



# National Adaptation Plan process in focus: Lessons from Papua New Guinea



**Papua New Guinea (PNG)** shares the island of New Guinea with Indonesia. The country of 463,000 km<sup>2</sup> includes a group of islands in Oceania, between the Coral Sea and the South Pacific Ocean. The terrain of PNG is composed primarily of mountains, coastal lowlands and rolling foothills. Highlands run from east to west, dividing the country into distinct ecoregions. One of the world's largest swamplands is situated along the southwest coast. With a tropical climate, PNG experiences northeast monsoon (December to March) and southeast monsoon (May to October), with slight seasonal temperature variation. In the 2016 Human Development Report, PNG ranked 154th out of 185 countries surveyed. PNG has a population of 7.6 million, with an average life expectancy at birth of 62.8 years. Almost 40% of the population live on an income of less than USD 1.90 per day. The working poor (up to USD 3.10 per day) account for just over 66%. Hazards regularly faced in PNG include floods, droughts and landslides, which frequently lead to food insecurity, and can increase the prevalence of water-borne diseases. The island has an abundance of natural resources, including gold, copper, oil and natural gas. As a result, almost two-thirds of PNG's export earnings are obtained through mining.

## Climate change risks

More than 80% of the population of PNG live in rural areas, and more than 70% of households are dependent on subsistence agriculture – which accounts for nearly 30% of the GDP. As a result, most of PNG's population is vulnerable to climate variability and change.

Based on its Initial National Communication to the UNFCCC (2000), vulnerability assessments conducted in recent years (Antea Group, 2017) and the Climate Change (Management) Act (2015), the Climate Change Development Authority (CCDA) identified nine priority areas for climate change risk management. Coastal and inland flooding rank amongst the highest level of climate change risk. About 18% of the total landmass in PNG is permanently inundated or regularly flooded. In August 2017, more than 500 people were displaced in Morobe Province following floods which swept away more than 150 homes in a single day .

## Groundwork for supporting the NAP process

### Policy, planning and budgeting:

The *Papua New Guinea Vision 2050* (2009) contains a strong focus on environmental sustainability and climate change. This is a national development strategy to guide PNG's social economic development for the period 2010-2050. The *Strategy for Responsible Sustainable Development* (StaRs, 2014) focuses on renewable resources rather than extractive activities, and emphasizes mitigation over adaptation. The *National Climate Compatible Development Management Policy* (NCCDMP, 2014), focuses on sustainable economic development, which is climate resilient and carbon neutral. The *Climate Change (Management) Act* of 2015 outlines government's immediate and future steps for adaptation to climate change. Very few sectoral development strategies that incorporate climate change adaptation exist in PNG. The *National Food Security Policy* (2016-2025) is currently the only sectoral strategy to include adaptation concerns. Through a recent Adaptation Fund project (2012-2016), provincial-level adaptation strategies are being developed for five provinces with a focus on riverine and coastal populations.

PNG's *Nationally Determined Contributions* (NDC, 2016) includes a section on adaptation commitments. The priority areas of the NDC on adaptation are aligned with those for the NAP process, and based on the nine priority areas defined in the *Climate Change (Management) Act* and the *Initial (2000)* and *Second National Communication* (2014). The NDC sets its adaptation goal as risk management and the prioritization of climate hazards. The nine areas are summarized in the table overleaf:





# Nine priority climate adaptation areas defined in NDC

1. Coastal Flooding and Sea Level Rise
2. Inland Flooding
3. Food Insecurity caused by crop failures due to droughts and inland frosts
4. Cities and Climate Change
5. Climate Induced Migration
6. Damage to Coral Reefs
7. Malaria and Vector Borne Diseases
8. Water and Sanitation
9. Landslides

Although all foreign and domestic development related financing are registered with the Department of Treasury, there is a lack of climate disaggregated financing data, making it difficult to track climate finance. There is very little domestic finance made available by the government on climate change, and most contributions come from external sources such as the Adaptation Fund, USAID, ADB, World Bank, DFAT and the EU.

## Preparing for adaptation planning

PNG is a signatory to the Paris Agreement. In 2015, it introduced the *Climate Change (Management) Act* and in 2016 the *Paris Agreement Act*, both paving the way for adaptation planning in the country. Vulnerability assessments for the entire country were conducted in 2000 and 2014, through its *Initial and Second National Communications* to the UNFCCC. Through the Adaptation Fund project (CCAF – see opposite), UNDP further commissioned detailed assessments for five pilot provinces that includes community risk assessment, province/district hazard-vulnerability-risk assessment and composite risk assessment.

Climate information is being gathered on a project-to-project basis, with no framework in place for systematic review, nor a central repository on climate related vulnerabilities and/or medium to long-term climate scenarios for the country. A general lack of a monitoring and evaluation framework for adaptation hinders capturing valuable lessons, and providing feedback to the planning processes.

## Implementation of adaptation actions

A range of adaptation projects have been implemented in PNG, including:

- *Enhancing adaptive capacity of communities to climate change related floods in the North Coast and Islands Region of Papua New Guinea* (CCAF, 2012-2016), funded by the Adaptation Fund.
- *Building Resilience to Climate Change* (2015), which aims to implement the country's *Strategic Programme for Climate Resilience*, funded by the Climate Investment Fund (CIF).
- *Strategic Programme for Climate Resilience* (SPCR) (2012) with the aim to make PNG's development investments climate resilient, funded by ADB.
- *Capacitated, Holistic, and United Response to Climate-change Hazards* (CHURCH, 2015-17), funded by UNDP.
- *Building a More Disaster and Climate Resilient Transport Sector* (2011-2015), funded by the World Bank.
- *Climate Ready* (2017-2021), Pacific regional project funded by US Agency for International Development (USAID)

In addition, a range of projects on disaster preparedness and rural communications have been funded by World Bank, Asian Development Bank (ADB) and the Australian Department of Foreign Affairs and Trade (DFAT). Proposals are being prepared to the Green Climate Fund (GCF) on National Designated Authority strengthening and SMART Climate (Strengthening Multi-sectoral Adaptation Responses Through Climate-related information).





## PNG's NAP process

### Institutional arrangements

The Climate Change Development Authority (CCDA), under the Ministry of Environment, Conservation and Climate Change, is the nation's pre-eminent policy-making entity responsible for climate change adaptation and mitigation, and steering the NAP process. In 2015, the CCDA established an Adaptation Technical Working Group (ATWG) composed of members from government departments, the private sector, development partners, NGOs and CSOs as well as provincial/local level representatives. Under the auspices of CCDA, the ATWG also acts as the advisory body to review climate change adaptation related projects and interventions.

### NAP process timeline



### NAP support

The NAP process in PNG has been supported by a range of development partners, including GEF-funded NAP-GSP, the Asian Development Bank's Building Resilience to Climate Change programme, and USAID's Climate Ready Project.

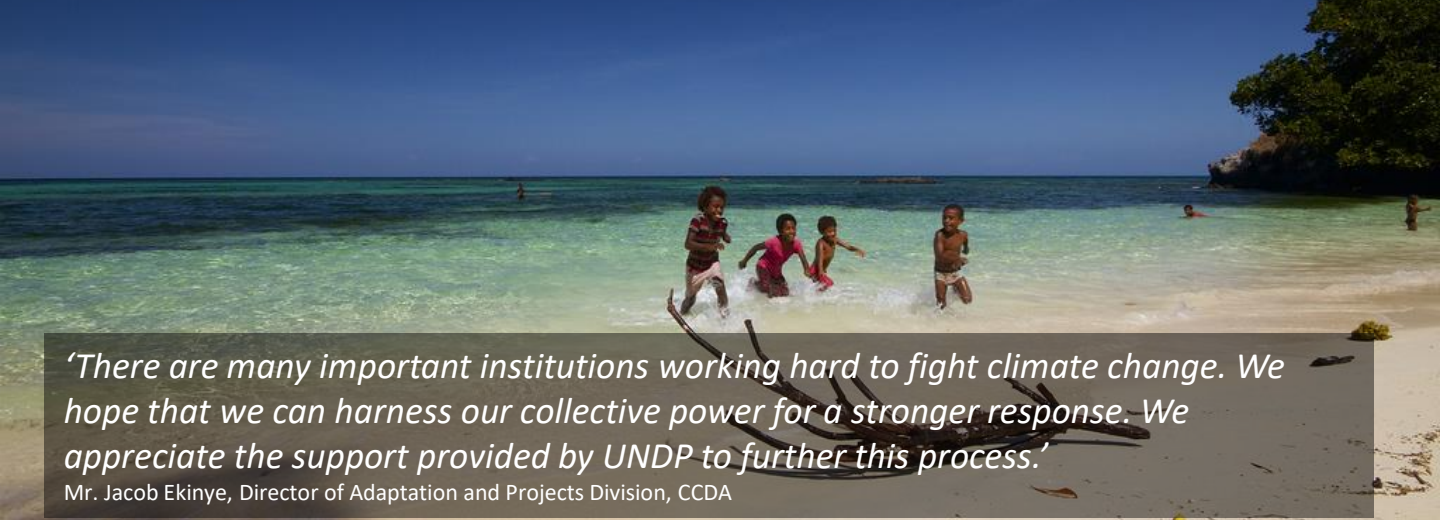
*The process to formulate and implement the NAP brings together the nation's strongest supporters of climate adaptation, to develop a unified strategy for the future, which will help PNG manage the impacts of climate change.*

*Mr. Ruel Yamuna, Managing Director of CCDA*

## What is the process to formulate and implement the NAP?

The Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) established the National Adaptation Plan (NAP) process in 2010, to enhance country-led planning and preparedness for climate change adaptation (CCA) in the medium and long-term. The objectives of the NAP are to reduce vulnerability to the impacts of climate change and to integrate adaptation into all levels of development planning. The NAP process is multi-sectoral, involving Ministries of Environment as well as Planning and Finance, in addition to other key Ministries. By bringing greater institutional integration and coordination to adaptation planning, NAPs can enhance ongoing national development planning processes, safeguard development gains, and build resilience.





*‘There are many important institutions working hard to fight climate change. We hope that we can harness our collective power for a stronger response. We appreciate the support provided by UNDP to further this process.’*

Mr. Jacob Ekinye, Director of Adaptation and Projects Division, CCDA

## Challenges

There is a lack of climate change related priorities in the country’s Medium-Term Development Plans. PNG also faces a lack of technical capacity in performing necessary assessments and analyses, to inform medium- to long-term adaptation budgeting and planning. This is exacerbated by lack of human resources at the sub-national level stemming from budgetary allocations not commensurate to the needs of the country.

Enhancing facilities and systems for the collection of climate data and information is also necessary. Currently there is insufficient weather and climate data equipment throughout the nation. Moreover, there are challenges with the communication and dissemination of existing climate information at national, provincial and community levels, and for various sectors. Enforcement is lacking for the existing acts containing adaptation planning components. This is due to insufficient means for tracking investments in climate change, and an annual budget not commensurate to the requirements for monitoring adaptation related interventions.

## Successes

The Adaptation Technical Working Group (ATWG) provides a well-coordinated, multi-sectoral and multi-disciplinary advisory function to the CCDA, ensuring stakeholders’ concerns are taken into account in planning for, and implementing, climate change adaptation actions. In 2017, PNG submitted a GCF readiness and preparatory support proposal, with the goal to strengthen the NDA capacity and development of strategic frameworks, including preparation of country programme. Relative to other countries in the region, PNG has a high number of adaptation projects and programs underway, from which lessons can be drawn to scale-up adaptation. These projects are implemented in a range of sectors – including agriculture, disaster risk reduction and coastal zone management – and can be used to provide a basis for integrating adaptation into sectoral planning.

## Opportunities

PNG’s third Medium Term Development Plan provides an opportunity to integrate adaptation into development planning, including adaptation priorities identified through the Climate Change Act. It also provides an opportunity to support mainstreaming of adaptation concerns across sectors and various levels of government.

Priority areas for the NAP process, as identified during the stakeholder consultation workshop, include: strengthening of climate information system; development of monitoring and evaluation systems to track effectiveness of adaptation actions as well as budget allocation; and a financing strategy for NAP implementation.

A stakeholder mapping exercise, which was conducted during the consultation, revealed that broadening stakeholder involvement would provide more effective guidance to the NAP process. The inclusion of various sectors and levels of government, media, NGOs and civil society, as part of a broad-based advisory body on adaptation planning, would strengthen the process to formulate and implement the NAP in PNG.

It is essential to incentivize and leverage private sector engagement in climate change adaptation interventions, such as disaster and weather-related insurance schemes and the dissemination of climate data. Neighbouring country Palau has implemented tariffs on air-tickets and other schemes for biosphere preservation, which could be replicated in PNG

## Key documents

- [NDC, 2016](#)
- [National Communications, \(Initial – 2000, Second – 2014\)](#)
- [Climate Change Act, 2015](#)
- [Paris Agreement Act, 2016](#)
- [National Climate Compatible Development Management Policy, 2014](#)

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Institutions involved in NAP coordination

9

Priority adaptation areas

9

key adaptation projects under implementation

40%

of the population live on under USD 1.90/day

over 70%

are dependent on subsistence agriculture

## About the NAP-GSP

The joint UNDP-UN Environment National Adaptation Plan Global Support Programme (NAP-GSP) was launched in June 2013, financed by the Global Environment Facility (GEF) Least Developed Countries Fund (LDCF), and the Special Climate Change Fund (SCCF). The NAP-GSP, together with partners, are assisting developing countries to identify technical, institutional and financial needs to integrate climate change adaptation into medium and long-term national planning and financing. The NAP-GSP provides technical expertise and guidance on country NAP processes, and provides opportunities for knowledge exchange on NAPs.



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