

## Statement made by Asian Development Bank under the Nairobi Work Programme on Impacts, Vulnerability and Adaptation to Climate Change

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1. The Asian Development Bank is pleased to be able to contribute to the Nairobi Work Programme.
2. Asia and Pacific are amongst the most vulnerable regions to climate change, and have some of the greatest needs for adaptation. Consider the following:
  - a. Asia and Pacific cover 30% of the world's land area and 60% of the human population. Over half of its 4 billion inhabitants live on or near the coast and depend directly on coastal resources such as mangroves and coral reefs for at least part of their livelihoods – especially its island states – of which there are more than any other region in the world. Most Asian states also depend heavily on agriculture, therefore, land conservation and securing surface and groundwater resources is critical to the region's food security.
  - b. Asia's massive delta cities have most to fear from catastrophic storm floods driven by climate change...of 136 port cities assessed around the world for their exposure to once-in-a-century coastal flooding, 38 percent are in Asia.
  - c. Five of the top 10 cities most at risk in the world, in terms of exposed population are in Asia - Mumbai, Guangzhou, Shanghai, Ho Chi Minh City, and Kolkata.
  - d. The growth trajectory that the Asia and the Pacific region has been on for the last several decades is truly remarkable. This rapid growth has brought tremendous benefits to its people, not the least of which is a significant reduction in poverty. Still, 600 million people in Asia Pacific live on USD 1/day or less. Since the poorest people in the poorest countries are often the ones who are hardest hit by changes in climate or extreme weather events, we see climate change impacts as a significant regional risk economic development and poverty reduction
3. Many of our member countries are primarily 'climate-takers' and adaptation is integral to sustaining their economies and livelihoods. In extreme cases, entire Asian and Pacific nations, such as Maldives and Tuvalu are at risk of being uninhabitable due to climate change. When coupled with the potential impacts on low-lying deltas (e.g. Mekong delta) and floodplains (e.g. Bangladesh) there is urgent and pressing discussion on the fate of millions of potential 'climate change refugees'.
4. As Asia and Pacific are subject to climate risk, so too is ADB's lending portfolio. This is a concern to ADB, and as such for the last several years we have been working with our partners to promote development that is sustainable and resilient to climate risks. In this respect we have some good news for you. In November 2007 ADB's board approved financing for its adaptation program. This is a significant step for ADB as it can now weave stand-alone project-level activities into a bank-wide approach to adaptation. Our program has three main components.
  - a. **National adaptation planning** is being strengthened through better analysis of climate change consequences at the national and local levels and identification of cost-effective measures to improve the resilience of infrastructure and vulnerable populations to adverse

impacts. An ADB-World Bank-JBIC Initiative on Climate Impact and Adaptation in Asian Coastal Cities, ADB is supporting analysis of future climate conditions assisting local governments to adapt their investment plans to those future conditions. Under this study, several coastal mega-cities have been identified for analysis, including Karachi, Kolkata, Bangkok, Jakarta, Manila and Ho Chi Minh City. Together, these urban areas are home to more than 50 million residents, and all face increasing risks from flooding, heat waves, water shortages and other adverse impacts of climate change. The study will include economic analysis to determine the likely costs associated with these phenomena as a means for prioritizing adaptation measures. In Viet Nam, a new geographic information system is being created that will be used for improved identification and mapping of zones at risk from typhoons and storm surge. Elsewhere in the Greater Mekong Subregion, ADB is supporting analysis of the likely impacts of climate change on both natural and agricultural ecosystems, so that appropriate future investments can be planned to adapt to account for these added risks. ADB will continue to work in partnership with countries of the Asia and Pacific region to assist them with the establishment of adaptation priorities and to help identify the expertise and financing needed to support their high priority adaptation measures (e.g. ADB will work with many partners on the Coral Triangle Initiative, which will help prepare sector strategies for adaptation in South Pacific). We are also launching a comprehensive regional review report on economics of climate change through support of the UK government and members of the Stern Team. This “regional Stern” will provide insights into and recommendations for future domestic and regional policies on climate change. The six ASEAN member nations (Indonesia, Malaysia, Singapore, Philippines, Thailand and Vietnam) will participate in this study.

- b. **Project-level “climate proofing”** of existing infrastructure and future project designs will gradually become routine to ensure that physical and hydrological assumptions take account of predicted changes in precipitation patterns, the severity and frequency of storms, accelerated glacial melting, sea level rise and other impacts. ADB has already provided technical assistance to South Pacific countries to create practical guidelines on climate proofing of infrastructure (e.g. by strengthening road and port designs) and we aim to work with our member countries to implement those recommendations. Looking ahead, projects involving water resources management will need adjustments to their designs in order to take account of shifting precipitation and storm patterns.
- c. **Specific adaptation investments** will increasingly be made as defensive measures or steps to reduce the risks from increased flooding, storm surge, drought, wind damage, head waves, dust storms, and other anticipated impacts of climate change. The ADB-led Central Asia Countries Initiative for Land Management is helping the countries of that arid region adapt to future climatic conditions (warmer temperatures, increased winter precipitation, increased summer drought, and eventual loss of glacial melt) through development of adaptations (drought resistant crops, improving irrigation efficiency, water resource management, rehabilitation of degraded forests and pasturelands, watershed protection). ADB is also supporting work on assessing climate change considerations in the design and implementation of water projects across Asia and the Pacific. For example, in the Citarum River Basin of Indonesia, more than \$3 billion will be invested in upgrading water resources management infrastructure and institutions over the next 15 years under an ADB-led program. A parallel analysis will examine areas of climate proofing or specific investment required to adjust to the added risks from climate change.

The Asian Development Bank looks forward to an active engagement with a wide range of organizations under the Nairobi Work Programme. We are engaged and committed to increasing our engagement to contribute to climate-resilient development and poverty reduction in Asia and Pacific.