

STEPS Survey 2017

1. Initial sample size allocation

An initial sample of 4,500 individuals (respondents) between the ages of 18 to 69 years old was targeted to undertake the STEPS survey for 2017 in Tonga.

2. Sampling Design:

Because it is important to compare the results by island divisions (national level), it is required with importance to produce the estimates in the divisional level (National Level). Therefore the sampling fractions will be adjusted from its proportional to the size (number of households) to have higher sampling fraction (coverage) for the smaller size island division as shown in the following table:

		2016 TONGA POPULATION CENSUS	Sample - STEPS		
		total households	ideal sample size	coverage	Number of Selected Blocks
Island Division		1	2	3	4
1	Tongatapu	12,953	3240	25.0%	270
2	Vava'u	2,715	684	25.2%	57
3	Ha'apai	1,179	288	24.4%	24
4	Eua	885	228	25.8%	19
5	Niua	273	60	22.0%	5
Total		18,005	4,500	25.0%	375

The final sample numbers presented in the table above were rounded such that they were divisible by 12 (an enumerators workload) to accommodate field logistics. As such the sample size is recorded to 4,500.

The sample was selected independently within each of the 5 target areas.

The sampling in each area was then undertaken using a **three-stage process**. The first stage involved the selection of census blocks using Probability Proportional to Size (PPS) sampling,

where the size measure was the expected number of households in that block. For the second stage, a fixed number (twelve) of households were selected from each selected census block using systematic sampling. The household lists for all selected blocks were updated just prior to the second stage of selection. Once the selected 12 households are found, then the list of household members age 15 to 64 by gender will be recorded. The final stage will be to use the Random Sample Generator (Android Application) to randomly select one person from the household to be enumerated so that it captures the required composition of the sample with specific age-group distribution and gender.