

# PROJECT BRIEF

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



PACIFIC ISLANDS  
FORUM SECRETARIAT



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## Vanuatu: Improving small-scale community-based freshwater aquaculture and governance

### Background

The Republic of Vanuatu is an archipelagic nation of 83 islands in the south Pacific, 65 of which are inhabited. The islands are small and highly vulnerable to the disasters such as frequent cyclones, seismic and volcanic activities. Because of the rugged and mountainous terrain, most of the population live on the narrow coastal strip of the islands. Approximately 80 percent of the total 236,000 population live in rural areas, and live a mainly subsistence lifestyle. In recent years, tourism has developed, enhancing the economic development of Vanuatu. Most people however, still rely heavily on agriculture, forestry and fisheries for household staple food and income. The predicted effects of climate change are likely to disproportionately affect people living a subsistence lifestyle.

The project is located on Vanuatu's main island, Efate. The three fish farm trial sites are at: Mangaliliu, on Efate's west coast; Eton, on the east coast; and Onesua, on the north coast. The fish hatchery, TFAC, is located next to the Bauerfield International Airport at the northern end of the country's capital city, Port Vila. These project sites were selected to enable to cost-effective monitoring of the trial aquaculture ponds.

### Project Objective

This project will improve small-scale community-based freshwater aquaculture and governance in Vanuatu. This will be achieved through (i) trialling economically and environmentally sustainable small-scale, community-based aquaculture models and integrating successes into a robust national aquaculture governance system, and (ii) improving the Tagabe Freshwater Aquaculture Centre (TFAC). The project will help improve food

### Project Summary

**Location:** Efate, Vanuatu

**Objective:** Improving small-scale community-based freshwater aquaculture and governance in Vanuatu

**Implementing Agency:** Ministry of Climate Change and Natural Hazards in partnership with the Vanuatu Ministry of Agriculture, Livestock, Forestry, Fisheries and Bio-security and Queensland University of Technology (QUT), Australia.

**Budget:** € 254,000

**Duration:** 2017—2018

security. The project is aligned with the Government of Vanuatu's Policy Direction "Priority and Action Agenda" (PAA) and the Agricultural Ministry's overarching Sector Policy and Ministry Corporate Plan.

### Current situation

There are concerns about subsistence and commercial overfishing in the coastal zone. Freshwater aquaculture provides a means to improve food security and improve economic development, whilst reducing pressure on marine fish stocks.

Several privately operated commercial farms already exist, using imported tilapia. There are also many small, family-operated fish farms. The semi-commercial and commercial fish farm sector however, has yet to develop fully. The high cost of

imported feeds, high cost and complexity of establishing and operating commercial fish farms, lack of skills and training and clear partnership relationships with government, remain sig-

nificant challenges to the expansion of the aquaculture sector.

The Government of Vanuatu established TFAC on the country's main island of Efate, along with a smaller facility on the northern island of Espiritu Santo. These facilities promote and regulate aquaculture development and support skills development of fish farmers. However, the capacity of these facilities including infrastructure, operating procedures, staffing, training and extension services need upgrading.

## What Is EU-GIZ ACSE Doing?

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

GIZ is supporting the Government of Vanuatu to improve small-scale community-based freshwater aquaculture and governance through two complementary components:

### 1. Trialling and testing economically and environmentally sustainable small-scale, community-based aquaculture models, and integrating successes into a robust national aquaculture governance system

The project is testing cost-effective ways of establishing and operating semi-commercial tilapia farms, including digging ponds, procuring equipment, establishing security and operational procedures and selling fish. The project is also introducing concepts such as gender equality, farm planning and biosecurity.

### 2. Upgrading the infrastructure of Tagabe Freshwater Aquaculture Centre (TFAC) including improving skills of its technicians and enhancing overall planning and management of the facility

The project is upgrading pipes, pumps and ponds at TFAC, and training staff in hatchery techniques and upgrading the hatchery's operational procedures. The project is also testing cheap, local fishmeal alternatives to the currently available expensive imported feeds, and is working to identify a robust strain of tilapia fish suitable for commercial farm production.

At a policy level, the project is reviewing the Vanuatu Aquaculture Development Plan 2008-2013, integrating past learnings and new approaches including biosecurity and women's participation as progressive and necessary innovations for the sector.



## Organisational Context

The Ministry of Climate Change and Natural Hazards (MCCNH) is leading the project, in partnership with the Vanuatu Department of Fisheries (VDF) within the Ministry of Agriculture, Livestock, Forestry, Fisheries and Bio-security (MALFF) and Queensland University of Technology (QUT), Australia.

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