# PAPUA NEW GUINEA



## BACKGROUND

ike its neighboring Pacific States, Papua New Guinea is prone to natural disasters, including earthquakes, volcanic eruptions, tsunamis, cyclones, river flooding, coastal erosion, landslides, droughts and frost. It ranks in the top six countries for the highest percentage of population exposed to earthquake hazards and has the highest percentage of population exposed to severe volcanic risk. Landslide hazard is also particularly high. Heavy rains often lead to damage to road infrastructure and livelihoods, as well as economic losses, as seen in June and September of 2012.

Total damages and losses in 2012 amounted to approximately US\$28 million. The government spent more than US\$300,000 to organize humanitarian aid and provided US\$1.5 million for alternate road access in order to restore access to the damaged roads.

Papua New Guinea has scaled-up its disaster risk management (DRM) efforts. Indeed, the Papua New Guinea 2050—encompassing short and long term development strategies—aims at attaining sustainable development through DRM and Climate Change Adaptation (CCA). In 2005 Papua New Guinea was

# **QUICK FACTS**

## COUNTRY INDICATORS<sup>1</sup>

GDP per capita (PPP)	\$2,539
Total Population	7,321,262
Income Level	Lower middle
Poverty <sup>2</sup>	40%
Urban Population	13%

## RISK PROFILE<sup>3</sup>



## **KEY PRIORITIES**

- 1. DRM informed development planning and investments
- 2. Institutional capacity building
- 3. Coordination between DRM and CCA agencies
- 4. Risk financing mechanisms
- 5. Stronger focus on prevention
- 6. Risk assessment tools

- <sup>2</sup> Poverty rates at national poverty lines, World Bank Open Data.
- <sup>3</sup> INFORM: a global, open-source risk assessment for humanitarian crises and disasters. INFORM uses a scale from 0-10 (10 is the highest level of risk) http://www.inform-index.org/



<sup>&</sup>lt;sup>1</sup> World Bank: free and open access to development data in countries around the globe. http://data.worldbank.org/

among the first countries to adopt the Hyogo Framework for Action and, in 2012 the country launched its DRM plan. However, the country lacks institutional capacity to effectively implement its DRM strategy.

To further advance the DRM agenda, priorities include addressing: (i) building institutional capacity for

planning risk informed investments; (ii) supporting coordination between DRM and CCA agencies; (iii) shifting the emphasis on response to risk reduction and management; and (iv) addressing the lack of available historic natural hazard data, which hinders the assessment of risks.

## **GFDRR PROGRESS TO DATE**

Since 2008, GFDRR has provided support to Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI).<sup>4</sup> Under this initiative, risk information and models were developed which form the basis for applications in risk financing, and risk transfer strategies, urban and infrastructure planning, and the prediction of losses from tropical cyclones, earthquakes and tsunamis.

GFDRR's bilateral engagement in Papua New Guinea started in 2012. As a first step, GFDRR started working with the Office of Climate Change and Development and the Department of Agriculture to build and improve upon the resilience of the country's agricultural sector. To date, a pre-feasibility study for agricultural risk insurance has been completed with the help of the Policy

and Regulatory Window of the Global Index Insurance Facility managed by GFDRR and the World Bank. The findings of the study were discussed with public and private stakeholders during a dissemination workshop.

In 2012, GFDRR also supported the development of "Acting Today For Tomorrow: A Policy and Practice Note for Climate- and Disaster-Resilient Development in the Pacific Islands Region" which informs the dialogue and engagement of the World Bank in the Pacific region.

Complimentary technical assistance, funded by the World Bank's Policy and Human Resources Development (PHRD), through Japan, is supporting the Department of Works to mainstream disaster risk management in the transport sector.

## **LOOKING AHEAD**

During 2014-2016, GFDRR will continue to support the Department of Agriculture to achieve the objectives of the ongoing program to analyze the impacts of climate vulnerability and disaster risks in the agricultural sector—which includes commodity and crop-specific technical studies to examine the risks and impacts.

In addition, GFDRR will support stakeholders across sectors and at all levels of the government to effectively use risk information and tools in development planning and sectoral investments. Finally, GFDRR will focus on building the capacity to collect data, measure disaster impact, and identify recovery needs in the immediate post-disaster phase.

<sup>4</sup> http://pcrafi.sopac.org/

www.worldbank.org/en/news/feature/2012/06/04/acting-today-for-tomorrow-a-policy-and-practice-note-for-climate-and-disaster-resilient-development-in-the-pacific-islands-region

## **PROJECTS AWARDED BY GFDRR 2007-2015**

## **Project** Description

Disaster Risk Management and Climate Adaptation Program (Agriculture Sector)





US\$1,873,200 | Start date: 2011 (Ongoing)

Increases disaster and climate resilience in the agricultural sector. Activities include: (i) commodity or crop-specific technical studies that analyze the impacts of climate change and disaster risks and, in turn, offer specific policy recommendations and guidelines; and (ii) a pre-feasibility study for agricultural risk insurance for smallholder farmers.

Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI)\*





Start date: 2008 (Ongoing)

Disaster Economic Assessment in the Pacific\*

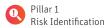


Start date: 2012 (Ongoing)

Provides 15 Pacific countries with a disaster and climate risk information. Activities include: (i) development of a comprehensive hazard, exposure and vulnerability platform to inform urban and development planning, building codes, rapid disaster impact estimation and risk financing decisions.

Increases the accuracy of damage, loss and needs assessments. Activities include: (i) establishment of a regional pool of personnel trained in the application of Damage and Loss Assessment (DaLA) to inform Post-Disaster Needs Assessment (PDNA).

<sup>\*</sup>Multi-country project











#### **GFDRR KEY PARTNERS**

## The Australian Agency for International Development (AusAID) provides support from 2010-2014 in the following five areas: (i) technical support for the National Disaster Center and province of West New Britain; (ii) funding to United Nations Office for the Coordination of Humanitarian Affairs (OCHA); (iii) support for Papua New Guinea's technical agencies through Geoscience Australia; (iv) strengthening community and non-governmental DRM capacity in five priority provinces; and (v) building the capacity of AusAID's Papua **AusAID** New Guinea office to respond to emergencies. AusAID also supports the Pacific Climate Change Science and Adaptation Planning Program, which seeks to develop community resilience to the impact of extreme weather (e.g. droughts and floods) through the development of future scenarios for climate change and country-specific climate projections. These are based upon the analysis of climate trends and natural variability, as well as the downscaling of global circulation models. The Secretariat of the Pacific Community Applied Geoscience and Technology Division (SPC/SOPAC) is implementing the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI). The initiative provides 14 Pacific Island Countries and Timor-Leste with a disaster and climate risk information platform, SPC/SOPAC including comprehensive hazard, exposure, and vulnerability information (i.e. assets, probabilistic analyses of risk for buildings, major infrastructure vegetation cover, and topography). This information is used to inform development planning, building codes, rapid disaster impact estimation and risk financing decisions. The United Nations Development Programme (UNDP) manages the Adaptation Fund, which provides support to the project Enhancing Adaptive Capacity of Communities to Climate Change-Related Floods. The project will: (i) enhance the Government's and civil society's capacity to implement environmental adaptation measures **UNDP** aimed at improving community livelihoods in order to reduce the vulnerability of women, girls, men and boys to disaster risk and (ii) develop a framework for climate change policy that public institutions, private sector and local communities may use to implement proper mitigation and adaptation measures to achieve climate resilient and environmentally sustainable economic growth. The following projects are part of the World Bank's efforts to mainstream DRM:

#### **GFDRR STAKEHOLDERS**

capacity for hazard risk assessments.

Building a More Disaster and Climate Resilient Transport Sector Project: Improves the resilience of

the country to the impact of natural disasters and climate change in the transport sector through building

National Services	Office of Climate Change and Development (OCCD), Department of Agriculture (DAL), Department of Works
International Organizations	World Bank, UNDP, Australia's Department of Foreign Affairs and Trade
Regional Organizations	Asian Development Bank (ADB), Secretariat of the Pacific Community Applied Geoscience and Technology Division (SPC/SOPAC)
Non-governmental Organizations and Civil Society Organizations	National Society for Earthquake Technology-Nepal (NSET), Centre for International Studies and Cooperation (CECI)

**World Bank**