NUI 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

Nui community & household water survey carried out from 28th June to 1st July 2021. There were 5 surveyors recruited from the community to assist in doing the survey. The project coordinator supervised the survey and also assisted the surveyors during the survey. On the last day, the coordinator joined the climate team at one of the islets to carry out the survey. 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 Nui Island. 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 Nui Island

Nui is a unique island in Tuvalu due to its language used which is the Kiribati dialect. However, the people of Nui also speak in the Tuvaluan dialect. Nui is one of the islands in Tuvalu that has a lagoon encircled by fringing reefs with atoll islands in formation paralleled to the fringing reefs. Its climate and weather patterns are very similar to other central islands and rainwater and groundwater are the two main source of water supply.

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 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 3 people per household.

Nui water survey analysis	
Population	500
Household	159
Tanks	316
Estimated capacity of 316 tanks	average of 10,000 liters
Total storage capacity	3,160,000 liters
Water available	6,320/person
With 10L/person/day	632 days

Table 3.1 The table above shows Nui's population in relation to water tanks.

3.2 Condition valuation of water tanks

Most of the households on Nui are not that in a very poor condition of their water catchment in regards to the number of households. Howver, the number of leaked and damaged water tanks is a bit high in relation to the total number of tanks on the island. The percentage shown below is equivalent to 68 tanks that need to be repaired and 70 households needed to repair their catchment systems.



Table 3.2 Conditions of water tanks & gutters on Nui Island that need to be repaired.

4. Conclusion

Nui Island water tanks are not that debauched compared to other islands as shown in the data above. However, 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 ongoing issues that caused water shortages most of the time.