

## *A ni-Vanuatu success story*



*I am grateful for the livestock project to be trialled on my island because it is an opportunity for us to learn how to better secure our food and income*

Frank and Eileen from Worearu/Pele

### *Project facts CCCPIR*

**Funding sources:** Federal Republic of Germany through the Federal Ministry for Economic Cooperation and Development (BMZ)

**Regional partners:** SPC, SPREP and USP

**Countries:** Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu

**Duration:** January 2009–December 2015

## SPC/GIZ Coping with Climate Change in the Pacific Island Region

*Climate adapted livestock and integrating farming systems, Pele Island, Vanuatu*



The Island of Pele (SPC/GIZ CCCPIR pilot site) is experiencing many climate change impacts, including coastal erosion, slope erosion, leaching of soil nutrients and increasing temperatures.

### Livestock in Vanuatu

On Pele, pigs play a very important role within the context of subsistence agriculture, both as a source of food and in culture and custom. The Vanuatu Agricultural Census estimated a total of 86,896 pigs (2007), with an average of five pigs tended per household. Over 50% of these are consumed for subsistence. The number of pigs is also increasing each year; from 1983 to 2007, the total number of rural pigs increased by nearly 20,000.



SPC  
Secretariat  
of the Pacific  
Community

**giz**

german  
cooperation  
DEUTSCHE ZUSAMMENARBEIT

Nevertheless, climate change is negatively affecting pigs' health and growth rates. Amongst other things, climate extremes compromise productivity (including fertility) as well as causing higher mortality due to heat and temperature stress, reduced rain and groundwater availability, reduced feed intake, increased spread of diseases, and increased intensity of rain, storms and cyclones. Climate change and associated climate variability mean farmers need to spend more time and effort searching for appropriate feeds for pigs. They also have to spend more money improving pig enclosure in preparation for extreme weather events. Furthermore, damaged infrastructure is causing market access problems for farmers.

### Hands-on, sustainable projects

The 400 residents of Pele Island rely heavily on the production of pigs to supply protein and income to their communities. The SPC-GIZ CCCPIR programme is assisting the island's farmers to adapt to climate change effects by addressing pig productivity and animal welfare.

The pilot project focuses on enhancing feed and water supplies, improving enclosure design, integrating livestock and agricultural production through manure composting, innovating in the area of pig feed silage and preservation, planting shade trees, and encouraging cross breeding for enhanced resilience against climate variability and extremes. The programme is helping the communities on Pele undertake cross-breeding trials among climate-tolerant varieties of wild pig, productive commercial varieties and domesticated pigs to rear a stronger breed of pig that can withstand climate variability, has increased productivity, a quiet temper and proven environmental suitability. Further, attention is given to intermixing livestock husbandry and agriculture in order to achieve mutual productivity enhancement. For example, animal waste is turned into compost to contribute to cultivating crops on the island, which are utilised to feed the local communities as well as pigs and at the same time generate income through market sales.

Island-appropriate technologies, including farming tilapia for enhanced pig feed and capturing biogas for energy production, are also being trialled.



*....For example, animal waste is turned into compost to contribute to cultivating crops on the island, which are utilised to feed the local communities as well as pigs and at the same time generate income through market sales....*

## CONTACT

### *SPC/GIZ Coping with Climate Change in the Pacific Island Region*

**Dr Christopher Bartlett**  
SPC/GIZ Adviser on Climate Change  
[christopher.bartlett@giz.de](mailto:christopher.bartlett@giz.de)

GIZ is a federally-owned enterprise that supports the German government in the field of international development cooperation. For more than 30 years, GIZ has been cooperating with Pacific Island partners in strengthening the capacity of people and institutions to improve the lives of communities for this generation and generations to come. GIZ is an implementing agency providing support through technical cooperation to balance economic, social and ecological interests through multi-stakeholder dialogue, participation and collaboration.

