
NIUTAO WATER SURVEY REPORT 2022

Tuvalu Water Scarcity Project, Tuvalu Climate Change Department



1. Background

Managing Water Scarcity through Strengthened Water Resource Management Project in Tuvalu is the second phase of the previous Strengthening Water Security in the Vulnerable Island States that aim to improve the water resource storage system to enhance resilience in communities. This regional project covers 5 Islands which are Cook Island, Kiribati, Marshall Islands, Tokelau, and Tuvalu. The project's long-term goal is for communities to be less susceptible to water scarcity. This project is funded by New Zealand's Ministry of Foreign Affairs and Trade and implemented by the Pacific Community (SPC).

2. Introduction

Niutao Island community & household water survey was carried out for 4 days from 11th to 14th April 2022. The survey was done with the help of 4 surveyors that were recruited by the Niutao Island Council and supervised by the assistant secretary. The sole purpose of the household water survey was to collect data and information about the conditions of water storage and catchment system at the household level on Niutao. As the Tuvalu Water Investment Plan needs solid and up-to-date data and information on the current storage capacity on each island of Tuvalu. The survey is a preliminary step towards the achievement of the investment plan.

Map of Niutao Island



Niutao Island is the 2nd farthest northern island of Tuvalu which is close to Nanumea and Nanumaga. It has a small and shallow lagoon in the middle and has no islets in its territory. Its climate & weather conditions are similar to other northern islands. Rainfall is usually lower than normal and this greatly affects its rainfall catchment. However, groundwater is the only other option that people rely on as a source of water supply to the community and individual households.

3. Results

3.1 Summary of the survey

The household covered in the survey were all private houses and government-owned houses. The population was categorized into adults who are 18 years and above and children, from 17 years to infant. The average population per household is 7 according to the survey that was carried out, and the agreed usage rate per person per day is 14 liters of water according to Tuvalu Public Health's standards. According to data collected, the average number of water tanks per household is 2, and an average of 4 people per household.

Niutao water survey analysis	
Population	827
Household	213
Tanks	366
Estimated capacity of 366 tanks	average of 10,000 liters
Total storage capacity	3,660,000 liters
Water available	4425 liters/person
With 10L/person/day	442 days

Figure 3.1 The table above shows Niutao's population in relation to water tanks.

3.2 Condition valuation of water tanks

Most of the households on Niutao have a very poor condition of their water catchment in regards to the number of households. The number of leaked and damaged water tanks is also high in relation to the total number of tanks on the island. The percentage shown below is equivalent to 143 tanks that need to be repaired and 120 households needed to repair their catchment systems.

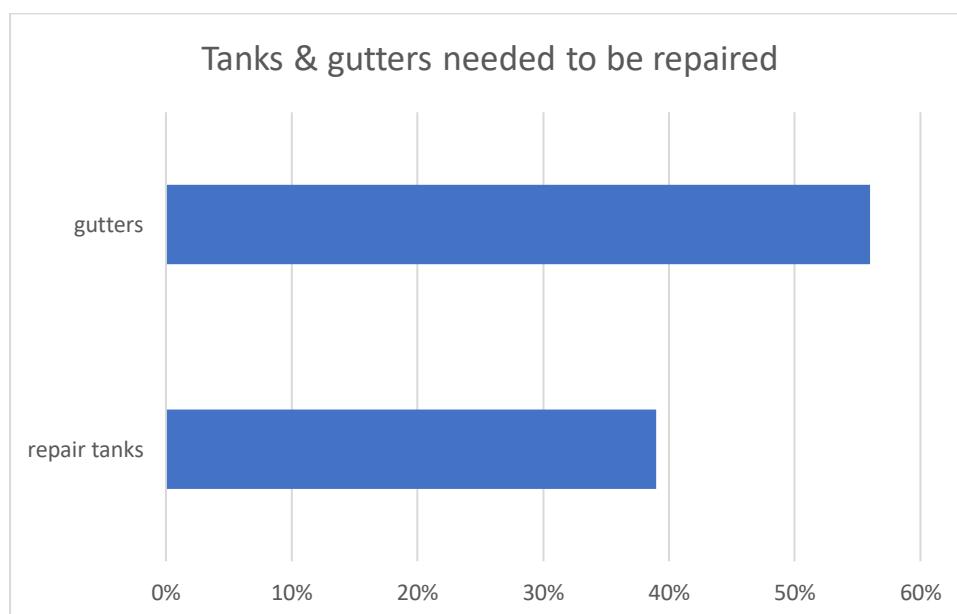


Figure 3.2 Conditions of water tanks & gutters on Niutao Island that need to be repaired.

4. Conclusion

The survey found out that there are many water tanks in Niutao that needed to be repaired as well as gutters for some of the households. The root problem of water shortage in communities deeply reflects on the people's behavior towards managing water properly. As seen in this report, many households need to repair their water catchment systems and also look after their water storage tanks appropriately. This report documented the importance of maintaining safe and good water storage systems in each household. As stated in the results, many households need their gutters and pipes repaired and tanks to be patched. These are unending issues that caused water shortages most of the time.