

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

Enhanced food security and alternative income opportunities through solar fruit drying on Pele Island, Vanuatu



#### Climate change and its impact on Vanuatu communities

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

#### Making the most of productivity in Vanuatu

Vanuatu is known for its bountiful harvests of fruits (e.g. mango, papaya and tamarind), but climate change is threatening this very important food and income source. Climate change and associated climate variability are already affecting the timing and success of flowering and fruiting of many of these crops. For example, in 2011 mango crops were affected by heavy rains caused by two consecutive La Niña events. Climate extremes can also cause trees to fruit early, late or not at all. The high vulnerability of our fruits to climate change has made them a focus of the SPC/GIZ Climate Change Programme.

#### 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









In Vanuatu, very little value adding of products is undertaken. For example, when tomatoes are in season, the markets are flooded, prices drop and much produce is wasted. Only a few months later, no tomatoes can be found. Thus, developing ways to store and preserve these excess fruits for use during periods when little food is available is a critical climate adaptation strategy. Some islands of Vanuatu have very well developed traditional food storage techniques, like the preservation of breadfruit in the Torres Islands, while others do not.

#### Hands-on, sustainable projects

The solar fruit dryer uses solar energy to naturally dry and preserve fruits, nuts, fish or meat. A 1-watt solar panel is sufficient to power two fans that blow solar-heated air around the inside of the dryer. The dryer does not require batteries and works during both sunny and cloudy weather conditions. Drying mangos can take as little as two days and the product can last for up to a year. The programme encourages villagers to expand the planting of fruit and nut trees as a way to financially benefit from sustainable land use and also adapt to climate change.

The SPC/GIZ programme, in collaboration with Charles Long Wah of the Vanuatu Kava Store, have developed this solar drying system, which is efficient and appropriate for use in Vanuatu. They have also organised training workshops on the basic elements of fruit drying, food security and value adding. With the help of the project's detailed step-by-step instruction and drying manual, village women have learned the intricacies of producing quality dried products for food security and even extra income generation.

# A ni-Vanuatu success story

## Katy, Melanie and Janet



'Food preservation enables me to prepare food for my family for times when the harvest is destroyed by wind and rain.'

'People in Port Vila love to buy my dried fruit and jam. I can now make money to support my family.'



## 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 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.







