

# Dry Litter Waste Management System For Small-scale Piggery In The Western Pacific

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Non-point source pollution of surface, ground, and coastal waters has received much attention in the Pacific islands. Thanks to Cooperative Extension agents from Northern Marianas College, Palau Community College, and the University of Hawaii word is also out about a way to stop some of that pollution - an alternative waste management method for those who raise pigs in the Pacific islands.



Uncontrolled flow of manure around the perimeter of piggeries



Republic of Palau



Tinian, CNMI

Two demonstration centers have been installed, one in the island of Tinian and the other in the Republic of Palau. Both sites demonstrate the key features such as an automatic nipple waterer, sloped flooring, waste alley, rain catchment roof overhang, and pig panels. Significant results have been seen with a 10% slope in a 4m x 3m pen along with a mixture of wood chips and shredded coconut husks.



The dry litter waste management system is being introduced to island pig farmers. In this system, pigs are housed in sloped pens with dry litter used as bedding material. The litter and pig waste get pushed down slope into a composting pit. Various slope ratios and types of dry litter have been tested to help determine the efficiency of the system and the quality of the composted product.



Working with this system has become a process of innovation for both farmers and professionals as they continue to improve and adapt it to the different island environments. While pig farmers have been the primary target audience, efforts have also been made to raise awareness in schoolchildren, regulators, and the general public. Recently, USDA –NRCS Pacific Basin has adopted the dry litter system as one of their Best Management Practices (BMP's) to offer in their EQIP program.