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

Adaptation to climate change through composting toilets, Pele Island, Vanuatu

On Pele Island, a major problem for agriculture, forestry and food security is the lack of good quality, nutrient-rich soils for seed germination and high productivity. This lack is exacerbated by climate change. Buying soil and fertilisers from Port Vila is expensive, and transportation to Pele Island is very difficult. Through the support of the SPC/GIZ CCCPIR programme, however, island committees sought to develop their own solutions. Composting toilets turn human waste into good soil through the process of decomposition and dehydration. These toilets need no water and do not have septic systems. They cause minimal environmental impact and produce a valuable compost mix for gardening. In as little as nine months, human waste is turned into a fully usable organic material for more productive gardens and thereby better food security. The first composting toilet was installed at the Tangovauwia Primary School, where the 100+ students ‘help’ to produce about 40 kilos of excellent fertiliser a year.

Moreover, these toilets protect the island’s underground water sources in a time of serious climate change. Pele Island is already experiencing water shortages, as there are no rivers, no streams and no creeks. The only fresh water comes from rain, which is not enough for everyone’s needs. Most of the water used for washing, bathing and cleaning comes from dug wells, which used to be clean and safe. The major problems today are deforestation, which causes dirty water runoff; sea level rise, which affects the salinity of groundwater wells; and the increase in the number of pit toilets. More than 50% of Pele’s 27 wells have recently been tested and the water found unfit for use.

Converting from pit toilets to composting toilets will protect water sources, provide an excellent source of compost and help Pele Islanders to adapt to climate change!

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.