

IWRM in RMI : an achievement story

By Julius Lucky



Regional knowledge sharing builds community acceptance in waste management



Above: Local builders constructing a compost toilet at Laura Village, RMI

The main issue facing groundwater in the Laura Lens is the amount of contaminant being discharged into our only freshwater resource making it nearly impossible for human consumption. The two main sources of contaminants are human and animal wastes that have not been dealt with over the years, resulting in high levels of nutrients and pathogens. To reduce this contamination, we explored the options of compost toilets and dry-litter piggeries.

The project proposed that these disposal systems be trialled at Laura Village. Councilwoman Joubon Kabua said of the decision, "It is about time, we need more to help sustain our natural water resource". Initially the Laura community was reluctant to accept and trial these systems at the household level because of negative perceptions that they would smell, that they can't be clean without using water, and the perception of a compost toilet being a step down from a flush toilet. We needed to present to people the technical operation of the systems and to let them see and understand the benefits they could provide, both at the household and environmental level.

For the compost toilets we engaged the IWRM project manager from Tuvalu, Pisi Selganiu, to share his knowledge and approach to introducing compost toilets. Pisi had been successful at raising community acceptance of the toilets through hands-on engagement. Together with local community members we built a demonstration toilet and through community-led discussions about the systems and continuous knowledge sharing from the IWRM team, community perceptions began to change and led to the willingness of several households to trial the ecosan system at their homes.

Glen Fukumoto of the University of Hawaii, introduced the dry-litter system to us after successful implementation at various sites around the Pacific region. Again we approached those households that had domestic pigs and a commercial piggery, and discussed with them the impact that wash-down piggeries were having on the environment. Through open discussion we presented the alternative dry-litter solution and described its operation and benefits. We soon had many households on board to trial the system.

Local community members were contracted to construct the toilets and dry-litter pens to encourage community ownership, and increase technical construction skills and knowledge of how the system works. This was the turning point for these projects as when construction commenced, more community members became aware, asked questions and were eager to install the systems at their homes. To date, three compost toilets, thirty portable dry-litter pens, and a commercial dry-litter pen have been constructed around Laura Village. Many more are being requested as people notice the benefits their neighbours are experiencing by using them and become more aware of the importance of keeping the lens free from contaminants.

This experience has shown me the importance of gaining community support when introducing new technologies that significantly impact on how people go about their day-to-day lives. Engaging with influential members of the community also helped with uptake of the technologies. As Chief Iroij Leikman Zedkaia said to many community members "I support this project and will continue to for I know the outcomes that will be beneficial for the people of Laura", showing his support for a sustainable way forward and encouraging others to do so.

The project team and I realised that a combination of open discussion and on-the-ground construction led to the most positive outcome. Discussion alone wasn't enough and people needed to see and understand the final product in order to make an informed decision to support the project or not. We are now having more and more requests everyday for assistance in building dry-litter pens. We are starting to notice a difference in the contaminant levels of the Laura Lens and a reduction in odour from domestic pig-pens, pig-pens and many households have signed up to construct compost toilets.



Above: The completed commercial dry-litter piggery. Dried leaves form a bed that soaks up pig waste and is converted into nutrient rich compost.