# **PROJECT BRIEF**

# EU-GIZ ACSE ADAPTING TO CLIMATE CHANGE AND SUSTAINABLE ENERGY

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# Papua New Guinea: Integrated Water and Sustainable Energy (IWASE) Project

# **Background**

Papua New Guinea (PNG) occupies the eastern half of the rugged tropical island of New Guinea and has a population of 7.3 million. The central part of the island is characterised by dense forests and a wide ridge of mountains known as Highlands. PNG's main electricity supplies are fossil fuels (70%) and hydro (30%). However, only larger urban areas have access to a centralised power supply systems and access to clean water and sanitation facilities.

Predicted climate change impacts such as the increase in extreme weather conditions amplify the vulnerability of communities already living in very poor conditions. Improved infrastructure is required to protect access to safe and reliable water supply and provide access to electricity for the refrigeration of food to overcome periods of food shortages caused by extreme events such as droughts and floods.

The project will be implemented in three rural communities in Rigo District: Imuagoro, Kalo and Keapara villages.

## **Project Objective**

The objective of the project is to support the development and resilience to climate change effects of three rural communities in the Rigo District: Imuagoro, Kalo and Keapara villages through the provision of reliable, integrated water and sustainable energy.

#### **Project Summary**

**Location:** Communities of Imuagoro, Kalo and Keapara in Rigo District, Central Province

**Objective:** To support the development and resilience to climate change effects in three rural communities in the Rigo District, Papua New Guinea

Implementing Agency: Climate Change and Development Authority (CCDA) with implementing partners Central Provincial Government, Rigo District Administration and Water PNG Limited

**Budget:** € 1,200,000 **Duration:** 2017—2019

#### **Current situation**

The country's topography has hindered the basic development of remote rural communities. There is a lack of basic infrastructure such as power and water supply and basic health care systems. Eighty five percent of the total population have no access to electricity, and therefore no conveniences such as lighting and refrigeration. Furthermore, 61% of the population have no access to safe drinking water. Unfortunately, the Government of PNG lacks the required resources to supply basic infrastructure to remote communities.

The impacts of climate change are likely to make this situation worse. Surface temperatures in PNG have increased by about half a degree Celsius since the mid-70s, while rainfall has reduced in some areas by as much as 15%.

The communities of Imuagoro, Kalo and Keapara in Rigo District, Central Province were selected as they met the following criteria:

- Represent the different kind of village structure (highland, shoreline-coastal and hill village) to reflect Papua New Guineas villages,
- Are easily accessible to ensure that project partners can visit the sites, and
- Have interest and capacity to implement the project.

### What Is EU-GIZ ACSE Doing?

The EU-GIZ ACSE programme helps the people of fifteen Pacific island countries address two common challenges: adapting to climate change and reducing their dependence on fossil fuels.

The project is supporting the Government of PNG to improve the development and resilience of rural communities through

- Establishing improved water supply and treatment infrastructure – including protected water sources, solar powered pumps, reservoir and rainwater harvesting systems,
- Providing health care centres in Imuagoro and Kalo with a sustainable energy source, medical coolers and water supply, impacting approximately 4500 users of these health centres,
- Providing stand-alone solar powered street-lighting that will help increase the safety around the water sources, and
- Increasing the capacity and awareness of stakeholders regarding sustainable energy and water supply infrastructure.

## **Organisational Context**

The Climate Change Development Authority (CCDA) is leading the project, which is implemented in partnership with the implementing partners, Central Provincial Government, Rigo District Administration and Water PNG Limited.

The design and implementation is carried out in close collaboration with the Local Level Governments and the village themselves in accordance with Ward Development Plans.





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