Rainwater Catchment Safety

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Rain is an essential freshwater source of drinking water in rural Hawaii and many other Pacific islands. Despite the widespread use of rain catchment systems in Palau, most rain catchments are not properly maintained for safe drinking water. Although experts said the rain catchment systems were improperly maintained, the general public seemed to believe that rainwater is naturally the cleanest water on earth. They not consider their catchments, roofs, and cutters could contaminate their drinking water.

By tradition, Pacific islanders consider rainwater catchments to be anything that can be used to catch rain, such as basins, drums, trash plastic trash cans, big pots, and swimming pools. The rainwater caught was used for drinking and cooking, and maintenance of the catchment was ignored. Some island resident still use such systems.

Region 9 Pacific islands, states, and territories initiated a regional project to educate residents and promote maintenance and proper components of rainwater catchments, as well as conduct water testing.

Dr. Patricia Macomber from the University of Hawaii in Manoa visited the Republic of Palau, Chuk in the Federated States of Micronesia, and the Marshall Islands to train the trainers in water testing and rainwater catchments maintenance. Household surveys and water testing were conducted during Dr. Macomber’s visit. In addition Dr. Macomber made it possible for water quality representatives from Palau, the Marshall Islands, the Federated States of Micronesia, and Guam to attend the annual rainwater catchment conference in the Big Island of Hawaii.

Through the trainings and professional meetings, Region 9 water quality coordinators were able to hold several workshops, water education campaigns, community outreaches, demonstrations, and water testing activities throughout the Pacific islands. The activities were conducted and coordinated by the water quality coordinators, assistant coordinators, and Extension agents throughout the region.

In Palau, a rainwater catchment maintenance manual has been modified from Hawaii’s rainwater catchment’s manual and published. The Marshall Islands produced a DVD as an awareness and promotional tool, and provided information about alternative methods of harvesting clean and quality water. The water quality coordinator of the Federated States of Micronesia—Pohnpei, Kosrae, Chuuk, and Yap—produced brochures and demonstrations of rainwater catchments systems.

Project coordinators, assistant coordinators, and Extension agents reported that more than 50 percent of the people who have been educated through these programs have changed their practices, attitudes, and conditions, and improved their knowledge on rainwater catchment maintenance and their personal health.