its developing member countries (DMCs) in building a climate-resilient Asia and the Pacific. In support of this effort, ADB is developing and pilot-testing a set of adaptation technical resources. These technical resources aim to support its operations departments and its DMC partners to identify climate change risks to development investments, and to plan for, implement, monitor, and evaluate climate risk management interventions. These resources are designed to ensure consistency in the methods, tools, and data used for climate risk screening, and to improve the efficiency and cost-effectiveness of ADB's climate risk management efforts.

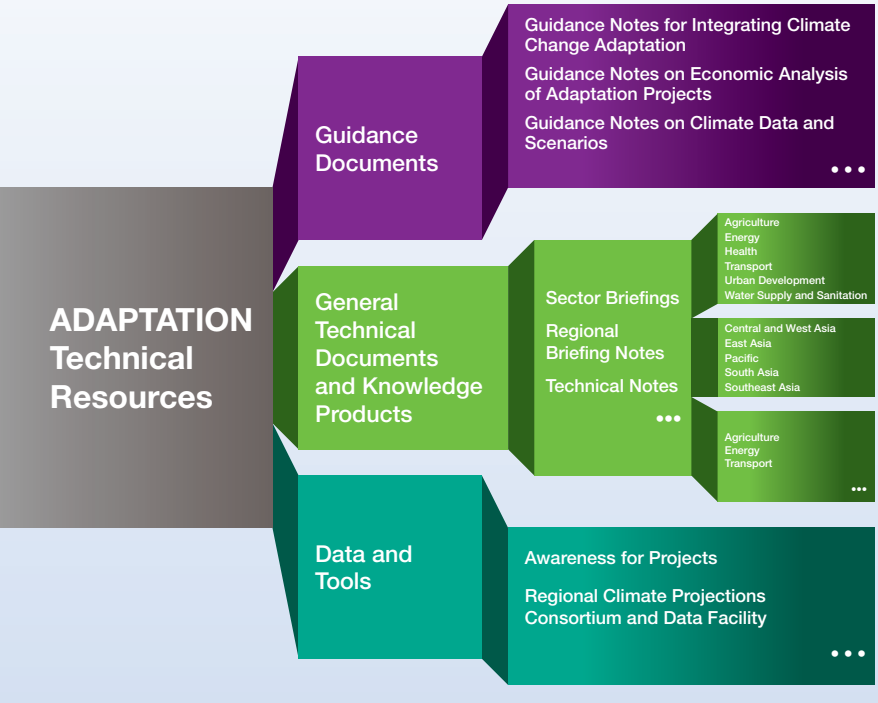

Figure 1: An Overview of Adaptation Technical Resources

The Adaptation Technical Resources Portfolio
Various technical resources are being developed to support the various tasks for enabling climate risk assessments and adaptation planning, implementation, and monitoring and evaluation (Figure 1).

Guidance documents—include, among others, (1) notes to project teams on how to integrate adaptation considerations in project design and development, (2) directions on how to conduct economic analysis of climate change adaptation options, and (3) guides on how to develop and apply climate information to assess climate risks and plan for adaptation.

General technical documents and knowledge products—synthesize the exposure and vulnerability of different sectors and regions to climate change, and identify potential options to reduce vulnerability and enhance resilience; and document good practices and lessons learned from ongoing and completed adaptation initiatives.

Data and tools—to enable comprehensive climate risk management of ADB-financed projects, climate risk screening tools are being developed and made available for assessing the exposure and vulnerability of investment projects to climate change and its impacts. These include:

> **AWARE for Projects**–a web-based, rapid climate risk screening tool that can be used by a project team to carry out a rapid initial risk screening at project concept paper phase and obtain substantial information to guide detailed assessment during preparation phase. Based on answers to a series of questions about the project, the tool produces a climate risk assessment report that provides a summary of key risk areas (with a ranking of low, medium, or high), as well as narratives describing potential impacts of climate change and adaptive measures for further consideration.

Asian Development Bank

Climate Projections Consortium and Data Facility—ADB is also facilitating the development of a regional climate projections consortium and data facility to provide and deliver robust climate data and projections in support of vulnerability assessment and adaptation planning, accompanied with capacity building and user services. The design of the facility is based on user needs identified through consultations and other relevant analyses. It will provide a hierarchy of data and scenario products, ranging from more aggregated national level summary information to facilitate awareness raising and policy dialogue, to detailed, high resolution scenarios to inform the engineering design of critical infrastructure.

The Asia Pacific Adaptation Network (APAN) is the primary vehicle for sharing these adaptation knowledge resources and tools. Through its portal www.asiapacificadapt.net, these resources are available for easy access among adaptation practitioners. APAN is a regional knowledge sharing and capacity building mechanism on climate change adaptation jointly organized by ADB, the United Nations Environment Programme (UNEP), the Institute for Global Environmental Strategies (IGES), and other partners.

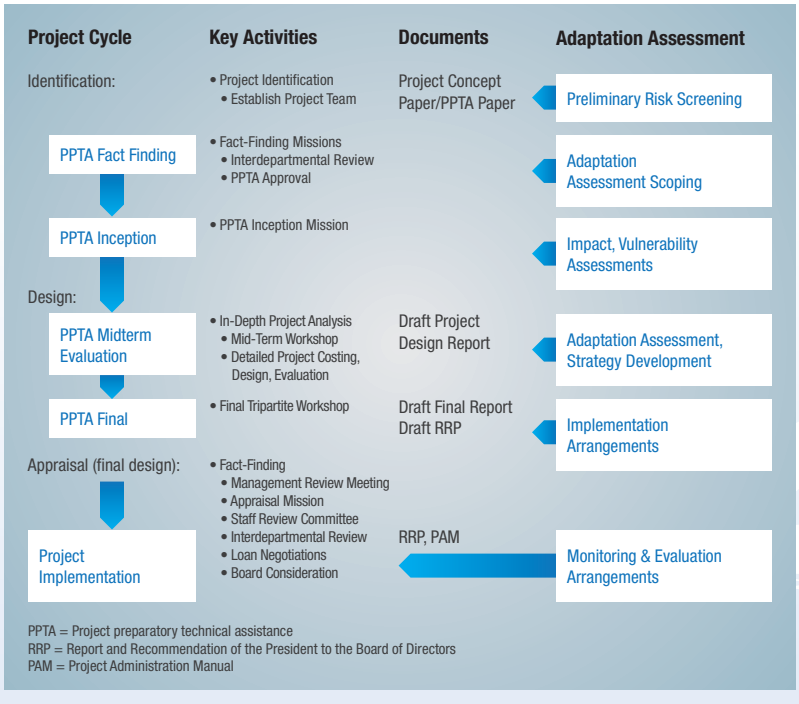

Figure 2: Key Entry Points and Activities for Integration of Adaptation into the Project Cycle

As illustrated in Figure 2, these resources are intended to support sequential climate risk assessment and adaptation planning activities at different stages (entry points) within the project cycle. For example, the climate risk screening tool will facilitate rapid preliminary risk screening at the project concept paper stage of the loan project preparation, while the regional climate data and projections facility—together with sectoral technical notes, guidance notes on the use of climate scenarios and on adaptation economics, and an adaptation options database—will support impacts, vulnerability, and adaptation assessments.

Collectively, these technical resources provide a coherent and effective approach to addressing the broad challenges of protecting regional investments from the adverse impacts of climate change and building resilience more broadly within the DMCs of Asia and the Pacific.

Status of Development of Adaptation Technical Resources

Currently Available Resources

1. Climate Risk and Adaptation in the Electric Power Sector http://www.adb.org/sites/default/files/pub/2012/climate-risks-adaptation-power-sector.pdf
2. Adaptation to Climate Change: The Case of a Combined Cycle Power Plant http://www.adb.org/sites/default/files/pub/2012/climate-change-combined-cycle-power-plant.pdf
3. Sector Briefing on Climate Change Impacts and Adaptation http://www.adb.org/publications/series/climate-change-sector-briefs
4. Guidelines for Climate Proofing Investments in the Transport Sector: Road Infrastructure Projects http://www.adb.org/sites/default/files/guidelines-climate-proofing-roads.pdf
5. Guidelines for Climate Proofing Investments in Agriculture, Rural Development, and Food Security http://www.adb.org/documents/guidelines-climate-proofing-investment-agriculture-rural-development-and-food-security

Forthcoming Technical Resources

1. Guidelines for Climate Proofing Investments in the Energy Sector
2. Guidance Notes on Economic Analysis of Climate Change Adaptation
3. Lessons Learned Report under RETA 6420: Promoting Climate Change Adaptation in Asia and the Pacific
4. Guidance Notes on Climate Data and Scenario
5. Guidelines for Climate Proofing Investments in Water Supply and Sanitation
6. Guidelines for Climate Proofing Investments in Water Resources
7. Guidelines for Climate Proofing Investments in the Health Sector
8. Guidelines for Climate Proofing Investments in the Urban Development Sector

For further information, please contact:
Nessim J. Ahmad
Director, Environment and Safeguards (RSES)
Regional and Sustainable Development Department
Concurrently Practice Leader (Environment)
Chairperson, ADB Climate Change Adaptation and Land Use Working Group
njahmad@adb.org or call +63 2 632 6883

Charles Rodgers
Senior Environment Specialist (Climate Change Adaptation)
RSES/RSDD
crodgers@adb.org or call +63 2 632 5618

www.adb.org/environment
www.adb.org/climate-change

 Publication Stock No. ARM135545-2 March 2013