
NUKUFETAU WATER SURVEY REPORT 2022

Tuvalu Water Scarcity Project, Tuvalu Climate Change Department



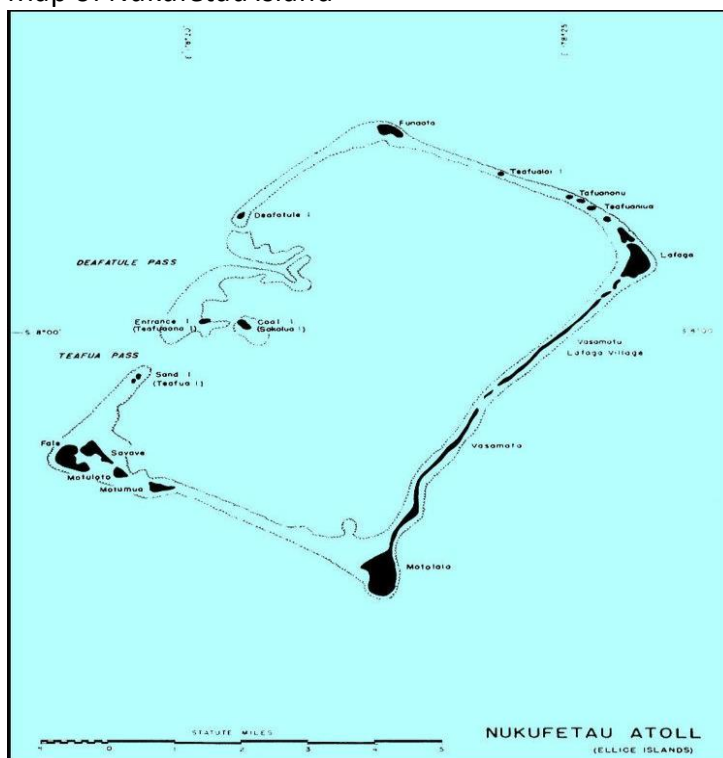
1. Background

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

The Nukufetau household water survey was carried out for 3 days from the 18th, 19th, and 21st of June 2021, and 5 surveyors carried out the survey. The project coordinator joined the survey and assisted the five surveyors from the island. On the last day of the survey, the project coordinator joined the climate change team and surveyed the settlement located on the islets whilst the surveyors continue the survey on the main island. 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 Nukufetau. 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 Nukufetau Island



Nukufetau Island is very similar to Funafuti Island in terms of its geographical formation. Nukufetau is categorized as one of the central islands which is close to Funafuti and its climate and weather patterns are the same as Funafuti and other nearby islands. Historically, Nukufetau island also deeply relies on its underground water during water shortages and still uses it nowadays. Even some of the surrounding islets have their wells to use when people of the community visit those islets.

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 1, and an average of 3 people per household.

Nukufetau water survey analysis	
Population	562
Household	198
Tanks	417
Estimated capacity of 417 tanks	average of 10,000 liters
Total storage capacity	4,170,000 liters
Water available	7419 liters/person
With 10L/person/day	741 days

Table 3.1 The table above shows Nukufetau’s population in relation to water tanks.

3.2 Condition valuation of water tanks

Most of the households on Nukufetau 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 82 tanks that need to be repaired and 131 households needed to repair their catchment systems.

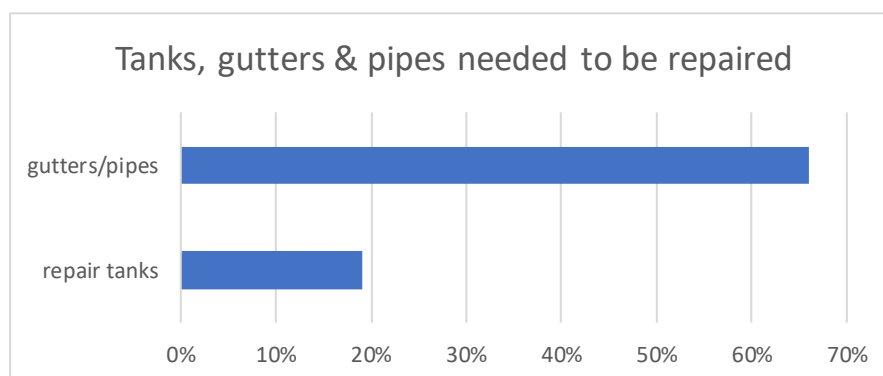


Figure 3.2 Conditions of water tanks & gutters on Nukufetau Island that need to be repaired.

4. Conclusion

Many of the concrete tanks on Nukufetau Island are not in use because it's having cracks on the sides or from the base. However, this does not mean that these tanks are no longer in use. It is best to get these tanks repaired so that people can use them again to store water. 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.