DISASTER RISK REDUCTION AND MANAGEMENT IN THE PACIFIC

The Pacific is one of the world's most disaster-prone regions. The small size, remoteness, and fragile biodiversity of the Pacific islands make them exceptionally vulnerable to natural hazards, with low capacity to manage the resulting risks. In the future, climate-related disasters are likely to increase in number and scale. Disaster risk reduction and management are hence critical issues that must be addressed to avoid derailing the region's development progress.

Background

Pacific countries are located within the geologically active "Ring of Fire," and many are also located within the South Pacific tropical cyclone belt. The geography and geology of these countries expose them to hydrometeorological events, e.g., floods, cyclones, storm surges, and droughts; and geophysical events such as earthquakes, volcanic eruptions, and tsunamis, which pose a significant development challenge to the region. A single disaster event has the potential to erode many years of economic development gains by damaging critical infrastructure and diverting resources away from development spending, such as health and education services, toward disaster response and reconstruction efforts. In the South Pacific region, average annual direct losses from natural disaster events are estimated at $284 million.[1]

Climate change will affect disaster risks through changes in weather and climate hazards, as more extreme weather events are likely to increase in the future. The Pacific region is already experiencing changes in climate such as higher temperatures, changing rainfall patterns, varying frequencies of natural hazard events, and sea-level rise. It is important to integrate climate change considerations within existing disaster risk reduction (DRR) tools, as DRR based only on past and current experiences is likely to fail in building resilience to future risks. Climate change can also further increase the vulnerability of communities even to the existing levels of hazards through ecosystem degradation, impacts on water supply and food security, and changes to livelihoods.

The Pacific leaders have endorsed a regional strategic framework to address the adverse impacts of natural hazards and climate change. These regional strategies include the Pacific Islands Framework for Action on Climate Change, 2006–2015;[2] and the Pacific Disaster Risk Reduction and Disaster Management Framework for Action, 2005–2015, which provides overarching policy guidance for disaster risk management and support for building climate-resilient communities.[3] All these plans are currently under review for the standard follow-on 10-year period.

ADB photo

Houses built in a flood prone area, Popua village, Nuku'alofa, Tonga

ADB and Disaster Risk Reduction and Management

ADB's Pacific Approach (2010–2014) identifies effective disaster management and risk reduction as critical to achieving sustainable growth in the region. Underpinning this is ADB's Disaster and Emergency Assistance Policy (2004), which pursues an integrated disaster risk management (DRM) approach that combines DRR, elements of climate change adaptation (CCA), and disaster risk financing to support its developing member countries (DMCs)[4] in building their DRM capacities.

The ADB Pacific Climate Change Implementation Plan (2009–2015) supports Pacific DMCs in improving (i) capacity for access to and use of disaster and climate risk information, tools, and methodologies in development planning; (ii) coordination of climate and disaster risk response at the regional and national levels; and (iii) coordination and partnerships with Pacific DMCs and development agencies by mainstreaming climate and disaster risk into ADB operations

ADB photo

Flooded road in Lepa, Samoa

including country partnership strategies, business plans, and jointly planned actions.

Regional and Country Initiatives

ADB's flagship project for strengthening DRM and CCA linkages is the Regional Partnerships for Climate Change Adaptation and Disaster Preparedness. With the Secretariat of the Pacific Community and the World Bank, and financial support from the Government of Japan and the Global Facility for Disaster Reduction and Recovery, ADB developed in 2009–2011 the region's most comprehensive historical hazard catalog and historical loss database for major disasters, and country-specific hazard models that simulate earthquakes (both ground shaking and tsunamis) and tropical cyclones (wind, storm surge, and excess rainfall). The information is the basis for the subregional catastrophe insurance scheme piloted in the Marshall Islands, Samoa, Solomon Islands, Tonga, and Vanuatu in January 2013.

The Pilot Program for Climate Resilience aims to address capacity, knowledge, and resource constraints to achieving climate resilience, and mainstream CCA and DRR into national and local plans and policies. In the Pacific, ADB support is provided through (i) country interventions in Papua New Guinea and Tonga and (ii) region-wide interventions covering ADB's 14 Pacific DMCs. These initiatives will continue current ADB programming priorities for climate-resilient infrastructure development, integrated urban development, and ensuring food security, including support for capacity building.

ADB provides regional assistance for strengthening tools and methodologies to incorporate disaster risk and climate change considerations into project cycles, spatial plans, and the countries' development planning process. ADB employs a learning-by-doing approach, using as case studies actual plans and projects being developed in the participating countries. Lessons are shared to increase potential for upscaling and replication.

In the event of a natural disaster, ADB also provides its DMCs support in disaster response. Recently in Fiji after Cyclone Daphne, ADB provided an Asia Pacific Disaster Response Fund (APDRF) which enabled the government to repair damaged water and sewerage systems. Similarly, an ADB APDRF grant in Samoa supported humanitarian and relief efforts for those affected by Cyclone Evan.

Future Direction

ADB will continue with its current approach to strengthening Pacific CCA and DRM in the coming years. The main thrusts of ADB's contribution will be to (i) ensure that DRM and CCA information and considerations form an integral part of the country's development planning process, (ii) ensure close collaboration with Pacific DMC governments to develop and employ new and relevant tools and methodologies, (iii) highlight best practices for replication or leverage of additional resources; and (iv) improve coordination of regional and country-level development assistance. ADB is currently developing an integrated disaster risk management (IDRM) financing partnership facility to fund innovative IDRM initiatives. The facility will coordinate existing and new resources that are granted to ADB for IDRM purposes and can operate through pooled grants, bilateral grants, and other forms of assistance.

With CCA and DRR/DRM moving up on the international political agenda in the Pacific region, it will be important to increase the countries' absorption capacity at the national level by enhancing their eligibility for budget support as well as strengthening the capacity of regional organizations and coordination with donors.

1 World Bank. 2011. Pacific Catastrophe Risk and Financing Initiative. Pacific Disaster Risk Financing and Insurance Program Briefing Note. Washington DC.

2 Secretariat of the Pacific Regional Environment Programme. Pacific Islands Framework for Action on Climate Change, 2006–2015. Apia, Samoa. www.sprep.org/attachments/Publications/PIFACC-ref.pdf

3 Applied Geoscience and Technology Division of the Secretariat of the Pacific Community. 2005. Pacific Disaster Risk Reduction and Disaster Management Framework for Action, 2005–2015. Suva, Fiji. www.pacificdisaster.net/pdnadmin/data/original/mr0613.pdf

4 Cook Islands, Fiji, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu, and Vanuatu.

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 Publication Stock No. ARM135980-3 August 2013