



Integrated Sustainable Wastewater Management (EcoSan) for Tuvalu

Progress Snapshot

Project Objective

To demonstrate that improved sanitation technology and practices can provide protection of primary and secondary water resources, marine biodiversity, livelihood, and food security.



Project Contact
Pisi Selagniu
National Project Manager
Ministry of Public Utilities
and Industry
seleganiu70@gmail.com

Process

✓ **Lessons learned incorporated into other projects and/or regulations**

From a baseline of little interest in composting toilets to a success story other countries are looking to emulate, the Tuvalu GEF Pacific IWRM project has demonstrated the value of engaging stakeholders.

✓ **National IWRM indicator framework embedded in formal national reporting**

This core IWRM and project approach has facilitated a national-level change in attitudes to sanitation and water management, development of a national water and sanitation policy framework, increased water security and is dramatically increasing access to improved sanitation in Tuvalu.

✓ **Increased proportion of community engaged in water issues**

Initially, the project struggled to find families to trial the first ten compost toilets. A communication and engagement campaign involving innovative strategies including a toilet roadshow, a competition to name the Tuvaluan designed toilet (the 'Falevatie'), focus groups and targeted media campaigns and numerous school and community sessions were built around a sound technical solution. Less than three years later over 25% of Funafuti's households (275 families) are seeking to install compost toilets.

The project focus on stakeholder engagement has been reflected in strong support for a national indicator framework and a national water and sanitation policy. The inclusion of gender targets in senior national water governance is a reflection of the empowering nature of the project and a positive response to pilot gender awareness in water workshops.

The project is also assisting with drought management, particularly relevant following the 2011 drought and national State of Emergency, through the development of a national water storage model, providing critical water security management and planning information.



Olioliga Iosua
IWRM Focal Point
Permanent Secretary,
Ministry of Public Utilities
and Industry
kakega@gmail.com

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- Annie Homasi
- Loia Tausi



The Compost Toilet RoadShow showcased the Falevatie (compost toilet) by taking the toilet to the communities



The RoadShow received a very positive response and can be regarded as the most influential tool in addressing misconceptions of eco-sanitation in Tuvalu.

Tuvalu IWRM Demonstration Project Video

<http://www.pacific-iwrm.org/Tuvalu-video.html>

Stress Reduction

✓ Reduction in sewage pollution across Funafuti

Reducing water and sanitation management impacts on Tuvalu's groundwater and coastal resources, has been identified as critical to the long-term sustainability of the country from a food and water security and biodiversity perspective. One of the most severe challenges to the groundwater and coastal water quality and to water security is the use of septic tanks. Many septic tanks have failed; however due to the sandy soils, even functioning tanks still do little to reduce the pollution load to the environment

The installation of 40 compost toilets has removed sewage pollution from entering into groundwater and subsequently into coastal waters from these 40 houses. This represents about a 5% reduction in pollution into the groundwater.

The co-funding commitments to replicate eco-sanitation to a further 60 houses in partnership with this project will deliver a further 8% reduction in sewage pollution, putting the project on track to exceed the target. Additionally, current government and development partner planning and community commitment suggest that much larger targets may be achievable.

✓ Reduction in use of freshwater for sanitation purposes

Toilets flushing into septic tanks typically use six to ten litres per flush, and represent more than 30% of household water use. During the 2011 drought resulting in a State of Emergency, flushing toilets were a significant contributor to drawing down water reserves.

By installing the 40 compost toilets the project has achieved a 30% reduction of water use at those households, representing about 5% of Funafuti's population. The co-funded installation of toilets in partnership with this project will see these reductions in about 15% of Funafuti houses.

Ultimately, the changes in building regulations being developed and implemented under this project, together with development partner commitments will see similar reductions over much of Funafuti and the Tuvalu Outer Islands.



Eutrophication in the Fongafale lagoon



Falevatie construction workshop



Installed composting toilet "Falevatie"

Water Resource and Environmental Status

✓ Increase population with access to safe drinking water supply

Whilst MDG statistics suggest that Funafuti has high access rates to improved sanitation and drinking water, recently the United Nations Special Rapporteur on the right to safe drinking water and sanitation declared that this did not reflect the true situation in Tuvalu. Most sanitation systems have failed and open defecation is still practiced, increasingly so during drought periods.

The provision of sustainable sanitation through the Tuvalu GEF Pacific IWRM is directly increasing the access to improved sanitation for 40 households, about 280 people, with co-funded and catalytic outcomes delivering further increases. These toilets will also alleviate some of the challenges in providing access to improved drinking water sources, significantly reducing household water use, increasing security and water availability during drought periods



Outside and inside of composting toilets, Falevatie.