

# Tonga Disability Survey Report 2018



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This report was prepared by the Statistics for Development Division of Pacific Community, TSD and UNICEF with the assistance of DFAT, Washington Group and Pacific Disability Forum.

### **More information**

For more information about the 2018 Tonga Disability Survey Report, or to request additional statistical information from the Survey not included in this publication, please contact the Tonga Statistics Department.

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# ACKNOWLEDGEMENT

The Tonga National Disability Survey is the first countrywide comprehensive survey to assess and document the degree of activity limitations and participation restrictions and societal activities for persons with disability and to ascertain the specific vulnerabilities that children and adults with disability face.

The survey was conducted as a joint exercise between the Tonga Department of Statistics and the Ministry of Internal Affairs, Social Protection and Disability with funding from the Government of Tonga, UNICEF and Australian Government's Department of Foreign Affairs and Trade (DFAT). The Pacific Community and UNICEF provided the necessary technical support throughout the different stages of the survey.

The Tonga National Statistics Office would like to thank the following representatives (see table on the following page) who were part of the Tonga National Disability Steering Committee, whom we were indebted for their valuable contribution and commitment in ensuring the successful completion of the project.

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# Tonga National Disability Steering Committee

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# FOREWORD

The Tonga Disability Report is the result of a coordinated effort by various individuals, organisations, ministries and departments who have worked diligently to ensure that the survey was planned and implemented successfully, culminating with the production of this national report on the status of disability in Tonga.

The statistics and analysis in this report provide very important information about the status and prevalence of disability among the people of the Kingdom of Tonga and affords a better understanding of their situation and background characteristics compared with the rest of the population. It also highlights the disparities that exists between the vulnerable population and those who had full access to the different services and enjoy all activities available in their homes, communities and broader society. Persons with disabilities will continue to face barriers and limitations in accessing services or participating in various activities if there are no interventions or formulation and implementation of policies to address these issues through the equitable allocation of resources to support persons with disabilities.

The Information contained in this report will support evidence-based decisions and support planning and implementation by the relevant agencies, NGO's and various arms of Government to ensure that 'no one is left behind' and everyone has equitable opportunities to whatever services and activities that are available.

The report also includes recommendations to support inclusive development policies, activities, services and infrastructure, to ensure the full participation and access for people with disabilities. It is our wish that the report will be accessible and distributed to relevant stakeholders, public and private sectors, NGOs, development partners and all those interested in supporting the inclusion and participation of persons with disabilities.

The Tonga Department of Statistics would like to acknowledge the effort of a number of organisations and technical partners for their valuable input into the various phases of the project including questionnaire consultation and design, training of field enumerators, monitoring of field operations, data processing and the compilation of this report. We extend our deep appreciation to UNICEF, DFAT, the Washington Group, Pacific Disability Forum, Tongan Government, Ministry of Internal Affairs as well as the Social Development Programme and the Statistics for Development Division of Pacific Community for their invaluable contributions financially or through technical support.

Vested in this report, are our hopes that it will greatly benefit the population of the Kingdom of Tonga who have a disability and it is with heartfelt gratitude to all survey respondents that we were able to collect the wide range of rich information included in this report.

Malo 'Aupito,

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Dr Viliami Konifelenisi Fifita  
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# EXECUTIVE SUMMARY

The Tonga Disability Survey is one of a few detailed surveys conducted in the region to assess and document the degree of activity limitations and participation restrictions and societal activities for persons with disabilities and to ascertain the specific vulnerabilities that children and adults with disability face in Tonga. It was also undertaken to establish the baseline information about accessibility of health and social services for persons with disabilities in Tonga and generate data that guides the development of policies and strategies that ensure equity and opportunities for children and adults with disabilities.

Like most countries in the region, Tonga has limited reliable, comprehensive and timely data on persons with disabilities, hence the need to undertake a disability survey to close the data gap. While the Population Census captures information on disability, based on the Washington Group short set questions on seeing, hearing, walking or climbing stairs, remembering or concentrating, self-care (washing or dressing) and communicating, results from this report provides more in-depth information on the situation of persons and the existing disparities between those with and without disabilities. The inclusion of the Washington Extended Set of questions complements the information already collected in the census. This collection fully supports the regional initiatives such as the inclusion of Goal 5 in the 2016–2025 Pacific Framework for the Rights of Persons with Disabilities (PFRPD) that focuses on strengthening disability research, statistics and analysis.

The survey was designed to be representative of the six geographical zones of Tonga and was based on a 2-stage stratified random sample. The first step was to identify the household with disability from the frame. Households with disabilities were the households who recorded at least one member with disability according to the six functioning domains (seeing, hearing, walking, remembering, self-care, communication) from the 2016 census. The overall idea was to equally split the total sample in both strata (households with identified persons with disability and households without disability), which had been allocated to approximately 5,500 households. A replacement procedure was implemented in case of non-response.

## Prevalence of disability

Disability is conceptualised as a continuum, from minor functioning difficulties to severe difficulties, which have major impacts on one's life. The responses are purposefully designed to reflect this continuum. Cut off points for disability can therefore be determined by the purposes for use of the data. As recommended by the Washington Group, disability cut-off is set at a lot of difficulty (a lot of difficulty and cannot do at all) in any one domain which put the prevalence rate of disability for Tonga at 7.6 percent. Of the 7.6 percent, 4.0 percent had (some or a lot or cannot do) difficulties in one domain, 1.4 percent had difficulties in two domains while 2.3 percent had difficulties in three or more domains.

By age disaggregation, disability prevalence is 2.2 percent among children aged 2-4, 2.0 percent among children aged 5-17 and 11.4 percent among population aged 18+. Out of the total population with disabilities, Tongatapu rural recorded the highest prevalence rate of 47.1 percent; Tongatapu urban at 21.3 percent; Vava'u at 13.4 percent; Ha'apai at 10.9 percent; 'Eua at 6.4 percent and Ongo Niua at 0.7 percent.

For individual ages, children with disabilities at age 2 is 16.5 percent, 34.1 percent for children at 3 years old whilst 50.0 percent were recorded for 4-year-old children. Children with disabilities in the age group 5-9 was 49.8 percent, 33.2 percent for ages 10-14 and 16.9 percent for those in 15-17 years of age.

If the level of inclusion for disability is set at, at least some difficulty (some difficulty, a lot of difficulty cannot do at all), about 43 percent have some disability. If a very conservative cut-off level of “cannot do it” at all is chosen, the prevalence of disability is about 2.3 percent. The various cut-off points for disability prevalence help to guide specific policy positions, for example, provision of assistive products and cash transfer support could start with those who have severe functional challenges or very high support needs and as such cannot do at all in any one of the domains.

## Profiles of persons with disabilities

The results from the survey shows that disability in Tonga largely associated with illness and age. A substantial proportion of those with a disability occurring early in life (about 12 percent) were the result of preventable diseases and medical conditions. This information is thus highly relevant for post-natal, pre-natal and early childhood health services, and the results indicate that there is potential for improving services and thus for reducing disabling conditions early in life but also access to improved health services to manage illness for the rest of the population.

In terms of use of assistive products for vision impairment, 13.9 percent stated that they are using ‘personal companion’ to assist them in their mobility whilst 6.6 percent indicated that they use a walking aid (stick/cane) to assist them.

Those who are using assistive products for hearing impairment, 35.9 percent were able to use assistive products for reading lips and pronunciations, 10.6 currently using cochlear implants whilst 10.3 percent uses sign language to communicate. About one third indicated that they are in need of hearing aid.

For persons aged 5 years and above with walking impairment, 54.4 percent indicated that they are already using a cane or walking stick, 37.2 percent needed someone’s assistance to make them walk whilst 34.5 percent stated they are using either a wheelchair or scooter to move around. 42.0 percent stated that they are in need of a ‘walker or Zimmer frame’, 41.0 percent needed wheelchairs or scooter whilst 20.3 percent needed crutches.

## Living conditions

The statistics show that there is not much disparity among the households with disabilities (case) and households without disabilities (control), where every households indicated access to improved water sources, source of energy and safe sanitation. Average Household size for case households is 6.2 people compared to the control households with 5.3 people. However, the accessibility of the facilities is of concern. 9.9 percent of case households have accessible concrete footpath for wheelchair, compared to 6.7 percent in control households. 7.3 percent of case households have ramps whilst 6.2 percent have support facilities in their bathroom. Persons with disabilities are likely to be found in larger households. Households with persons with disabilities recorded 23.7 percent, almost one-in-every-four, of households with seven persons or more, compared to households without persons with disabilities with 18.8 percent.

## Education

Education data shows stark disparities between persons with and without disabilities. 94.0 percent of the total population aged 3 years and over have ever attended school, are currently attending, have completed or dropped

out of school, with no differences between males and females. Persons with disabilities have lower rates of participation in education.

The data shows 8.1 percent of persons with disabilities aged 3 years and over have never attended school, 61.2 percent dropped out of school and only 6.6 percent are currently attending school; and 6.6 percent of persons with disabilities are currently attending school, compared to 38.3 percent without disabilities. Almost one quarter or 24.2 percent of persons aged 3 years and over with disabilities have completed school, not that different from the 25.4 percent of persons without disabilities. However, 61.2 percent persons with disabilities dropped out of school compared with 30.4 percent without disabilities, and a further 8.1 percent of persons with disability have never attended school, compared to 5.8 percent without disability.

For persons with disability aged 3 years and over who have dropped out of school, females recorded 64.0 percent and males 30.0 percent, compared to 58.3 percent and 30.9 percent respectively for those without disabilities. The same pattern occurs for those currently attending school, with 4.6 percent females with disabilities compared to 36.7 percent without disability; and 8.6 percent for males with disabilities compared to 40.1 percent without disability. 8.2 percent females with disabilities had never attended school, compared to 5.8 percent without disability, while 8.0 percent males with disabilities had never attended compared to 5.9 percent without disability.

In terms of highest level of schooling completed for those aged 3 years and over, disparities are evident between persons with disabilities and those without in the different highest levels of school attended. More males than females had attended a special school, at 2.9 percent compared with 0.7 percent of females. Preschool is the highest level completed for 0.5 percent of persons with disability compared to 1.8 for those without; 13.3 percent have completed primary (compared to 19.0 percent without), 66.5 percent secondary (59.3 percent without); 5.8 percent vocational (9.0 percent without) and 3.8 percent tertiary (5.1 percent without). It is interesting to note that a higher proportion of persons with disability have completed secondary school level than persons without disability; however, completion rates for post-secondary education and training are much lower for persons with disability than those without.

The majority (78.6 percent) of those who never attended school stated their 'illness or disability' was the reason for never attending. Out of the 61.2 percent of people with disabilities who dropped out of school, 24.4 percent were underachievers or not interested in school; 23.7 percent to help at home in household duties or farms and 16.8 percent could not obtain tuition fees, and these main reasons were the same for persons without disability.

## **Economic activity**

The data does not reveal significant disparities between the two types of households (case and control) in the proportion of the adult population (aged 15 years and over) engaged in paid and unpaid work; however more people from households with disabilities are not in the labour force because of old age, in ability to perform activities and because of physical or mental disability. A slightly higher proportion of persons with disability work in occupations related to agriculture, livestock and fisheries; and plant and machine operators than persons without disability; and there are higher proportions of persons without disability working in clerical and retail occupations than persons with disability; however these occupations comprise a range of jobs that persons with disability could perform, with or without assistance and devices.

## **Awareness, needs and use of services**

Awareness of available services is very similar for persons aged 15 years and over with and without disabilities with a few notable exceptions. Significant differences are evident in access to vocational training with 39.7 percent of those with disabilities aware of it, compared to 47.2 percent of those without disabilities. Persons with disability were less likely to be aware of counselling services (40.7 percent) compared to persons without

disability (44.9 percent) indicating that awareness and outreach programmes need to be better targeted towards persons with disability. However, persons with disability were much more aware of services relating to welfare, assistive devices and medical rehabilitation, not surprising given their situation. No disparities were apparent between males and females about awareness of these services. Questions were also asked to people aged 15 years and over about services that they need and the type of services they had received. Results show that those with disabilities recorded higher occurrences in the medical rehabilitation services, assistive products services, welfare services, traditional healing and legal services, but that more of these services were needed.

## Participation and accessibility

Stark disparities exist between people aged 15 years and over with and without disability in participation in the same activities. Persons with disabilities have a lot of difficulties participating in community activities (75.4 percent compared to 17.2 percent); employment (75.0 percent compared to 5.9 percent); education (41.4 percent compared to 2.5 percent); household decision making (32.4 percent compared to 11.8 percent) and other activities (69.3 percent compared to 2.4 percent) as well as all forms of transport (land, sea, air and private). A higher proportion of persons without disabilities faced difficulty participating in Government decision making than those with disabilities (94.2 percent to 68.4 percent), showing some progress in initiatives to foster inclusive decision making but more effort needed. Similar trends could be seen as well between males and females where both sexes with disabilities have more difficulties participating than those without disabilities, except in Government decision making. Likewise, persons with disabilities also have a lot of difficulties accessing all the selected activities and services compared to those without disabilities, notably employment, transport, community activities, education, health, and other activities, with females with disability having slightly more difficulties accessing transport than males.

## Conclusion and recommendations

This report contains in-depth statistical information and analysis on the prevalence of disability in Tonga and the related background and characteristics of persons with and without disability, in terms of their access and participation in various activities and services that are available and recommends that:

- Adequate investment (financial, human and technical) and other resources to support
  1. the enforcement of laws protecting the rights of persons with disabilities;
  2. the implementation of national disability policies and plans and
  3. the delivery of essential services to persons with disabilities
- Support the formulation and implementation of laws and policies to advance disability-inclusive development through capacity development for policymakers and other key stakeholders at the national level
- Expand and develop the arm of the Disability Department in the Ministry of Internal Affairs through it budget allocation to fully coordinate and implement relevant disability programmes and plans for the improvement of the lives of the population with disabilities.
- Further research and studies to identify the root causes of disparity shown in the data, especially when disaggregation by gender, regions, urban/rural, wealth status and other demographic characteristics that is available in the survey data.



# INTRODUCTION

## Purpose and Objective of the Survey

The main purpose of the survey was to collect information in determining the prevalence of disability in Tonga as well as describing their related socio-economic characteristics. Data collected would apparently help the government planners and decision makers in formulating suitable national development plans and policies relevant to persons with disabilities.

The other objectives of the Disability survey were to collect data that would determine but not limited to the following:

- a) Disability prevalence rate at the national, urban and rural based on the Washington Group recommendations
- b) Degree of activity limitations and participation restrictions and societal activities for persons with disability
- c) Ascertain the specific vulnerabilities that children and adults with disabilities face in Tonga
- d) Establish the accessibility of health and social services for persons with disabilities in Tonga
- e) Generate data that guides the development of policies and strategies that ensure equity and opportunities for children and adults with disabilities.

## Disability-inclusive Development in Tonga

The Tongan Government does not have a clear and official definition of disability but they had included some related disability legislation indirectly in their Mental Health Act of 1992. This was also the case in their previous National Development Plan, prior to 2015, where there were no plan specifically or directly aimed to provide support for the vulnerable population, including persons with disabilities.

History shows in March 2002, with the support of the Planning and Evaluation Department of the Japan International Cooperation Agency (JICA), Tonga published a report called the ‘Country Profile on Disability Report’, which provides some basic disability indicators together with some information on the limitations and issues related to definitions and legislation.

The Tongan Government signed the United Nations “Convention on the Rights of Persons with a Disability” (CRPD) in November 2007 but have not yet ratify the convention. In June 2015, Her Majesty the Queen of Tonga, Nanasipau’u Tuku’aho, officially launched the new Division of Social Protection and Disability within the Ministry of Internal Affairs, which confirms the Tongan Government’s commitment and appreciation to support the vulnerable population in the country following the adoption of the Tonga National Policy on Disability Inclusive Development 2014-2018. The policy adopts the CRPD definition of disability as an evolving concept recognising the role of societal barriers. As a result, awareness of the rights of people with disabilities in Tonga is increasing.

The Tonga Strategic Development Framework 2015-2025 (TSDF 2015-25), provides a wider range of strategic concepts and outcomes, through provisions of social protection, institutional care and support services for the vulnerable population, with reference to persons with disabilities.

Other sectoral policies in place include the ‘Inclusive Education Policy’, which ensures that children with disabilities receives appropriate education while the Tonga National Health Strategic Plan 2016-2020 aims to increase access to health and rehabilitation services for people with disabilities.

## Concepts and Definitions

According to The Convention of the Rights of Persons with Disability (CRPD) persons with disability include those who have long-term physical, mental, intellectual or sensory impairments, which in interaction with various factors, may hinder their full and effective participation in society on an equal basis with others.

Based on this CRPD concept and definition, the Washington Group on Disability Statistics (WG) states that “Disability involves the interaction of a person’s functional status with their physical, cultural and policy environments. If the environment in which one lives is designed for the full range of human functioning and incorporates appropriate accommodations and support mechanism, then people with functional limitations would not be ‘disabled’ in the sense that they would be able to fully participate in society” (WG, 2010).

The International Classification of Functioning, Disability and Health (ICF) developed by the World Health Organization (WHO) and endorsed in 2001, provided the conceptual framework for the design of the WG questions for inclusion in household surveys, with a focus more on identifying limitations in functioning.

The ICF classifies disability according to three inter-related domains, referencing challenges faced across all three areas:

- a) **Impairments** are loss or abnormality of a body part (i.e. structure) or body function (i.e. physiological function including mental functions)
- b) **Activity limitations** are difficulties an individual may have in executing activities
- c) **Participation restrictions** are problems an individual may experience in life situations. Disability denotes the negative aspects of the interaction between and individual’s health condition and that individual’s environmental or personal factors (WHO 2007).

Recognizing the complexity of measuring disability, in 2001 the United Nations Statistical Commission established the Washington Group on Disability Statistics – commonly known as the Washington Group – to develop statistical tools and measures for disability. With participation from National Statistics offices from 123 countries and other key stakeholders, the Washington Group developed questions suitable for use in censuses, population surveys as well as specialized surveys.

The questions use the ICF as the conceptual framework and as such do not focus on the impairment but rather focus on identifying limitations in functioning. The so-called ‘*short set of questions*’ includes six core functional domains – seeing, hearing, walking, cognition, self-care and communication. The WG also developed an extended set of survey questions on functioning to be used as components of population surveys or as supplements to specialized surveys. The extended set covers 11 domains, the six in the short set plus upper body, anxiety, affect (anxiety), pain and fatigue. These questions identify persons who are at a greater risk of experiencing restrictions in performing usual activities such as those undertaken in daily living or participating in roles if no accommodations are made (Washington Group, 2006). The WG questions were rigorously tested prior to endorsement<sup>1</sup>. UNICEF, in conjunction with the WG, also developed tools appropriate for identifying children

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<sup>1</sup>see Miller et. al., 2011 for further information

(0-17 years) who have greater risk of experiencing restrictions in performing the usual activities required for daily living. The resulting child functioning module has two components: a module for children 2-4 years of age (8 core domains), and a module for children 5-17 years (12 core domains). The domains include seeing, hearing, walking, communicating, learning, remembering (5-17), self-care (5-17), fine motor (2-4), behaviour, emotions (5-17), coping with change (5-17), focusing attention (5-17), playing (2-4) and relationships (5-17).

The Tonga National Disability Survey (TNDS) questionnaire included the WG Extended Set Questions on functioning difficulties (18+ years) and the child functioning module (2-17 years). The purpose was to identify persons who were at a greater risk of experiencing restrictions in performing usual activities such as those undertaken in daily living or participating in roles, if no accommodations were made from age 2 years and over.

## Organization of this Report

The report is divided into 10 Sections. This introductory chapter provides background information about the objectives of the TNDS and related concepts and definitions of disability or functioning difficulties; and the methodology chapter describes practices and procedures used throughout the different phases of the survey, including sample design, weight calculations, questionnaire design, training, field operations and data processing.

Section 1 highlights the prevalence of disability for each of the targeted age groups. Section 2 provides information on the profiles of persons with disabilities. Sections 3-9 provide more details about the characteristics of persons with disabilities compared to those without disabilities in terms of housing, education, economic activity, source of income, health, transport, participation, and accessibility. Finally, Section 10 draws key conclusions, summarizes policy implications and recommends possible actions and interventions for policy formulation, planning and development support by Government and related partners and agencies.

# METHODOLOGY

## Introduction

This section provides information on the methodology and procedures carried out during the various phases of the survey, from planning and preparatory work; field enumeration and operations; data processing and data analysis. The section also contains relevant information on any limitations experienced and deviations from the standard statistical procedures and best practice that were not followed.

## Sample Design

The sampling strategy applied was designed to be consistent with the objectives of the survey, which is to estimate the prevalence of disability in Tonga and assess the situation of households with persons with disabilities (Case) in comparison to households without disabilities (Control), across the six geographical zones of Tonga. The design was based on a 2-stage stratified random sample.

The sampling frame used in this survey was the 2016 National Population Census for the full listing of households and also the data from the WG short set of question on disability. In addition to the first stratification, the geographical breakdown of Tonga (by six island groups) was taken into consideration to ensure full geographic coverage.

The first step was to identifying the households with disability from the sampling frame. Households with persons with disability were households with at least one member with disability according to the six functioning domains (seeing, hearing, walking, remembering, self-care, communication). Hence, the stratification carried out for this survey was based on the disability status of the household:

- (a) Strata 1: households with at least one person with a disability; and
- (b) Strata 2: households without anyone with a disability.

The overall objective was to equally divide the sample across both strata (1 & 2), with a total sample of approximately 5,500 households. A replacement procedure was implemented in case of non-response.

In Strata 1, the sample distribution of approximately 2,750 households was allocated using the square roots distribution of households across the six island groups. The next step was determining the number of blocks (Enumeration Areas) to be selected as the Primary Sampling Unit. This was done by using the average number of households with disability in each block by island group, and then within each selected block, all households with disability will be selected for interview.

The strategy for strata 2 (non-disable households) was to use the same blocks that have been selected for households in strata 1 and interview within these blocks the same number of households as strata 1. More information on the sample design is attached in the appendix.

## Weighting

Sampling weights were calculated at Person and Household level. The Household Weights were generated according to the probability of selection of each household (inverse of the factor of probability of selection of the blocks and probability of selection of the households within that block). The weighting computation process made a distinction between households in strata 1 and households in strata 2. The household weights were adjusted to match the total number of households at the island group level.

Due to a lower average household size within all island groups when comparing the census and the survey data, it was not possible to use the household weights at individual level. A specific set of person weights were computed and this was a result of an adjustment of the household weights by the age structure of the population in both strata. This set of person weights matches the total household population from the 2016 census.

## Estimate of Sampling Errors

Computation of Sampling Errors were done in Stata and were computed with the adjusted finite population corrector such as:

- i) Fpc1: total number of EA within the strata
- ii) Fpc2: total population within the EA

Sampling errors were computed for the main tables only. Sampling error table are attached in the appendix of the report.

## Questionnaire Development

The TNDS used the CAPI (Computer Assisted Personal Interviewer) technology for data collection. The questionnaire was initially developed manually using excel and word software for the purpose of consultation with relevant stakeholders on the questions to be included. It was then designed using the World Bank Survey Solutions Designer software for CAPI use. The questionnaire had two parts:

- a) **Household schedule/roster** – individual person roster which captures their related socio-economic information and background.
- b) **Household characteristics** – capturing information about household structure, characteristics, assets and income.

The Person Section contains questions on child functioning among young children (aged 2-4 years), older children (aged 5-17 years) and adults aged 18 years and above, including the following sections:

- a) Young Child functioning for children aged 2-4 years old
- b) Older child functioning for children aged 5-17 years old
- c) Adult functioning for persons aged 18 years and older
- d) Tools and service (2 years and above)
- e) Needs and availability (2 years and above)

- f) Transport (2 years and above)
- g) Health care and support (5 years and above)
- h) Education (5 years and above)
- i) Employment and income (15 years and above)
- j) Participation and accessibility (15 years and above)
- k) Other social issues (18 years and above)

The development of the questionnaire went through several consultations and review from key partners and stakeholders, which include the Tonga Statistics Department, Ministry of Internal Affairs and relevant Ministries and Department in Tonga, civil society organisations, organisation for persons with disabilities (DPOs), UNICEF, WG, PDF, UNESCAP and SPC.

An additional module was included, upon the request from the Public Service Ministry, to collect information on people's perception/experiences of Government service delivery to the public. This module is reported on separately.

The questionnaire was translated to the Tongan language. The first draft of the questionnaire was tested during the Pilot training to gauge its' effectiveness and efficiency.

## Training

The Statistics for Development Division of The Pacific Community provided the technical assistance on training the enumerators and staff of the Tonga Statistics Department and the Ministry of Internal Affairs on the data collection processes and procedures. As the norm when conducting a survey or census, two sets of trainings were conducted beginning with the Pilot testing and followed by the main training.

The pilot training was conducted for two weeks, from the 27th of August to the 7th of September 2018, with more than 20 participants. The purpose of the Pilot training was to test all the tools and instruments to be used in the survey, which include testing the questionnaires (questions, answer categories, translation, skips and validations), the training materials and equipment, the tablets and it's relates systems, field work logistics and operations.

Performance and evaluation from the pilot training also served as a selection criteria for those to be appointed as Supervisors and Team leaders. The training consisted of classrooms discussions of the survey objectives and arrangement, PowerPoint presentations, quiz, mock interviews and fieldwork practices and tests. Lessons learnt from the training provides more revisions, updates and fine-tuning of processes and the questionnaire.

The final training for the Enumerators, Supervisor and Headquarters was from the 24th of September to the 5th of October 2018 and followed the same structure and arrangement of the pilot training. About seventy fieldworkers were trained, including those fieldworkers that were initially part of the Pilot training. Fieldwork enumeration commenced immediately after the training.

A significant aspect of the training was the inclusion of persons with disabilities who attended the training and some were later appointed as interviewers in the survey.

## Fieldwork

Data collection for the survey commenced from the 7th of October to the 7th of December 2018.

There were eleven teams and twelve field supervisors where each supervisor was assigned to a team of around three to four enumerators to manage and supervise during the fieldwork. Six teams of four interviewers each and a Supervisor were assigned for Tongatapu. The other six supervisors were assigned to manage each of the other four statistical regions - Vava'u with two Supervisors and six enumerators; Ha'apai with one Supervisor and four enumerators; Eua with one Supervisor and four enumerators; and Ongo Niua had two supervisors who were assigned to Tongatapu as well, along with two enumerators each.

## Data Processing

Data processing work began during the questionnaire design stage where validation checks were incorporated into the questionnaire to verify the information recorded by the interviewers when they were conducting the interview. This ensures that data captured from the field are of good quality and reliable.

The Survey Solution also provided extra functional systems, which ensures the efficient monitoring of fieldwork between the Interviewers, Supervisors and Headquarters. The software has various data quality functionalities where Interviewers synchronized their completed questionnaires to their respective Supervisors who then checks the questionnaires thoroughly and approves or rejects the questionnaires if there are errors or inconsistencies in the data. Similarly, Headquarters had the final checks on the completed questionnaire in approving or rejecting the completed questionnaire.

Data quality is warranted as verifications were done while the interviewers were still in the field, which enables them to revisit the households to rectify the errors if need be. Other functionalities in the software like the generation of progress reports by teams and individual interviewers, mapping of GPS points and capturing of photos of the house, fully complements the quality of the data collected and ensures high degree of reliability of the data.

Upon the completion of the survey, the raw data was downloaded to Stata for final editing process.

Due to the complexity of the data based on the different targeted age groups, a RECODE process had to be done based on the recommendations of the Washington Group (WG) Short and Extended Sets of functional difficulties. Different recodes were done for the Age group 2-4, 5-17 and 18+ followed by the generation of tables for final reporting.

# Chapter 1

## PREVALENCE OF DISABILITY

### 1.1 Prevalence of disability for CHILDREN AGED 2-4

The disability domains assessed for children aged 2-4 include seeing, hearing, walking, fine motor, communication, learning, playing and controlling behaviour. The prevalence of disability was measured for those who have ‘*a lot of difficulties*’ or ‘*cannot do at all*’ in at least one of the domains, except for controlling behaviour which include those that indicated ‘*a lot more*’. The applied cut of point is the recommended by the Washington Group of Disability for measuring disability prevalence.

Table 1.1: *Percentage of children aged 2-4 by selected functional difficulty domains, Tonga, 2018*

Categories	Percentage of children aged 2-4 years who have functional difficulty for the indicated domains <sup>1</sup>								Percentage of children <sup>2</sup>	Number <sup>3</sup> of children
	Seeing	Hearing	Walking	Fine Motor	Communication	Learning	Playing	Controlling Behaviour		
<b>TONGA</b>	0.2	0.8	0.5	0.2	0.5	0.3	0.6	0.7	2.2	7,735
<b>SEX</b>										
Male	0.1	0.6	0.7	0.2	0.8	0.4	1.1	1.2	2.7	3,734
Female	0.3	1.1	0.4	0.1	0.3	0.2	0.1	0.2	1.7	4,001
<b>Region</b>										
Tongatapu Urban	0.1	0.4	0.3	0.1	0.7	0.4	0.9	1.2	2.2	1,782
Tongatapu Rural	0.3	1.1	0.7	0.2	0.5	0.2	0.6	0.5	2.5	4,093
Vava'u	0.4	0.9	0.3	0.2	0.3	0.4	0.4	0.5	1.9	1,036
Ha'apai	0	0.7	0	0	1.2	0.9	0.3	1.2	1.5	406
Eua	0	1	0	0	0.3	0	0	0	1	318
Ongo Niua	0	0	1.2	0	0	0	0	0	1.2	101
<b>Area</b>										
Urban	0.1	0.4	0.3	0.1	0.7	0.4	0.9	1.2	2.2	1,782
Rural	0.3	1	0.6	0.2	0.5	0.3	0.5	0.5	2.2	5,953
<b>Age</b>										
2 years	0	0.5	0.4	0.2	0.4	0.3	0.1	0.1	1.2	2,332
3 years	0.3	0.4	0.6	0.1	0.7	0.4	0.6	0.8	2.3	2,579
4 years	0.3	1.5	0.5	0.2	0.4	0.3	1	1	3	2,823
<b>Attendance to early childhood education</b>										
Attending	0.3	0	0.6	0.2	0	0	1.3	1.5	2.4	1,074
Not attending	0.2	1	0.5	0.2	0.6	0.4	0.5	0.6	2.2	6,661
<b>Wealth index quintile</b>										
Lowest quintile	0.1	0.9	0.7	0.2	0.6	0.3	1.4	0.6	2.9	1,254
Second quintile	0.1	0.4	0.7	0.5	0.4	0.1	0.8	1	2	1,410
Middle quintile	0	1.6	0.2	0	0.6	0.3	0	0.4	2.3	1,913
High quintile	0.9	0.5	0.8	0.2	0.4	0.6	1.1	1.3	2.6	1,595
Highest quintile	0	0.6	0.1	0	0.7	0.3	0	0.2	1.3	1,564

<sup>1</sup>Totals may not add up due to rounding off from the weights

<sup>2</sup>Percentage of children with functional difficulty in at least one domain

<sup>3</sup>Number of children aged 2-4 years



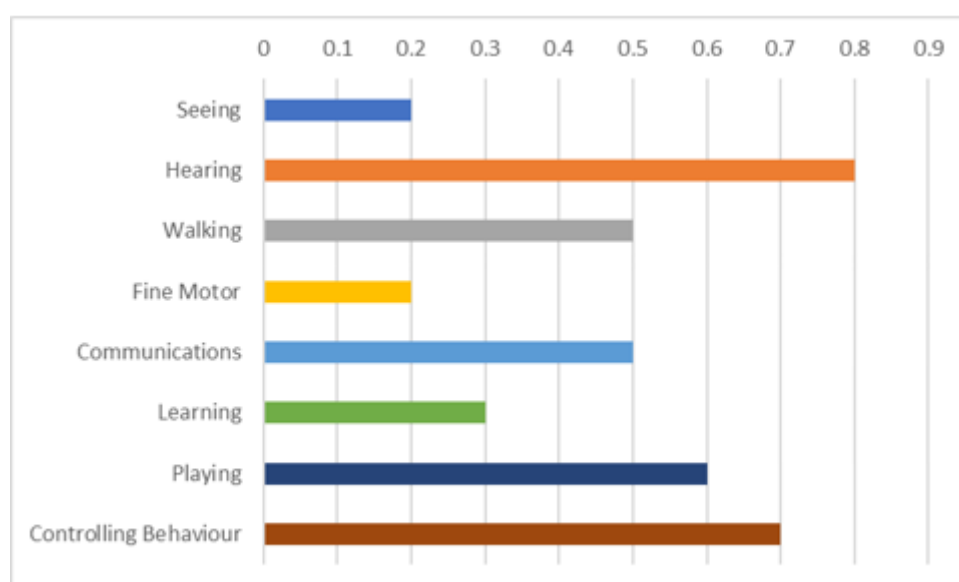


Figure 1.1: *Percentage of children aged 2-4 years with functional difficulty in each domain, Tonga, 2018*

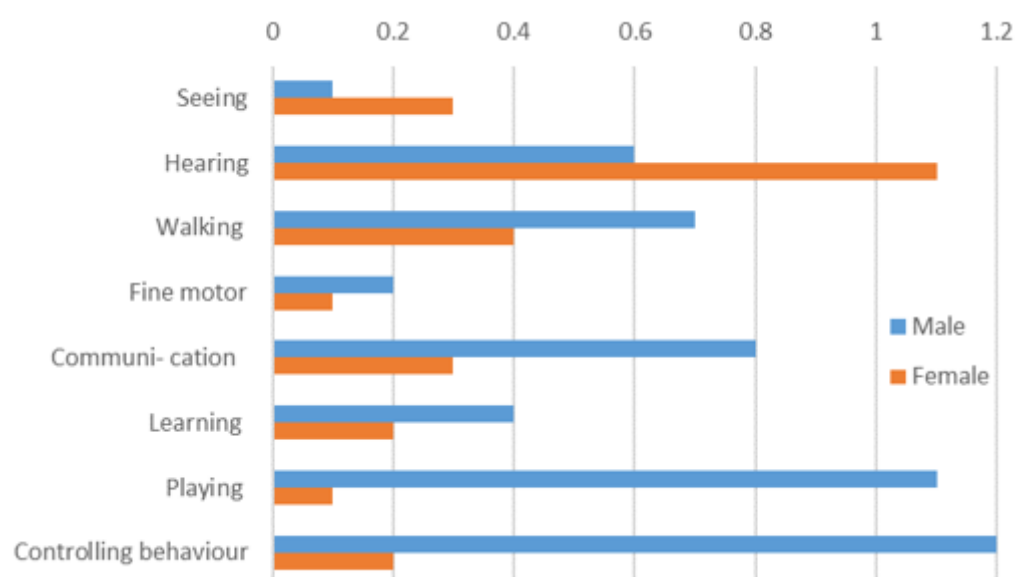


Figure 1.2: *Percentage of children aged 2-4 years with functional difficulty in each domain by Sex, Tonga, 2018*

Table 1.1 on the preceding page shows the disability prevalence by background characteristics. The prevalence of disability among children aged 2-4 years is 2.2 percent. For each of the domains, hearing and controlling behaviour were the most prevalent difficulties at 0.8 and 0.7 percent respectively (Figure 1.1).

By sex disaggregation, males have higher functional difficulties prevalence in at least one of the domains, at 2.7 percent compared to females with 1.8 percent. Looking at each domain, males have higher prevalence in controlling behaviour (1.2 percent), and playing and hearing (both 1.1 percent) whilst females have higher prevalence in seeing and hearing (Figure 1.2).

## 1.2 Prevalence of disability at various cut off points for children aged 2-4

Various cut off for disability are possible when applying the Washington Group tools and this usually depends on overall purpose. These are “*Some difficulty*” for those who stated that they have “*some difficulty*” or “*a lot of difficulty*” or “*cannot do at all*” in at least one of the domains or “*the same or less*”, “*more*” or “*a lot more*” in the behaviour domain. “*A lot of difficulty*” include those that stated that they have “*a lot of difficulty*” or “*cannot do at all*” in any of the domains OR “*more*” or “*a lot more*” in the behaviour domain. “*Cannot do at all*” are those that stated that they “*cannot do at all*” in any domains OR “*a lot more*” in the “*behaviour*” question. If the cut-off for disability is set at the level of functioning difficulties set at “*Some difficulty*” was 61.3 percent, whereas those set at “*A lot of difficulty*” was 2.2 percent and those set at “*Cannot do all*” is 0.3 percent, at the national level (Table 1.2).

Table 1.2: *Percentage of children aged 2-4 with functional difficulties at different cut-off points, Tonga, 2018*

Categories	Percentage of children with <i>some difficulty</i> <sup>4</sup>			Percentage of children with <i>a lot of difficulty</i> <sup>5</sup>			Percentage of children who <i>cannot do at all</i> <sup>6</sup>			Number of children aged 2-4 years		
	M	F	T <sup>7</sup>	M	F	T	M	F	T	M	F	T
<b>TONGA</b>	63.3	59.5	61.3	2.7	1.7	2.2	0.5	0.2	0.3	3,734	4,001	7,735
<b>Region</b>												
Tongatapu Urban	27.4	23.1	25.3	25.0	21.4	22.9	20.0	42.9	22.2	926	855	1,782
Tongatapu Rural	45.5	54.4	49.9	56.0	64.3	59.4	40.0	42.9	44.4	1,852	2,241	4,093
Vava'u	19.6	15.7	17.6	11.0	12.9	11.8	30.0	0.0	22.2	548	489	1,036
Ha'apai	4.5	3.4	4.0	6.0	0.0	3.5	0.0	0.0	0.0	203	203	406
'Eua	0.7	1.8	1.3	2.0	1.4	1.8	10.0	14.3	11.1	146	172	318
Ongo Niua	2.5	1.5	2.0	0.0	1.4	0.6	0.0	0.0	0.0	60	41	101
<b>Area</b>												
Urban	27.4	23.1	25.3	25.0	21.4	22.9	20.0	42.9	22.2	926	855	1,782
Rural	72.6	76.9	74.7	76.0	78.6	77.1	80.0	57.1	74.1	2,808	3,146	5,953
<b>Age</b>												
2 years	33.9	29.8	31.9	10.0	24.3	16.5	5.0	57.1	22.2	1,187	1,146	2,332
3 years	33.1	34.0	33.6	44.0	20.0	34.1	80.0	0.0	59.3	1,224	1,355	2,579
4 years	33.0	36.1	34.6	46.0	54.3	50.0	10.0	42.9	18.5	1,323	1,501	2,823
<b>Attendance to early childhood education</b>												
Attending	13.3	13.2	13.2	24.0	2.9	15.3	25.0	0.0	18.5	519	555	1,073
Not attending	86.7	86.8	86.8	77.0	97.1	85.3	75.0	100.0	81.5	3,215	3,446	6,661
<b>Wealth index quintile</b>												
Lowest quintile	15.6	15.6	15.6	29.0	10.0	21.2	10.0	0.0	7.4	572	682	1,254
Second quintile	16.8	18.7	17.8	20.0	12.9	16.5	25.0	0.0	18.5	647	763	1,410
Middle quintile	23.1	23.9	23.5	17.0	38.6	25.9	25.0	14.3	22.2	942	971	1,913
High quintile	24.1	18.4	21.2	20.0	30.0	24.1	20.0	85.7	37.0	852	743	1,595
Highest quintile	20.4	23.3	21.9	14.0	8.6	11.8	15.0	0.0	11.1	722	841	1,564

Throughout this report, for comparison purposes, the prevalence of disability in ‘*A lot of difficulties*’ is being used as the benchmark for analysis as recommended by the Washington Group. It could be seen from the table that males have higher prevalence of disability in all the cut-off points. The prevalence of disability for persons aged 2-4 is 2.2 percent, with males at 2.7 percent and females at 1.7 percent.

Tongatapu rural and urban recorded the highest prevalence of disability across the regions followed by Vava'u at 11.8 percent. Children aged 4-year-old had higher prevalence at 50.0 percent, while those aged 3 years and 2 years old recorded lower prevalence at 34.1 and 16.5 percent respectively. Only 15.3 percent are attending school with 24.0 percent males and 2.0 percent females.

Higher disability prevalence rates are found in the rural areas, whereas by region, Tongatapu rural has the highest, followed by Tongatapu urban and Vava'u. Looking at age in single years, those who are 4 years old recorded higher prevalence than other ages, whilst those who have never attended school also recorded high prevalence.

<sup>4</sup>Percentage of children aged 2-4 years with at least one domain is scored some difficulty

<sup>5</sup>Percentage of children aged 2-4 years with at least one domain is scored a lot of difficulty

<sup>6</sup>Percentage of children aged 2-4 years with at least one domain is scored cannot do at all

<sup>7</sup>Totals may not add up due to rounding off from the weights

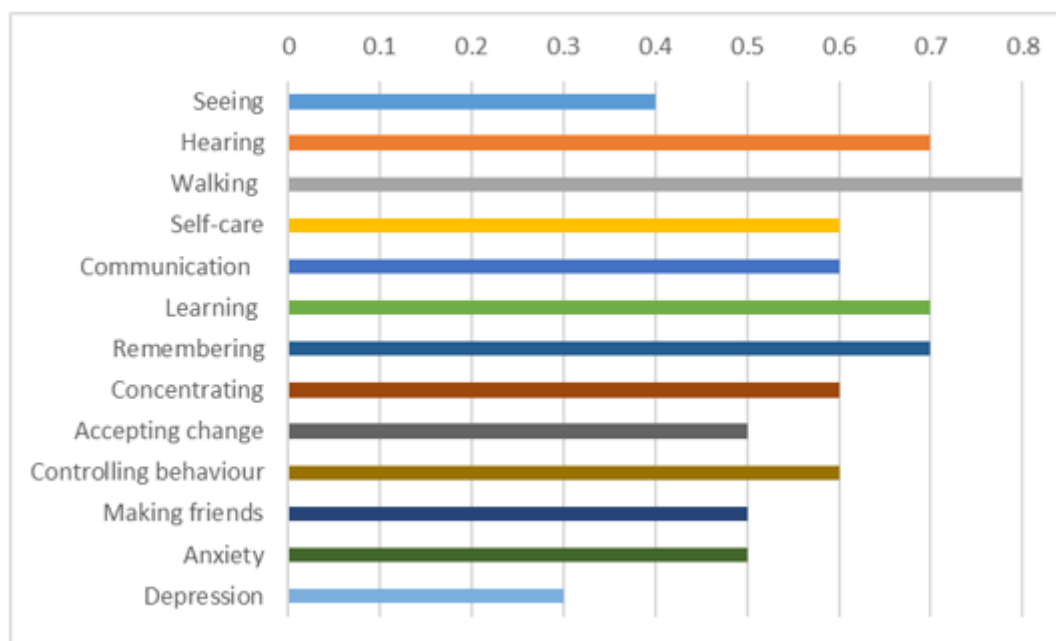


Figure 1.3: Percentage of children aged 5-17 years with functional difficulty in each domain, Tonga, 2018

### 1.3 Prevalence of functional difficulties for Children aged 5-17

For the purpose of this survey, the measure of the prevalence of functioning difficulties for children aged 5-17 was defined for those who have "a lot of difficulty" or "cannot do at all" in at least one of the domains or they have "daily" occurrences on anxiety and depression.

Figure 1.3 presents disability prevalence by domain for children 5-17 years. Results show that walking (0.8 percent), hearing (0.7 percent), learning (0.7 percent) and remembering (0.7 percent) were the highest prevalent of functional difficulties in this age group.

Comparing the prevalence of functional difficulties between sexes, males (0.6 percent) have higher prevalence than females (0.2 percent) in the seeing domain. Similar prevalence could be seen as well in 'making friends', otherwise the other domains do not have much differences in their prevalence (Figure 1.4 on the following page).

### 1.4 Prevalence of disability at various cut off points for children aged 5-17

Table 1.3 on page 17 shows the prevalence of functional difficulties at various cut-off. The cut-off at some difficulty include those that had "some difficulty", "a lot of difficulty" or "cannot do at all" in at least one of the domains or "daily", "weekly" or "monthly" (codes 1, 2 or 3) in the anxious or depression domain.

"A lot of difficulty" cut-off point includes those that reported "a lot of difficulty" or "cannot do at all" in at least one of the domains or "daily" or "weekly" occurrences in anxious or depression.

"Cannot do at all" cut-off point includes those that reported "cannot do at all" in at least one of the domains and "daily" occurrences in anxious or depression.

The prevalence of disability is 29.7 percent for children aged 5-17 using cut of some difficulty, 2.0 percent when cut off at "a lot of difficulty" and 0.6 percent when cut off at "cannot do all". The prevalence of disability in these cut-off points also shows that males have higher prevalence than females.

Looking at the islands, Tongatapu rural and urban have the highest prevalence of disability for those with a lot of difficulty whilst Tongatapu rural and Vava'u have high prevalence for those who cannot do at all.

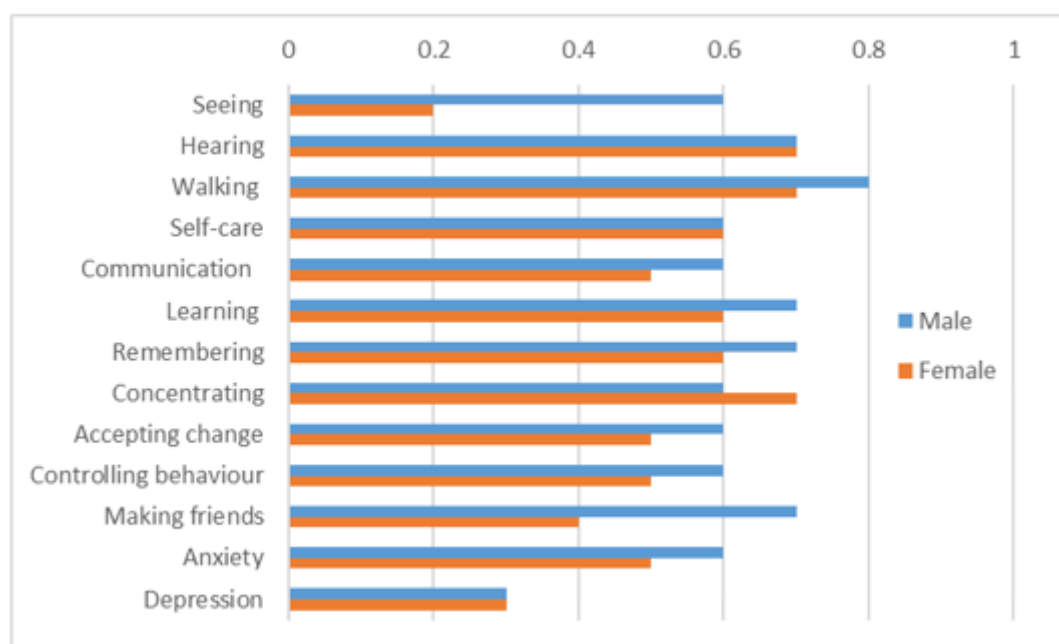


Figure 1.4: *Percentage of children aged 5-17 years with functional difficulty in each domain by sex, Tonga, 2018*

It is interesting to note that those in age group 5-9 have the highest prevalence of disability, compared to the other age groups, which is totally opposite the norm that the prevalence of disability increases with age. The same trend happens in all the three cut-off points, followed by those in the 10-14 age groups.

The prevalence of disability is high in all cut-off points for those who have attained primary school level, followed by those who have attained lower secondary level in the cut-off point some and a lot of difficulties.

Table 1.3: *Percentage of children aged with functional difficulties at different cut-off point, Tonga, 2018*

	Percentage of children with some difficulty <sup>8</sup>			Percentage of children with a lot of difficulty <sup>9</sup>			Percentage of children who cannot do at all <sup>10</sup>			Number of children aged 5-17 years		
Categories	M	F	T <sup>11</sup>	M	F	T	M	F	T	M	F	T
<b>Total</b>	<b>30.1</b>	<b>29.3</b>	<b>29.7</b>	<b>2.1</b>	<b>1.9</b>	<b>2.0</b>	<b>0.7</b>	<b>0.6</b>	<b>0.6</b>	<b>15,875</b>	<b>14,769</b>	<b>30,644</b>
<b>Region</b>												
Tongatapu Urban	29.1	29.4	<b>29.2</b>	18.3	13.5	<b>16.1</b>	16.1	7.1	<b>12.2</b>	3,376	3,097	<b>6,473</b>
Tongatapu Rural	46.5	46.0	<b>46.3</b>	62.8	53.3	<b>58.5</b>	66.1	51.8	<b>59.9</b>	8,446	7,790	<b>16,236</b>
Vava'u	21.0	21.3	<b>21.2</b>	10.7	21.5	<b>15.6</b>	8.9	18.8	<b>13.2</b>	2,244	2,266	<b>4,509</b>
Ha'apai	1.9	1.1	<b>1.5</b>	6.4	4.7	<b>5.8</b>	4.5	2.4	<b>3.6</b>	896	722	<b>1,619</b>
'Eua	0.8	1.3	<b>1.0</b>	1.5	6.2	<b>3.7</b>	4.5	20.0	<b>11.2</b>	741	736	<b>1,477</b>
Ongo Niua	0.8	0.8	<b>0.8</b>	0.0	0.4	<b>0.2</b>	0.0	0.0	<b>0.0</b>	172	158	<b>330</b>
<b>Area</b>												
Urban	29.1	29.4	<b>29.2</b>	18.3	13.5	<b>16.1</b>	16.1	7.1	<b>12.2</b>	3,376	3,097	<b>6,473</b>
Rural	70.9	70.6	<b>70.8</b>	81.7	86.5	<b>83.9</b>	83.9	92.9	<b>87.8</b>	12,499	11,672	<b>24,171</b>
<b>Age</b>												
5-9 years	48.8	44.2	<b>46.6</b>	54.9	43.8	<b>49.8</b>	72.3	42.4	<b>58.9</b>	6,641	5,839	<b>12,481</b>
10-14 years	33.2	37.0	<b>35.0</b>	32.3	34.3	<b>33.2</b>	23.2	42.4	<b>31.5</b>	5,863	5,679	<b>11,542</b>
15-17 years	18.1	18.8	<b>18.4</b>	12.8	21.9	<b>16.9</b>	4.5	16.5	<b>9.1</b>	3,370	3,251	<b>6,621</b>
<b>Attendance to early childhood education</b>												
Attending	90.9	92.3	<b>91.6</b>	72.6	54.0	<b>64.1</b>	52.7	15.3	<b>36.5</b>	14,628	13,997	<b>28,625</b>
Not attending	9.0	7.7	<b>8.4</b>	27.4	46.0	<b>35.9</b>	46.4	85.9	<b>63.5</b>	1,247	772	<b>2,018</b>
<b>Education Level Attained</b>												
Pre-school	2.9	1.9	<b>2.4</b>	3.7	0.0	<b>2.0</b>	0.0	0.0	<b>0.0</b>	250	254	<b>504</b>
Primary	54.6	52.3	<b>53.5</b>	37.2	42.0	<b>39.2</b>	13.4	11.8	<b>12.2</b>	8,123	7,277	<b>15,400</b>
Lower secondary	27.7	29.6	<b>28.6</b>	19.8	15.3	<b>17.8</b>	0.0	1.2	<b>0.5</b>	5,254	4,995	<b>10,249</b>
Upper secondary	7.6	9.9	<b>8.7</b>	0.6	3.3	<b>1.8</b>	0.0	0.0	<b>0.0</b>	1,470	1,738	<b>3,207</b>
Technical and Vocational	1.2	0.2	<b>0.7</b>	0.6	0.0	<b>0.3</b>	0.0	0.0	<b>0.0</b>	220	48	<b>268</b>
University	0.1	0.1	<b>0.1</b>	0.0	0.0	<b>0.0</b>	0.0	0.0	<b>0.0</b>	3	5	<b>8</b>
Special school	1.1	0.3	<b>0.7</b>	15.9	5.1	<b>11.0</b>	42.9	5.9	<b>26.9</b>	52	14	<b>66</b>
Other (specify)	0.1	0.1	<b>0.1</b>	1.8	0.0	<b>1.0</b>	0.0	0.0	<b>0.0</b>	6	3	<b>10</b>
<b>Wealth index quintile</b>												
Lowest quintile	16.3	13.4	<b>14.9</b>	10.1	20.4	<b>14.8</b>	4.5	28.2	<b>15.2</b>	2,366	2,114	<b>4,480</b>
Second quintile	18.6	22.8	<b>20.6</b>	12.8	32.1	<b>21.6</b>	11.6	36.5	<b>22.8</b>	2,983	2,809	<b>5,792</b>
Middle quintile	20.4	19.9	<b>20.2</b>	41.2	17.9	<b>30.7</b>	54.5	16.5	<b>37.6</b>	3,471	3,247	<b>6,718</b>
High quintile	21.4	20.7	<b>21.1</b>	18.9	19.7	<b>19.4</b>	18.8	17.6	<b>18.3</b>	3,590	3,253	<b>6,843</b>
Highest quintile	23.3	23.1	<b>23.2</b>	16.8	9.5	<b>13.6</b>	9.8	1.2	<b>6.1</b>	3,464	3,346	<b>6,810</b>

## 1.5 Prevalence of functional difficulties for Adults aged 18 years and over

The Washington Group extended set of disability questions covers 11 domains including seeing, hearing, walking, communication, cognition, self-care, upper body, anxiety, depression, pain and fatigue. The first six domains of seeing, hearing, walking, communication, cognition, self-care are derived from responses for a lot of difficulty and cannot do at all. The upper body indicator was derived from the responses in the questions on difficulty in raising objects from waist to eye level and the difficulty in using hands and fingers. The indicator about pain was derived based on the responses to questions on the frequency and degree of pain, and the fatigue indicator was generated from the responses on the frequency, degree and duration of tiredness and exhaustion of a person.

Prevalence of functioning difficulty in at least one of the domains is 11.4 percent for the population aged 18 years and over.

For each domain, it could be seen that the highest prevalence recorded was for those who have walking difficulties, at 5.4 percent. This is followed by upper body (2.1 percent), followed by self-care (1.9 percent), seeing (1.8 percent) and hearing (1.8 percent). Other prevalence levels for the other domains are shown in Figure 1.5 on the following page.

<sup>8</sup>Percentage of children aged 5-17 years with at least one domain is scored some difficulty

<sup>9</sup>Percentage of children aged 5-17 years with at least one domain is scored a lot of difficulty

<sup>10</sup>Percentage of children aged 5-17 years with at least one domain is scored cannot do at all

<sup>11</sup>Totals may not add up due to rounding off from the weights

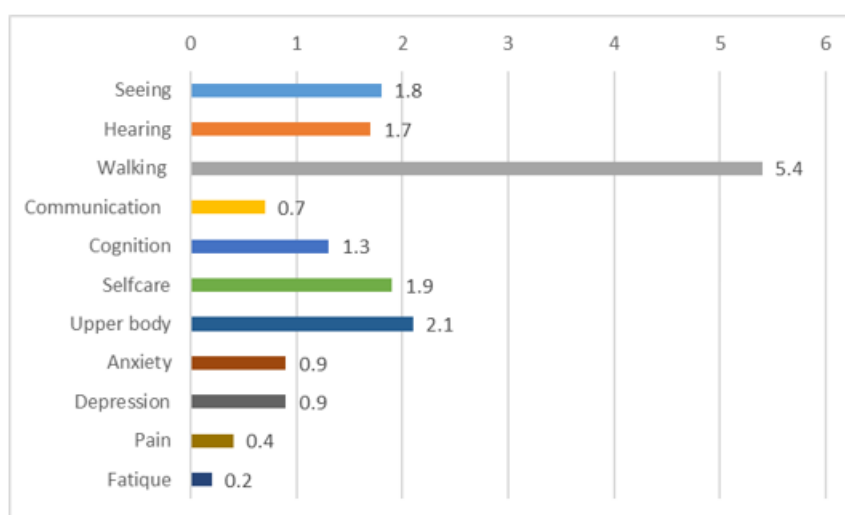


Figure 1.5: Percentage of persons aged 18+ years with functional difficulty in each domain, Tonga, 2018

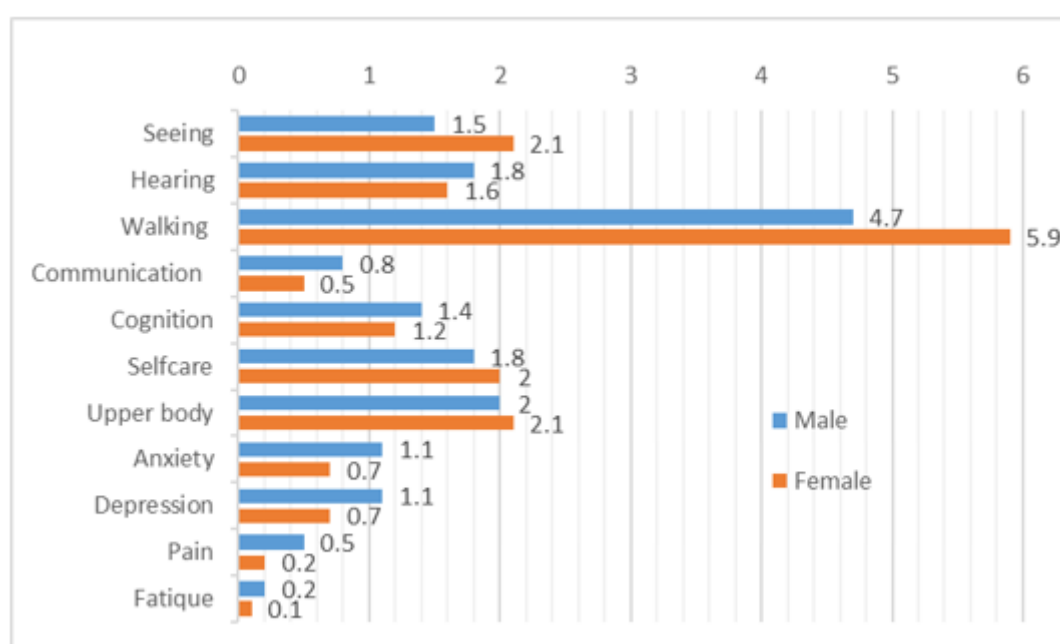


Figure 1.6: Percentage of persons aged 18+ years with functional difficulty in each domain, Tonga, 2018

Analysis of prevalence for each domain by sex disaggregation shows that females have higher prevalence than males in seeing and walking, whilst males have higher prevalence in communication, anxiety and depression. Other domains shows similar prevalence between sexes (Figure 1.6).

## 1.6 Prevalence of disability at various cut off points for persons aged 18 and above

Disability is conceptualised as a continuum from no difficult to cannot do at all. Cut off points for disability can be drawn at various points. The cut-off at some difficulty include those that had "some difficulty", "a lot of difficulty" or "cannot do at all". A lot of difficulty cut-off point includes those that reported a lot of difficulty or cannot do at all. Cannot do at all cut-off point includes those that reported cannot do at all in at least one of the domains.

Based on the various cut-off points, the prevalence of disability for some difficulties was 47.7 percent whereas

11.4 percent for those with *a lot of difficulties* and 3.5 percent for those that *cannot do at all* (Table 1.4).

Females have higher prevalence than males for those with *some difficulties* whilst males have more prevalence in the other two cut-off points. As expected, the three age groups shows that prevalence of disabilities increases with age where those in the age group 50 years and above have higher prevalence than the lower age groups 18-29 and 30-49.

Focussing on the prevalence of disability for those with *a lot of difficulties*, Tongatapu rural and urban have the highest prevalence, followed by Vava'u and Ha'apai, whilst those who have attained lower and upper secondary recorded the highest prevalence.

As expected, those in the 50 years and over recorded higher prevalence of disability as well as those in the lower and upper secondary, due to the targeted age group of 18 and above.

Table 1.4: *Percentage of persons aged 18 years and above with functional difficulties at different cut-off point, Tonga, 2018*

Categories	Percentage of persons with <i>some difficulty</i> <sup>12</sup>			Percentage of persons with <i>a lot of difficulty</i> <sup>13</sup>			Percentage of persons who <i>cannot do at all</i> <sup>14</sup>			Number of persons aged 18 years and older		
	M	F	T <sup>15</sup>	M	F	T	M	F	T	M	F	T
<b>Total</b>	47.2	48.1	<b>47.7</b>	12.2	10.7	<b>11.4</b>	3.9	3.2	<b>3.5</b>	26,477	30,864	<b>57,341</b>
<b>Region</b>												
Tongatapu Urban	25.3	25.8	<b>25.6</b>	20.8	22.7	<b>21.8</b>	16.7	20.9	<b>18.8</b>	6,247	7,261	<b>13,508</b>
Tongatapu Rural	51.8	51.7	<b>51.7</b>	46.3	45.2	<b>45.8</b>	35.4	31.9	<b>33.7</b>	13,275	15,557	<b>28,832</b>
Vava'u	12.7	13.2	<b>13.0</b>	14.2	12.4	<b>13.3</b>	20.9	17.9	<b>19.4</b>	3,454	4,053	<b>7,507</b>
Ha'apai	6.2	5.5	<b>5.8</b>	11.8	11.4	<b>11.6</b>	11.2	10.1	<b>10.7</b>	1,751	2,096	<b>3,846</b>
'Eua	3.0	2.9	<b>3.0</b>	5.9	7.8	<b>6.8</b>	15.2	19.0	<b>17.0</b>	1,407	1,510	<b>2,917</b>
Ongo Niua	1.0	0.9	<b>0.9</b>	0.9	0.7	<b>0.8</b>	0.6	0.2	<b>0.4</b>	344	387	<b>731</b>
<b>Area</b>												
Urban	25.3	25.8	<b>25.6</b>	20.8	22.7	<b>21.8</b>	16.7	20.9	<b>18.8</b>	6,247	7,261	<b>13,508</b>
Rural	74.7	74.2	<b>74.4</b>	79.1	77.3	<b>78.2</b>	83.3	79.2	<b>81.2</b>	20,230	23,602	<b>43,832</b>
<b>Age</b>												
18-29 years	23.3	23.8	<b>23.6</b>	13.7	10.2	<b>11.9</b>	15.6	8.9	<b>12.4</b>	8,572	9,805	<b>18,378</b>
30-49 years	37.2	35.6	<b>36.3</b>	31.2	24.3	<b>27.7</b>	27.2	20.8	<b>24.1</b>	10,091	12,126	<b>22,217</b>
50+ years	39.5	40.6	<b>40.0</b>	55.1	65.6	<b>60.4</b>	57.2	70.3	<b>63.5</b>	7,814	8,932	<b>16,747</b>
<b>Attendance to early childhood education</b>												
Attending	4.3	3.9	<b>4.1</b>	1.5	0.5	<b>1.0</b>	1.1	0.4	<b>0.8</b>	1,701	2,097	<b>3,798</b>
Not attending	95.7	96.1	<b>95.9</b>	98.5	99.5	<b>99.0</b>	98.9	99.6	<b>99.2</b>	24,776	28,766	<b>53,543</b>
<b>Education Level Attained</b>												
Pre-school	0.0	0.0	<b>0.0</b>	0.0	0.0	<b>0.0</b>	0.0	0.0	<b>0.0</b>	0	1	<b>1</b>
Primary	5.0	5.6	<b>5.3</b>	9.8	12.6	<b>11.2</b>	16.2	16.2	<b>16.2</b>	877	1,028	<b>1,904</b>
Lower secondary	37.0	34.1	<b>35.4</b>	39.2	42.4	<b>40.8</b>	40.1	45.2	<b>42.5</b>	8,659	8,827	<b>17,486</b>
Upper secondary	37.1	39.8	<b>38.6</b>	33.2	29.8	<b>31.5</b>	21.5	21.3	<b>21.4</b>	10,785	14,187	<b>24,972</b>
Technical and Vocational	10.9	10.9	<b>10.9</b>	6.3	6.5	<b>6.4</b>	3.9	4.0	<b>4.0</b>	3,822	4,075	<b>7,897</b>
University	8.1	8.4	<b>8.3</b>	4.9	3.7	<b>4.3</b>	3.5	2.8	<b>3.2</b>	2,077	2,550	<b>4,627</b>
Special school	0.4	0.1	<b>0.2</b>	1.6	0.3	<b>1.0</b>	2.7	0.7	<b>1.7</b>	57	11	<b>68</b>
Other (specify)	0.0	0.0	<b>0.0</b>	0.0	0.1	<b>0.0</b>	0.0	0.1	<b>0.0</b>	7	10	<b>17</b>
<b>Wealth index quintile</b>												
Lowest quintile	15.4	16.4	<b>15.9</b>	19.1	19.2	<b>19.2</b>	21.1	20.0	<b>20.5</b>	3,902	4,589	<b>8,491</b>
Second quintile	17.3	16.9	<b>17.1</b>	19.0	19.4	<b>19.2</b>	26.0	21.3	<b>23.8</b>	4,656	5,312	<b>9,968</b>
Middle quintile	22.1	21.5	<b>21.8</b>	19.7	20.3	<b>20.0</b>	15.2	21.0	<b>18.1</b>	5,577	6,230	<b>11,806</b>
High quintile	21.3	20.2	<b>20.7</b>	22.2	21.7	<b>21.9</b>	23.5	22.2	<b>22.9</b>	6,015	6,952	<b>12,968</b>
Highest quintile	23.8	25.0	<b>24.5</b>	20.0	19.3	<b>19.7</b>	14.1	15.5	<b>14.8</b>	6,327	7,781	<b>14,108</b>

## 1.7 Prevalence of functional difficulties for ALL PERSONS AGED 2 YEARS AND ABOVE

This section provides analysis on the total prevalence of functional difficulties based on the different cut-off points at *some difficulties* (include *some*, *a lot* and *cannot do at all*), *a lot of difficulties* (include *a lot* and *cannot do at all*) and *cannot do all*. Analysis shows that 43.0 percent had some difficulties in at least one of the domains

<sup>12</sup>Percentage of persons aged 18 years and older with at least one domain is scored some difficulty

<sup>13</sup>Percentage of person aged 18 years and older with at least one domain is scored a lot of difficulty

<sup>14</sup>Percentage of persons aged 18 years and older with at least one domain is scored cannot do at all

<sup>15</sup>Totals may not add up due to rounding off from the weights

whilst 7.6 percent recorded having a lot of difficulties and 2.3 percent stated that they cannot do at all in at least one of the domains (Table 1.5).

Table 1.5: *Percentage of persons aged 2 years and above with functional difficulties at different cut-off point, Tonga, 2018*

Categories	Percentage of persons with some difficulty <sup>16</sup>			Percentage of persons with a lot of difficulty <sup>17</sup>			Percentage of persons who cannot do at all <sup>18</sup>			Number of persons aged 2 years and older		
	M	F	T <sup>19</sup>	M	F	T	M	F	T	M	F	T
Total	42.6	43.4	43.0	7.9	7.3	7.6	2.6	2.2	2.3	46,086	49,633	95,719
Region												
Tongatapu Urban	26.5	26.2	26.4	20.7	22.0	21.3	16.7	19.9	18.2	10,550	11,213	21,763
Tongatapu Rural	49.8	50.8	50.3	48.1	46.1	47.1	38.4	33.5	36.1	23,573	25,588	49,161
Vava'u	15.5	15.1	15.3	13.8	13.1	13.4	19.9	17.9	18.9	6,245	6,807	13,052
Ha'apai	4.9	4.4	4.6	11.2	10.7	10.9	10.4	9.5	10.0	2,849	3,021	5,871
'Eua	2.2	2.5	2.3	5.4	7.5	6.4	14.1	19.0	16.4	2,294	2,418	4,712
Ongo Niua	1.1	0.9	1.0	0.8	0.7	0.7	0.5	0.2	0.4	576	586	1,161
Area												
Urban	26.5	26.2	26.4	20.7	22.0	21.3	16.7	19.9	18.2	10,550	11,213	21,763
Rural	73.5	73.8	73.6	79.3	78.0	78.7	83.3	80.1	81.8	35,536	38,420	73,957
Age												
2-4 years	12.0	11.0	11.5	2.7	1.9	2.3	1.7	0.7	1.2	3,734	4,001	7,735
5-17 years	24.4	20.0	22.1	9.0	7.5	8.3	9.5	8.0	8.8	15,875	14,769	30,644
18+ years	63.6	68.9	66.4	88.3	90.6	89.4	88.9	91.3	90.0	26,477	30,864	57,341
Attendance to early childhood education												
Attending	26.5	22.7	24.5	8.5	4.6	6.6	6.5	1.6	4.1	16,848	16,649	33,497
Not attending	73.5	77.3	75.5	91.5	95.4	93.4	93.5	98.4	95.9	29,238	32,984	62,222
Education Level Attained												
Pre-school	2.3	1.8	2.0	1.0	0.1	0.5	0.4	0.0	0.2	766	808	1,574
Primary	16.5	14.4	15.4	12.0	14.6	13.3	15.6	15.7	15.6	9,000	8,304	17,305
Lower secondary	30.3	29.4	29.8	36.4	39.5	37.9	35.6	41.3	38.4	13,914	13,821	27,735
Upper secondary	25.5	29.4	27.6	29.4	27.2	28.3	19.1	19.5	19.2	12,255	15,925	28,180
Technical and Vocational	7.2	7.6	7.4	5.6	5.9	5.7	3.5	3.6	3.6	4,042	4,123	8,165
University	5.2	5.8	5.5	4.4	3.3	3.8	3.1	2.5	2.9	2,080	2,555	4,636
Special school	0.5	0.5	0.3	2.9	0.7	1.8	6.5	1.0	3.9	110	24	134
Other (specify)	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.1	0.0	16	20	36
Wealth index quintile												
Lowest quintile	15.6	15.7	15.7	18.6	19.1	18.8	19.4	20.5	19.9	6,840	7,385	14,226
Second quintile	17.6	18.3	17.9	18.5	20.3	19.4	24.7	22.5	23.6	8,286	8,884	17,170
Middle quintile	21.8	21.4	21.6	21.6	20.5	21.0	19.1	20.6	19.8	9,990	10,448	20,437
High quintile	21.7	20.1	20.9	21.8	21.7	21.8	23.1	22.3	22.7	10,457	10,949	21,406
Highest quintile	23.3	24.5	23.9	19.6	18.4	19.0	13.7	14.2	14.0	10,513	11,968	22,481

If the level of inclusion for Tonga is set at a lot of difficulties, then the prevalence of disability in Tonga is 7.6 percent and this would require targeted intervention to ensure their inclusion and participation where national policies and interventions would be aligned for their development and support. As for the conservative cut-off for those who cannot do all, 2.3 percent would be those with high support needs, for example, the provision of assistive products, other support services (like sign language interpreters for the deaf), social protection to pay for additional costs associated with living with their disability.

Prevalence of disability is higher in females for those who have some difficulty but is the opposite for the other two cut-off points where more males have more prevalence.

Looking at the regions, Tongatapu rural have the highest prevalence of disability (a lot) at 47.1 percent, followed by Tongatapu urban at 21.3 percent, Vava'u at 13.4 percent and Ha'apai at 10.9 percent. The same trends happens between the two sexes.

Those in the age group 18 years and older have the highest prevalence of disability, through which most of the interventions would focus on for their support and assistance. In terms of the education level attained, there is

<sup>16</sup>Percentage of persons aged 2 years and older with at least one domain is scored some difficulty

<sup>17</sup>Percentage of person aged 2 years and older with at least one domain is scored a lot of difficulty

<sup>18</sup>Percentage of persons aged 2 years and older with at least one domain is scored cannot do at all

<sup>19</sup>Totals may not add up due to rounding off from the weights



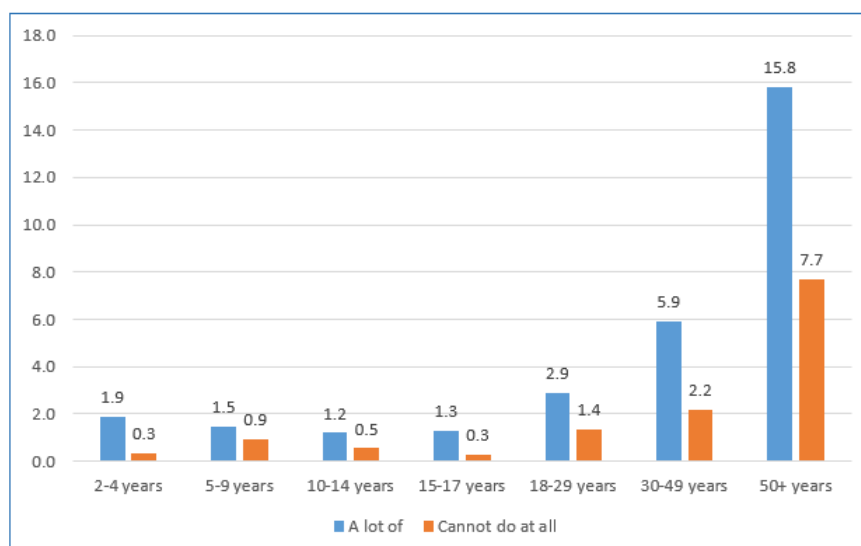


Figure 1.7: *Percentage of persons aged 2 years and above with 'a lot of' and 'cannot do at all' difficulties by age groups, Tonga, 2018*

higher prevalence for those who have attained lower secondary school (Form 1 - Form 3), followed by those in the upper secondary.

Further breakdown of by age shows that the prevalence of difficulty increases with age, where those in the age group 30-39 and 50 years and above have high prevalence of a lot and cannot do at all difficulties (Figure 1.7). About 15.8 percent of those 50+ years have a lot of difficulties while 7.7 percent cannot do at all difficulties.

## 1.8 Number of disabilities among persons with disability

Further analysis was undertaken to show if a person has more than one impairment or recorded difficulty in more than one domain among persons with disabilities. This provide a better assessment of the degree or extent of a person's difficulties as people with more than one form of disability are more vulnerable.

Analysis on Table 1.6 shows that out of the total number of persons aged 2 years and above, 4.0 percent have one form of disability, 1.4 percent have two forms of disability whilst 2.3 percent have three or more forms of disability.

Table 1.6: *Percentage of persons aged 2 years and above by number of disabilities, Tonga, 2018*

Categories	One form of disability			Two forms of disability			Three or more forms of disability			Number of persons aged 2 years and older		
	M	F	T	M	F	T	M	F	T	M	F	T
Total	4.4	3.6	<b>4.0</b>	1.3	1.5	<b>1.4</b>	2.3	2.3	<b>2.3</b>	46,086	49,633	<b>95,719</b>
Region												
Tongatapu Urban	22.9	25.7	<b>24.2</b>	22.7	16.7	<b>19.3</b>	15.5	19.6	<b>17.6</b>	10,550	11,213	<b>21,763</b>
Tongatapu Rural	51.0	45.9	<b>48.6</b>	49.9	49.3	<b>49.5</b>	41.5	44.4	<b>43.0</b>	23,573	25,588	<b>49,161</b>
Vava'u	8.8	10.4	<b>9.6</b>	10.9	11.7	<b>11.4</b>	25.0	18.2	<b>21.5</b>	6,245	6,807	<b>13,052</b>
Ha'apai	13.0	12.3	<b>12.7</b>	13.9	12.7	<b>13.2</b>	6.2	6.6	<b>6.4</b>	2,849	3,021	<b>5,871</b>
'Eua	3.5	4.7	<b>4.1</b>	1.6	9.0	<b>5.8</b>	11.0	10.9	<b>11.0</b>	2,294	2,418	<b>4,712</b>
Ongo Niua	0.7	0.9	<b>0.8</b>	1.0	0.5	<b>0.8</b>	0.8	0.4	<b>0.5</b>	576	586	<b>1,161</b>
Area												
Urban	22.9	25.7	<b>24.2</b>	22.7	16.7	<b>19.3</b>	15.5	19.6	<b>17.6</b>	10,550	11,213	<b>21,763</b>
Rural	77.1	74.3	<b>75.8</b>	77.3	83.2	<b>80.7</b>	84.5	80.4	<b>82.4</b>	35,536	38,420	<b>73,957</b>
Age												
2-4 years	2.3	2.5	<b>2.4</b>	5.4	2.5	<b>3.8</b>	2.2	0.5	<b>1.3</b>	3,734	4,001	<b>7,735</b>
5-17 years	7.2	7.2	<b>7.2</b>	7.6	3.4	<b>5.2</b>	13.3	10.7	<b>12.0</b>	15,875	14,769	<b>30,644</b>
18+ years	90.5	90.2	<b>90.4</b>	87.0	94.0	<b>91.1</b>	84.5	88.7	<b>86.7</b>	26,477	30,864	<b>57,341</b>
Attendance to early childhood education												
Attending	7.7	6.6	<b>7.2</b>	9.5	1.5	<b>5.0</b>	9.6	3.5	<b>6.5</b>	16,848	16,649	<b>33,497</b>
Not attending	92.3	93.4	<b>92.8</b>	90.3	98.5	<b>95.0</b>	90.4	96.4	<b>93.5</b>	29,238	32,984	<b>62,222</b>
Education Level Attained												
Pre-school	0.5	0.2	<b>0.4</b>	4.0	0.0	<b>1.8</b>	0.2	0.0	<b>0.1</b>	766	808	<b>1,574</b>
Primary	8.3	10.8	<b>9.5</b>	10.9	12.2	<b>11.6</b>	19.9	22.2	<b>21.1</b>	9,000	8,304	<b>17,305</b>
Lower secondary	40.1	40.1	<b>40.1</b>	36.4	41.6	<b>39.4</b>	29.1	37.1	<b>33.3</b>	13,914	13,821	<b>27,735</b>
Upper secondary	34.8	30.8	<b>32.9</b>	25.5	26.3	<b>25.9</b>	21.0	22.3	<b>21.7</b>	12,255	15,925	<b>28,180</b>
Technical and Vocational	7.1	8.0	<b>7.5</b>	1.9	5.7	<b>4.1</b>	4.6	2.9	<b>3.7</b>	4,042	4,123	<b>8,165</b>
University	5.3	5.0	<b>5.2</b>	4.0	2.3	<b>2.9</b>	2.7	1.3	<b>2.0</b>	2,080	2,555	<b>4,636</b>
Special school	0.4	0.4	<b>0.4</b>	4.9	0.4	<b>2.3</b>	6.5	1.3	<b>3.8</b>	110	24	<b>134</b>
Other (specify)	0.2	0.1	<b>0.2</b>	0.0	0.0	<b>0.0</b>	0.1	0.1	<b>0.1</b>	16	20	<b>36</b>
Wealth index quintile												
Lowest quintile	18.5	17.3	<b>17.9</b>	14.9	21.9	<b>18.9</b>	20.9	20.0	<b>20.4</b>	6,840	7,385	<b>14,226</b>
Second quintile	17.9	19.9	<b>18.8</b>	18.5	19.4	<b>19.0</b>	19.5	21.5	<b>20.6</b>	8,286	8,884	<b>17,170</b>
Middle quintile	19.8	19.4	<b>19.6</b>	24.1	20.3	<b>22.0</b>	23.4	22.3	<b>22.9</b>	9,990	10,448	<b>20,437</b>
High quintile	20.7	20.5	<b>20.6</b>	23.6	25.1	<b>24.4</b>	23.1	21.3	<b>22.1</b>	10,457	10,949	<b>21,406</b>
Highest quintile	23.1	22.9	<b>23.0</b>	18.9	13.4	<b>15.7</b>	13.1	14.8	<b>14.0</b>	10,513	11,968	<b>22,481</b>

For those who have one form of disability, 4.4 percent were males compared to 3.6 percent females. Data by region shows Tongatapu rural recorded 43.0 percent for those with three or more disability, Vava'u with 21.5 percent and 17.6 percent from Tongatapu urban. Tongatapu rural and urban recorded the highest percentage for those with two forms of disability. The age group 18 years and above recorded the highest number compared to the lower age groups.

## Chapter 2

# PROFILES OF PERSONS WITH DISABILITIES

## 2.1 Causes of disability

This section provided relevant information on the different causes of disabilities. Respondents who indicated some form of difficulties in selected domain were further asked questions on causes. It has to be noted that the question on the cause of disability were not asked to all the domains of functionality for each age group, hence, the total response to the questions does not match the total functional difficulties in previous tables.

A total of 4,932 persons with functional disabilities responded to the question on the cause of disability, from which 83.2 percent (4,101) were from the rural areas while and 16.8 percent (831) were from urban. Illness, 30.0 percent (1,480) tends to be the main cause of disability followed by aging at 23.9 percent (1,179). The same trend also happens in both urban and rural areas as well as by sex. Other major causes were from other accidents while both sexes recorded almost the same number on those that were birth related, male at 7.0 percent and females at 6.9 percent (Table 2.1).

Table 2.1: *Percentage distribution of persons 2 years and older with specific disability by cause and area, Tonga, 2018*

Cause of Disability	Urban			Rural			Total		
	Male	Female	Total <sup>1</sup>	Male	Female	Total	Male	Female	Total
Congenital	4.3	7.0	<b>48</b>	9.2	5.0	<b>286</b>	8.4	5.4	<b>334</b>
Birth related	10.2	7.8	<b>74</b>	6.4	6.7	<b>268</b>	7.0	6.9	<b>342</b>
Illness	28.0	33.6	<b>258</b>	26.8	32.4	<b>1,222</b>	27.0	32.6	<b>1,480</b>
Physical & psychological abuse	1.3	2.0	<b>13</b>	1.5	0.7	<b>43</b>	1.4	0.9	<b>56</b>
Aging	11.6	22.4	<b>146</b>	21.8	28.2	<b>1,032</b>	20.2	27.2	<b>1,179</b>
Traffic accident	4.0	1.7	<b>22</b>	2.6	1.3	<b>78</b>	2.8	1.4	<b>100</b>
Work accident	4.6	1.1	<b>22</b>	9.8	4.7	<b>292</b>	9.0	4.1	<b>315</b>
Other accident	12.9	10.2	<b>94</b>	9.1	10.5	<b>403</b>	9.7	10.5	<b>498</b>
Stress	2.2	0.9	<b>12</b>	2.6	2.3	<b>101</b>	2.6	2.1	<b>112</b>
Pregnancy related	5.4	3.9	<b>39</b>	1.9	1.3	<b>65</b>	2.5	1.8	<b>104</b>
Others	15.9	9.4	<b>102</b>	8.3	6.9	<b>311</b>	9.5	7.3	<b>413</b>
<b>Total</b>	<b>100.3</b>	<b>100.0</b>	<b>831</b>	<b>100.0</b>	<b>100.0</b>	<b>4,101</b>	<b>100.0</b>	<b>100.0</b>	<b>4,932</b>

The results from the survey shows that disability in Tonga largely associated with illness and age. A substantial amount of disability occurring early in life (about 12 percent) is preventable. This information is thus highly relevant for post-natal, pre-natal and early childhood health services, and the results indicate that there is potential for improving services and thus for reducing disabling conditions early in life but also access to improved health services to manage illness.

<sup>1</sup>Totals may not add up due to rounding off from the weights

Table 2.2: *Percentage distribution of persons 5+ years with vision impairment by using assistive products, Tonga, 2018*

Devices	Urban				Rural				Total			
				In need but don't use				In need but don't use				In need but don't use
	Use	Don't Use	Total <sup>2</sup>		Use	Don't Use	Total		Use	Don't Use	Total	
Tools for braille reading	5.0	95.2	<b>499</b>	19.8	1.1	98.9	<b>662</b>	14.5	2.7	97.3	<b>1,161</b>	16.6
Speaking devices or touchable	1.8	98.2	<b>499</b>	34.3	1.7	98.3	<b>662</b>	24.9	1.7	98.3	<b>1,161</b>	28.9
Recording devices	1.0	99.0	<b>499</b>	29.6	1.1	98.9	<b>662</b>	23.2	1.0	98.9	<b>1,161</b>	25.9
Computer with printer	0.8	99.2	<b>499</b>	19.6	0.8	99.2	<b>662</b>	11.7	0.8	99.3	<b>1,161</b>	15.1
Personal companion	11.4	88.6	<b>499</b>	18.8	15.7	84.3	<b>662</b>	15.1	13.9	86.1	<b>1,161</b>	16.7
Scanner	0.0	100.0	<b>499</b>	16.0	0.2	99.8	<b>662</b>	13.2	0.1	99.9	<b>1,161</b>	14.4
Stick	6.4	93.6	<b>499</b>	14.8	6.8	93.2	<b>662</b>	13.5	6.6	93.3	<b>1,161</b>	14.0
Guide movement	2.0	98.0	<b>499</b>	5.3	2.4	97.6	<b>662</b>	8.0	2.2	97.7	<b>1,161</b>	6.8
Others	4.2	96.0	<b>499</b>	0.0	4.4	100.2	<b>662</b>	1.2	4.3	95.7	<b>1,161</b>	0.0
<b>Total</b>	<b>120</b>	<b>379</b>		<b>259</b>	<b>173</b>			<b>313</b>	<b>293</b>	<b>868</b>		<b>572</b>

Table 2.3: *Percentage distribution of persons 5+ years with hearing disability by using tools and region*

Tools	Urban				Rural				National			
				In need but don't use				In need but don't use				In need but don't use
	Use	Don't Use	Total <sup>3</sup>		Use	Don't Use	Total		Use	Don't Use	Total	
Stethoscope without telephone adapter	2.0	98.0	<b>157</b>	28.5	4.7	95.3	<b>1,011</b>	33.1	4.3	95.7	<b>1,168</b>	32.5
Stethoscope with telephone adapter	0.0	100.0	<b>157</b>	29.3	3.0	97.0	<b>1,011</b>	30.9	2.6	97.4	<b>1,168</b>	30.6
Cochlear implants	10.5	89.5	<b>157</b>	16.3	10.6	89.4	<b>1,011</b>	40.0	10.6	89.4	<b>1,168</b>	36.8
Mobile device for messages	2.2	97.8	<b>157</b>	16.8	1.6	98.4	<b>1,011</b>	15.1	1.6	98.4	<b>1,168</b>	15.3
Fax	0.0	100.0	<b>157</b>	3.1	0.0	100.0	<b>1,011</b>	0.9	0.0	100.0	<b>1,168</b>	1.2
Computer to communicate	0.0	100.0	<b>157</b>	4.6	0.3	99.7	<b>1,011</b>	8.0	0.2	99.8	<b>1,168</b>	7.6
Visual and sensory	0.0	100.0	<b>157</b>	6.7	3.2	96.8	<b>1,011</b>	8.4	2.8	97.2	<b>1,168</b>	8.2
Sign language	2.1	97.9	<b>157</b>	7.5	11.6	88.4	<b>1,011</b>	9.9	10.3	89.7	<b>1,168</b>	9.6
Immediate voice translator for writing	0.0	100.0	<b>157</b>	5.4	0.3	99.7	<b>1,011</b>	4.6	0.3	99.7	<b>1,168</b>	4.7
Speakers	5.6	94.4	<b>157</b>	17.9	2.5	97.5	<b>1,011</b>	21.4	3.0	97.0	<b>1,168</b>	20.9
Translation bottom of the TV screen	2.8	97.2	<b>157</b>	4.8	3.1	96.9	<b>1,011</b>	12.7	3.1	96.9	<b>1,168</b>	11.6
Organized reception of the sounds from speakers	0.0	100.0	<b>157</b>	8.2	0.5	99.5	<b>1,011</b>	5.8	0.4	99.6	<b>1,168</b>	6.1
Reading lips and pronunciation	50.8	49.2	<b>157</b>	6.2	33.6	66.4	<b>1,011</b>	3.4	35.9	64.1	<b>1,168</b>	3.8
Others	2.6	97.4	<b>157</b>	13.8	0.9	99.1	<b>1,011</b>	1.4	1.1	98.9	<b>1,168</b>	3.0

## 2.2 Use of assistive aids

Table 2.2 provides information on those persons aged 5 years and above who had vision impairment, and whether they are using assistive products to improve their vision. Questions were asked on whether they use selected devices and for those which they don't use, extra question was asked if they needed those devices.

Out of the total persons of 1,161 who are using some device, 13.9 percent stated that they are using personal assistant to assist them in their mobility whilst 6.6 percent indicated that they use a cane or walking stick to assist them.

Interesting to note that 28.9 percent needed 'speaking devices or touchable' to assist in their vision whereas 25.9 percent needed recording devices, followed by those who needed 'tools for braille reading'. Similar trends are shown in both male and female.

Out of the 1,168 persons aged 15 years and over with hearing disability, 35.9 percent were able to use assistive products for reading lips and pronunciations, 10.6 currently using cochlear implants whilst 10.3 percent uses sign language to communicate.

About one third indicated that they are in need of hearing aid with or without telephone adaptor, cochlear implants, speakers and mobile devices for messages. This is common throughout the urban and rural areas, which indicates the needs of these persons with disabilities, through which interventions and policy plans could be aligned to assist and provide the necessary devices to improve lives (Table 2.3).

For those persons aged 5 years and above with walking disabilities (Table 2.4 on the next page), 54.4 percent indicated that they are already using a cane or walking stick, 37.2 percent needed someone's assistance to make

<sup>2</sup>Totals may not add up due to rounding off from the weights

<sup>3</sup>Totals may not add up due to rounding off from the weights

them walk whilst 34.5 percent stated they are either using a wheelchair or scooter to move around. 42.0 percent stated that they are in need of a walker or Zimmer frame, 41.0 percent needed wheelchairs or scooter whilst 20.3 percent needed crutches. These are important information, which would help relevant organisations, agencies, and ministries determine areas of need where assistance could be channelled to ensure persons with disabilities are able to access and participate in relevant activities.

Table 2.4: *Percentage distribution of persons 5+ years with walking disability by using tools and region*

Tools	Urban				Rural				National			
	Use	Don't Use	Total <sup>4</sup>	In need but don't use	Use	Don't Use	Total	In need but don't use	Use	Don't Use	Total	In need but don't use
Cane or walking stick	42.6	57.4	402	9.5	56.3	43.7	2,396	10.7	54.4	45.6	2,799	10.6
Walker or Zimmer frame	30.0	70.0	402	23.7	22.8	77.2	2,396	45.1	23.8	76.2	2,799	42.0
Crutches	8.8	91.2	402	8.7	6.4	93.6	2,396	22.3	6.8	93.2	2,799	20.3
Wheelchair or scooter	48.1	51.9	402	26.1	32.2	67.8	2,396	43.5	34.5	65.5	2,799	41.0
Artificial limb (leg/foot)	4.0	96.0	402	3.1	0.7	99.3	2,396	7.9	1.2	98.8	2,799	7.2
Someone's assistance	44.8	55.2	402	4.8	35.9	64.1	2,396	4.7	37.2	62.8	2,799	4.7
Others	0.7	99.3	402	6.4	1.7	98.3	2,396	1.2	1.6	98.4	2,799	2.0

Table 2.5 shows results on use of communication tools. Information were also collected for persons aged 5 years and above with communication disability and are using devices or in need of the relevant assistive products. It should be noted that different categories of responses were asked to the two different age groups, 5-17 and 18 and above and analysis shows that for those in the age group 5-17, most are using the selected devices except for 20.5 percent who don't use informal sign or body language to communicate. Same trends could be seen as well in both urban and rural areas but for those who are not using any devices, 43.1 percent stated they needed chat book, 33.1 percent needed specialised sign language whilst 33.0 percent needed an interpreter to communicate.

For those 18 years and older, 16.8 percent do not use sign language interpreters to communicate and understand what is being conversed whereas majority are using all the other methods. Out of those not using sign language interpreters, 17.5 percent of them needed the devices to assist them in their communication.

Table 2.5: *Percentage distribution of persons 5+ years with communication disability by using aids tools and region, Tonga, 2018*

Tools	Urban				Rural				National			
	Use	Don't Use	Total <sup>5</sup>	In need but don't use	Use	Don't Use	Total	In need but don't use	Use	Don't Use	Total	In need but don't use
<b>Age 5-17</b>												
Chat book	92.8	7.2	31	31.8	100.0	0.0	137	45.6	98.7	1.3	168	43.1
Sign language (specialised)	96.1	3.9	31	22.5	89.1	10.9	137	35.5	90.4	9.6	168	33.1
Informal sign/body language	87.0	13.0	31	4.2	77.8	22.2	137	28.5	79.5	20.5	168	24.0
Interpreter	100.0	0.0	31	27.4	100.0	0.0	137	34.3	100.0	0.0	168	33.0
Others	100.0	0.0	31	0.0	95.3	4.7	137	0.9	96.1	3.9	168	0.7
<b>Age 18+</b>												
A special device for speech	100.0	0.0	84	28.5	100.0	0.0	295	39.2	100.0	0.0	379	36.8
Computer	100.0	0.0	84	9.5	99.5	0.5	295	19.3	99.6	0.4	379	17.1
Communication Board	100.0	0.0	84	17.7	100.0	0.0	295	20.0	100.0	0.0	379	19.5
Speech language therapy	99.5	0.5	84	11.9	97.1	2.9	295	28.0	97.6	2.4	379	24.4
Sign language interpreter	88.2	11.8	84	10.4	81.8	18.2	295	19.5	83.2	16.8	379	17.5
Others	99.0	1.031	84	0.0	97.9	2.1	295	0.0	98.2	1.8	379	0.0

<sup>4</sup>Totals may not add up due to rounding off from the weights

<sup>5</sup>Totals may not add up due to rounding off from the weights

## 2.3 Onset of disability

Early identification of disability enables early intervention. Table 2.6 provides information on the onset of disability for children aged 2-4, showing the age at which, they had the disability. Data shows the onset for each of the eight domains of difficulty where 51.1 percent of those with hearing difficulty had the disability at the age of 2 while 51.5 percent had their seeing disability at the age of 1. For those having disability at birth, 71.5 percent were with fine motor, 71.0 percent with walking, 49.0 percent with communication disability and 48.5 percent with seeing.

Table 2.6: Percentage distribution of persons 2-4 years by functional domains and onset of disability, Tonga, 2018

Functional domains	Males						Females						Total					
	1	2	3	4	At birth	Total	1	2	3	4	At birth	Total	1	2	3	4	At birth	Total
1. Seeing	0.0	0.0	0.0	0.0	100.0	5	74.6	0.0	0.0	0.0	25.4	12	51.5	0.0	0.0	0.0	48.5	18
2. Hearing	22.4	0.0	9.1	64.4	4.1	21	7.4	76.0	0.0	3.3	13.2	43	12.3	51.1	3.0	23.3	10.3	64
3. Walking	25.3	20.2	0.0	0.0	54.5	25	0.0	0.0	0.0	0.0	100.0	14	16.1	12.9	0.0	0.0	71.0	39
4. Fine Motor	20.2	0.0	0.0	0.0	79.8	7	0.0	38.4	0.0	0.0	61.6	6	11.0	17.6	0.0	0.0	71.5	13
5. Communication	9.9	0.0	16.8	15.2	58.1	28	0.0	31.8	28.5	12.0	27.7	12	6.9	9.5	20.3	14.2	49.0	40
6. Learning	9.3	0.0	30.8	9.6	50.2	15	0.0	38.9	0.0	16.8	44.3	9	6.0	14.0	19.7	12.2	48.1	24
7. Playing	6.4	0.0	3.5	49.0	41.0	43	0.0	0.0	0.0	0.0	100.0	3	6.0	0.0	3.2	45.4	45.4	46
8. Controlling behaviour	2.9	0.0	5.9	45.5	45.6	46	0.0	39.9	28.1	0.0	32.0	8	2.5	6.2	9.4	38.5	43.5	54

Table 2.7: Percentage distribution of persons 2-4 years by functional domains and onset of disability, Tonga, 2018

Functional domains	1	2	3	4	At birth	Total
<b>Males</b>						
1. Seeing	0.0	0.0	0.0	0.0	100.0	<b>5</b>
2. Hearing	22.4	0.0	9.1	64.4	4.1	<b>21</b>
3. Walking	25.3	20.2	0.0	0.0	54.5	<b>25</b>
4. Fine Motor	20.2	0.0	0.0	0.0	79.8	<b>7</b>
5. Communication	9.9	0.0	16.8	15.2	58.1	<b>28</b>
6. Learning	9.3	0.0	30.8	9.6	50.2	<b>15</b>
7. Playing	6.4	0.0	3.5	49.0	41.0	<b>43</b>
8. Controlling behaviour	2.9	0.0	5.9	45.5	45.6	<b>46</b>
<b>Females</b>						
1. Seeing	74.6	0.0	0.0	0.0	25.4	<b>12</b>
2. Hearing	7.4	76.0	0.0	3.3	13.2	<b>43</b>
3. Walking	0.0	0.0	0.0	0.0	100.0	<b>14</b>
4. Fine Motor	0.0	38.4	0.0	0.0	61.6	<b>6</b>
5. Communication	0.0	31.8	28.5	12.0	27.7	<b>12</b>
6. Learning	0.0	38.9	0.0	16.8	44.3	<b>9</b>
7. Playing	0.0	0.0	0.0	0.0	100.0	<b>3</b>
8. Controlling behaviour	0.0	39.9	28.1	0.0	32.0	<b>8</b>
<b>Total</b>						
1. Seeing	51.5	0.0	0.0	0.0	48.5	<b>18</b>
2. Hearing	12.3	51.1	3.0	23.3	10.3	<b>64</b>
3. Walking	16.1	12.9	0.0	0.0	71.0	<b>39</b>
4. Fine Motor	11.0	17.6	0.0	0.0	71.5	<b>13</b>
5. Communication	6.9	9.5	20.3	14.2	49.0	<b>40</b>
6. Learning	6.0	14.0	19.7	12.2	48.1	<b>24</b>
7. Playing	6.0	0.0	3.2	45.4	45.4	<b>46</b>
8. Controlling behaviour	2.5	6.2	9.4	38.5	43.5	<b>54</b>

With regards to the onset of disability for persons aged 5-17 years old, high onset of disability at birth were recorded in depression (63.9 percent), communication (59.3 percent), and learning (46.5 percent). For those who had their disability when they were in the age group 2-4, 41.8 percent had seeing disability, 41.7 percent in anxiety, 41.7 percent have problems making friends and 35.0 percent with self-care.

Table 2.8 shows the onset of disability for children aged 5-17 recorded 37.2 percent in hearing, 20.6 percent in walking followed by depression and accepting changes, at 18.2 percent and 18.1 percent respectively.

Table 2.8: Percentage distribution of persons 5-17 years by functional domains and onset of disability, Tonga, 2018

Functional domains	Urban					Rural					Total				
	At birth	Less than 5 yrs	2-4	5-17	Total	At birth	Less than 5 yrs	2-4	5-17	Total	At birth	Less than 5 yrs	2-4	5-17	Total
1. Seeing	37.3	0.0	17.6	45.2	13	26.6	23.0	44.8	5.5	105	27.8	20.5	41.8	9.9	118
2. Hearing	31.4	0.0	12.3	56.3	29	25.1	3.8	36.9	34.2	182	26.0	3.3	33.5	37.2	211
3. Walking	35.8	22.6	6.0	35.6	38	35.4	11.2	35.7	17.7	198	35.5	13.0	30.9	20.6	237
4. Selfcare	66.5	10.0	0.0	23.6	19	42.8	10.2	39.1	7.8	164	45.3	10.2	35.0	9.5	183
5. Communication	70.7	19.9	3.6	5.7	33	56.6	11.1	22.9	9.4	141	59.3	12.7	19.3	8.7	174
6. Learning	49.2	18.3	4.8	27.7	23	46.1	7.4	37.2	9.3	186	46.5	8.6	33.6	11.3	210
7. Remembering	50.3	18.4	4.8	26.5	23	40.6	6.7	36.5	16.1	100	41.7	8.1	32.9	17.3	205
8. Concentrating	51.4	18.6	0.0	30.0	23	42.0	14.1	33.3	10.7	100	43.1	14.6	29.4	13.0	196
9. Accepting changes	72.2	23.7	0.0	4.1	18	30.8	12.9	36.4	19.9	143	35.5	14.1	32.3	18.1	161
10. Controlling behaviour	84.8	0.0	0.0	15.2	12	40.8	7.2	35.9	16.1	161	43.9	6.7	33.3	16.1	173
11. Making friends	74.2	13.2	0.0	12.6	18	38.3	7.1	45.0	9.6	147	42.2	7.8	40.1	9.9	165
12. Anxiety	43.8	0.0	0.0	56.2	10	39.4	4.3	44.4	11.9	150	39.7	4.0	41.7	14.5	160
13. Depression	45.0	0.0	0.0	55.0	10	66.3	11.9	8.2	13.6	79	63.9	10.6	7.3	18.2	88

Table 2.9: Percentage distribution of persons 5-17 years by functional domains and onset of disability, Tonga, 2018

Functional domains	At birth	Less than 5 yrs	2-4	5-17	Total
<b>Urban</b>					
1. Seeing	37.3	0.0	17.6	45.2	<b>13</b>
2. Hearing	31.4	0.0	12.3	56.3	<b>29</b>
3. Walking	35.8	22.6	6.0	35.6	<b>38</b>
4. Selfcare	66.5	10.0	0.0	23.6	<b>19</b>
5. Communication	70.7	19.9	3.6	5.7	<b>33</b>
6. Learning	49.2	18.3	4.8	27.7	<b>23</b>
7. Remembering	50.3	18.4	4.8	26.5	<b>23</b>
8. Concentrating	51.4	18.6	0.0	30.0	<b>23</b>
9. Accepting changes	72.2	23.7	0.0	4.1	<b>18</b>
10. Controlling behaviour	84.8	0.0	0.0	15.2	<b>12</b>
11. Making friends	74.2	13.2	0.0	12.6	<b>18</b>
12. Anxiety	43.8	0.0	0.0	56.2	<b>10</b>
13. Depression	45.0	0.0	0.0	55.0	<b>10</b>
<b>Rural</b>					
1. Seeing	26.6	23.0	44.8	5.5	<b>105</b>
2. Hearing	25.1	3.8	36.9	34.2	<b>182</b>
3. Walking	35.4	11.2	35.7	17.7	<b>198</b>
4. Selfcare	42.8	10.2	39.1	7.8	<b>164</b>
5. Communication	56.6	11.1	22.9	9.4	<b>141</b>
6. Learning	46.1	7.4	37.2	9.3	<b>186</b>
7. Remembering	40.6	6.7	36.5	16.1	<b>100</b>
8. Concentrating	42.0	14.1	33.3	10.7	<b>100</b>
9. Accepting changes	30.8	12.9	36.4	19.9	<b>143</b>
10. Controlling behaviour	40.8	7.2	35.9	16.1	<b>161</b>
11. Making friends	38.3	7.1	45.0	9.6	<b>147</b>
12. Anxiety	39.4	4.3	44.4	11.9	<b>150</b>
13. Depression	66.3	11.9	8.2	13.6	<b>79</b>
<b>Total</b>					
1. Seeing	27.8	20.5	41.8	9.9	<b>118</b>
2. Hearing	26.0	3.3	33.5	37.2	<b>211</b>
3. Walking	35.5	13.0	30.9	20.6	<b>237</b>
4. Selfcare	45.3	10.2	35.0	9.5	<b>183</b>
5. Communication	59.3	12.7	19.3	8.7	<b>174</b>
6. Learning	46.5	8.6	33.6	11.3	<b>210</b>
7. Remembering	41.7	8.1	32.9	17.3	<b>205</b>
8. Concentrating	43.1	14.6	29.4	13.0	<b>196</b>
9. Accepting changes	35.5	14.1	32.3	18.1	<b>161</b>
10. Controlling behaviour	43.9	6.7	33.3	16.1	<b>173</b>
11. Making friends	42.2	7.8	40.1	9.9	<b>165</b>
12. Anxiety	39.7	4.0	41.7	14.5	<b>160</b>
13. Depression	63.9	10.6	7.3	18.2	<b>88</b>

The onset of disability for those persons 18 years and older is presented in Table 2.10 on the next page. Results shows the majority have onset at 50 years old and above. In this age group, 72.2 percent have functional difficulty in walking, 69.0 percent in self-care, 62.8 percent in hearing and 55.4 percent in seeing.

Table 2.10: *Percentage distribution of persons 18 years and over by functional domains and onset of disability, Tonga, 2018*

Functional domains	Urban							Rural							National						
	At birth	Less than 5yrs	2-4	5-17	18-49	50+	Total	At birth	Less than 5yrs	2-4	5-17	18-49	50+	Total	At birth	Less than 5yrs	2-4	5-17	18-49	50+	Total
Seeing	11.9	0.3	0.6	7.9	33.4	45.9	<b>256</b>	15.1	0.8	1.7	4.4	19.7	58.4	<b>788</b>	14.3	0.7	1.4	5.2	23.0	55.4	<b>1,043</b>
Hearing	4.1	1.5	2.4	8.6	11.1	72.2	<b>128</b>	10.8	2.4	0.7	8.2	16.6	61.3	<b>829</b>	9.9	2.3	0.9	8.2	15.9	62.8	<b>957</b>
Walking	5.0	1.7	0.7	3.2	16.1	73.4	<b>500</b>	4.6	1.5	1.2	3.1	17.6	72.0	<b>2,570</b>	4.6	1.5	1.2	3.1	17.4	72.2	<b>3,070</b>
Communication	33.4	3.2	6.1	22.4	9.0	26.0	<b>84</b>	33.3	13.8	2.4	7.6	13.3	29.7	<b>295</b>	33.3	11.4	3.2	10.9	12.3	28.9	<b>379</b>
Cognition	27.8	4.7	4.7	12.3	14.0	36.5	<b>163</b>	26.1	3.9	0.9	11.2	16.9	41.0	<b>675</b>	26.4	4.1	1.7	11.4	16.3	40.1	<b>838</b>
Selfcare	8.6	1.1	0.0	6.1	12.8	71.4	<b>202</b>	11.9	2.7	0.6	3.0	13.3	68.4	<b>891</b>	11.3	2.4	0.5	3.6	13.2	69.0	<b>1,092</b>

Table 2.11: *Percentage distribution of persons 18 years and over by functional domains and onset of disability, Tonga, 2018*

Functional domains	At birth	Less than 5yrs	2-4	5-17	18-49	50+	Total
<b>Urban</b>							
Seeing	11.9	0.3	0.6	7.9	33.4	45.9	<b>256</b>
Hearing	4.1	1.5	2.4	8.6	11.1	72.2	<b>128</b>
Walking	5.0	1.7	0.7	3.2	16.1	73.4	<b>500</b>
Communication	33.4	3.2	6.1	22.4	9.0	26.0	<b>84</b>
Cognition	27.8	4.7	4.7	12.3	14.0	36.5	<b>163</b>
Selfcare	8.6	1.1	0.0	6.1	12.8	71.4	<b>202</b>
<b>Rural</b>							
Seeing	15.1	0.8	1.7	4.4	19.7	58.4	<b>788</b>
Hearing	10.8	2.4	0.7	8.2	16.6	61.3	<b>829</b>
Walking	4.6	1.5	1.2	3.1	17.6	72.0	<b>2,570</b>
Communication	33.3	13.8	2.4	7.6	13.3	29.7	<b>295</b>
Cognition	26.1	3.9	0.9	11.2	16.9	41.0	<b>675</b>
Selfcare	11.9	2.7	0.6	3.0	13.3	68.4	<b>891</b>
<b>National</b>							
Seeing	14.3	0.7	1.4	5.2	23.0	55.4	<b>1,043</b>
Hearing	9.9	2.3	0.9	8.2	15.9	62.8	<b>957</b>
Walking	4.6	1.5	1.2	3.1	17.4	72.2	<b>3,070</b>
Communication	33.3	11.4	3.2	10.9	12.3	28.9	<b>379</b>
Cognition	26.4	4.1	1.7	11.4	16.3	40.1	<b>838</b>
Selfcare	11.3	2.4	0.5	3.6	13.2	69.0	<b>1,092</b>

For those whose onset of disability occurring between the ages 18-49, 23.0 percent were in seeing, 17.4 percent in walking and 16.3 percent in cognition. Looking at those who had their disabilities at birth, there were 33.3 percent who had communication disability, 26.4 percent had cognition difficulty and 14.3 percent had seeing disability.



## Chapter 3

# HOUSING AND POPULATION CHARACTERISTICS

### 3.1 Household composition

This section gives more hindsight on the household composition of the selected households of the survey. Information also include their housing conditions, accessibility, household assets and source of income. Further information presented were on the population characteristics and other social and economic characteristics.

Based on the sample design of the survey (see Appendix 1), two sets of sample were derived from the 2016 Population Census, one for those households that were identified to have at least a person with disabilities in the household (**CASE**), and the other for households that did not have any person with disabilities (**CONTROL**).

Based on the weighted estimates, Table 3.1 on the following page shows that there were 5,217 Case households and 12,790 Control households, which provide an estimated 18,008 households in Tonga. There were 29.2 percent female-headed households in the case households, compared to 26.9 percent in the control households. The opposite could be said for the male-headed households where there were more in control than case households, at 73.1 percent and 70.8 percent respectively.

Total average household size was 5.5 with 6.2 percent in case households and 5.3 percent in control households. This gives an indication that disabilities live more in households with bigger size as they will need more support and assistance from the members of the household. This is supported as well from the data on the number of persons in a household, where there live more in households with two or more persons, with 23.7 percent of case households with seven people and above.

Table 3.1: *Household composition, Tonga, 2018*

Household Composition	Case	Control	Total
<b>Total households</b>	<b>5,217</b>	<b>12,790</b>	<b>18,008</b>
<b>Household headship</b>			
Male	70.8	73.1	<b>72.4</b>
Female	29.2	26.9	<b>27.6</b>
<b>% of household headed by member with disability</b>	<b>61.1</b>	<b>0.2</b>	<b>17.8</b>
<b>Number of usual members</b>			
One person	6.6	9.5	<b>8.6</b>
Two persons	13.8	12.8	<b>13.1</b>
Three persons	13.4	14.9	<b>14.5</b>
Four persons	15.8	16.7	<b>16.5</b>
Five persons	14.6	15.7	<b>15.4</b>
Six persons	12.1	11.5	<b>11.7</b>
<b>Average household size</b>	<b>6.2</b>	<b>5.3</b>	<b>5.5</b>
<b>Mean number of members with disability in household</b>			
	<b>1.386</b>	<b>0.005</b>	<b>0.4</b>

## 3.2 Housing conditions

Table 3.2 indicates that there is not much disparity between the case and control households according to their living conditions. Most of the households were a one-family house and owned by someone in the household free and clear (family owned). Most households use propane gas as their main source of cooking fuel, followed by wood and coconut husks. Most households have access to the public power supply for lighting.

In terms of access to drinking water, 44.8 percent of case households have access to rainwater in tanks with a tap outside the dwelling, compared to 42.6 percent of control households. A larger proportion of case households (84.8 percent) have access to a flush toilet compared to 82.2 percent of control households.

## 3.3 Accessibility for persons with disability

It is interesting to note that some households have adapted their homes to support persons with disabilities. Some have accessible toilets and bathroom, ramps, transport and footpaths, indicating that households do care for their vulnerable members of their families and do what they can to make their lives easier.

Table 3.4 shows that case households have accessibility features in their households, with 9.9 percent case households have accessible concrete foot path for wheelchair users, compared to 6.7 percent in control households. 7.3 percent of case households have ramps whilst 6.2 percent have supporting facility in their bathroom.

## 3.4 Households assets and capital goods

The wealth status of households was derived from household ownership of assets and capital goods. As mentioned above, there is not much disparity between the case and control households in terms of household assets and capital goods ownership, where they almost have similar proportion of access to these goods (Table 3.5).

## 3.5 Source of income

The survey also collected information about sources of household income. This ranges from regular salaries, business, subsistence, rents, remittances and pensions (Table 3.6). Of the total households surveyed, 87.8 percent of case households received remittances from outside the household compared to 84.5 percent for control households. Control households recorded more households receiving regular salary and from sale of produce, whilst 32.5 percent of case households recorded having received income from other sources. Unfortunately, the questionnaire did not provide further question to specify what these ‘other’ income includes.

Table 3.2: *Housing characteristics and living conditions, Tonga, 2018*

Household conditions	Case	Control	Total
<b>Total households</b>	<b>5,217</b>	<b>12,790</b>	<b>18,008</b>
<b>Type of dwellings</b>			
A one-family house	90.0	91.4	<b>91.0</b>
A one-household made up of multiple houses and dwellings	9.3	7.4	<b>7.9</b>
A one-household house attached to another household house	0.3	0.5	<b>0.4</b>
A building with two or more apartments	0.1	0.2	<b>0.1</b>
Dwelling attached to a shop or other non-resident building	0.4	0.6	<b>0.5</b>
Other	0.0	0.0	<b>0.0</b>
<b>Tenure Status</b>			
Owned by someone in this HH with a mortgage or loan	4.1	5.0	<b>4.7</b>
Owned by someone in this HH free and clear	85.0	76.9	<b>79.2</b>
Rented	1.3	3.2	<b>2.7</b>
Occupied without payment	9.6	14.9	<b>13.3</b>
<b>Main source of energy for cooking</b>			
Electricity	1.2	1.5	<b>1.4</b>
Propane gas (LPG)	74.4	73.8	<b>73.9</b>
Kerosene	0.1	0.0	<b>0.1</b>
Solar power	0.0	0.0	<b>0.0</b>
Wood and coconut husks/shells	24.2	24.7	<b>24.5</b>
Other	0.1	0.0	<b>0.0</b>
<b>Main source of lighting</b>			
Public power supply (electricity)	94.3	93.2	<b>93.5</b>
Solar	3.6	5.2	<b>4.7</b>
Own generator	0.0	0.2	<b>0.2</b>
Kerosene	0.2	0.1	<b>0.1</b>
Battery light (maama fakamaka)	1.6	1.2	<b>1.3</b>
Other	0.2	0.1	<b>0.1</b>
<b>Main source of drinking water</b>			
Public (or community) water supply with tap inside the dwelling	1.5	1.1	<b>1.2</b>
Public (or community) water supply with tap outside the dwelling	2.2	3.1	<b>2.8</b>
Rain water in cement or other tank with tap inside the dwelling	7.7	6.6	<b>6.9</b>
Rain water in cement or other tank with tap outside the dwelling	44.8	42.6	<b>43.3</b>
Rain water in cement or other tank without tap	7.3	7.2	<b>7.2</b>
Neighbouring cement or other tank	22.1	23.6	<b>23.2</b>
Bottled water	13.3	14.8	<b>14.3</b>
Boiling water	0.9	0.8	<b>0.8</b>
Other	0.3	0.2	<b>0.2</b>
<b>Main sanitary facility</b>			
Flush toilet	84.8	82.2	<b>83.0</b>
Manual toilet	9.0	9.6	<b>9.4</b>
Pit	6.0	7.8	<b>7.3</b>
Public shared toilet	0.0	0.0	<b>0.0</b>
Other	0.2	0.3	<b>0.3</b>

Table 3.4: *Households with accessibility for persons with disability, Tonga, 2018*

Household with	Case	Control	Total
Accessible toilet (toilet have any supporting tools)	5.9	4.3	<b>4.8</b>
Accessible bathroom (bathroom have any supporting facility)	6.2	4.2	<b>4.8</b>
Ramps (a sloping surface for a wheelchair ramp)	7.3	5.5	<b>6.0</b>
Accessible concrete footpath for wheelchair at home	9.9	6.7	<b>7.6</b>
Accessible transport (vehicles have any supporting facility)	1.0	0.5	<b>0.7</b>
<b>Total households</b>	<b>5,217</b>	<b>12,790</b>	<b>18,008</b>

Table 3.5: *Household with working assets and capital goods, Tonga, 2018*

Household with	Case	Control	Total
Car	46.7	44.6	<b>45.2</b>
Truck	3.5	3.9	<b>3.8</b>
Van	35.4	35.2	<b>35.3</b>
Motorbike	1.2	1.3	<b>1.3</b>
Scooter	0.7	0.6	<b>0.6</b>
Bicycles	22.5	19.3	<b>20.2</b>
Canoes	0.5	0.2	<b>0.3</b>
Boats with outboard motor	2.9	2.5	<b>2.6</b>
Refrigerator	48.3	45.3	<b>46.2</b>
Freezer	51.5	52.5	<b>52.2</b>
Stove	92.5	92.8	<b>92.8</b>
Washing machine	81.5	80.1	<b>80.5</b>
Sewing machine	17.4	16.3	<b>16.6</b>
Generators	4.8	6.1	<b>5.7</b>
Solar panel	4.5	4.7	<b>4.6</b>
Television screen	70.6	71.4	<b>71.2</b>
CD/DVD player	54.2	54.3	<b>54.2</b>
Cell phone	93.4	97.1	<b>96.0</b>
Desktop computer	4.4	5.7	<b>5.3</b>
Laptop	30.8	38.0	<b>35.9</b>
Tablet	14.2	14.9	<b>14.7</b>
Battery powered radios	55.3	46.8	<b>49.2</b>
Landline phone	25.1	20.9	<b>22.1</b>
Internet access	8.6	10.3	<b>9.8</b>
<b>Total households</b>	<b>5,217</b>	<b>12,790</b>	<b>18,008</b>

Table 3.6: *Household by source of income, Tonga, 2018*

Household source of income	Case	Control	Total
Regular salary of household members	51.5	55.1	<b>54.1</b>
Income form own business	8.8	7.8	<b>8.1</b>
Sale of produce (crops, fish, handicrafts, etc)	43.5	46.2	<b>45.5</b>
Rental income from land lease	0.5	0.6	<b>0.5</b>
Rental income from house rented out	1.9	1.5	<b>1.6</b>
Remittances from anyone not on HH roster	87.8	84.5	<b>85.5</b>
Pension or retirement fund	5.1	1.7	<b>2.7</b>
Other	32.5	6.8	<b>14.3</b>
None	0.0	0.0	<b>0.0</b>
<b>Total households</b>	<b>5,217</b>	<b>12,790</b>	<b>18,008</b>

Table 3.7: *Household population characteristics by age, sex and region, 2018*

Household conditions	Case	Control	Total
<b>Total population</b>	<b>32,372</b>	<b>67,227</b>	<b>99,599</b>
<b>Age</b>			
Percentage population 0-4 years	12.4	11.3	11.7
Percentage population 5-17 years	29.6	31.4	30.8
Percentage population 18-49 years	38.7	41.8	40.8
Percentage population 50+ years	19.4	15.6	16.8
<b>Region</b>			
Urban	22.8	22.7	22.7
Rural	77.2	77.3	77.3
<b>Sex</b>			
Female	47.6	48.2	48.0
Male	52.4	51.8	52.0
<b>Marital Status</b>			
<b>Total persons 15+</b>	<b>20,551</b>	<b>43,411</b>	<b>63,962</b>
Never married	33.5	36.2	35.3
Legally Married	52.2	54.5	53.7
De-facto or consensual marriage	0.9	1.0	0.9
Widowed	11.0	6.6	8.1
Separated	1.4	0.9	1.0
Divorced	1.0	0.8	0.9
Other	0.0	0.0	0.0

The table shows that 11.0 percent of persons in case households are widowed, compared to 6.6 percent for control households, whilst 1.4 percent of people in case households are separated compared to 0.9 percent in control households.

### 3.7 Other social and economic characteristics

Table 3.G shows other population characteristics that were collected in the survey and similar to other characteristics, there is not much difference in proportion between the case and control households. They have similar proportional distribution in the religion they belong to and birth registration, but interesting to note that most people do not have life or health insurance in Tonga.

Table 3.9: *Household population by other social and economic characteristics, Tonga, 2018*

Household by other social and economic characteristics	Case	Control	Total
<b>Total</b>	<b>32,372</b>	<b>67,227</b>	<b>99,599</b>
<b>Religion</b>			
Free Wesleyan Church (FWC)	34.6	35.7	35.4
Roman Catholic (RC)	16.9	15.8	16.2
Latter Day Saint (LDS)	19.1	18.4	18.6
Free Church of Tonga (FCOT)	12.8	11.6	12.0
Church of Tonga (COT)	6.2	7.5	7.1
Tokaikolo / Maamafo'ou	1.3	1.2	1.2
Mo'ui Fo'ou 'ia Kalaisi	0.9	0.4	0.5
Anglican Church (AC)	0.3	0.3	0.3
Seventh Day Adventist (SDA)	1.5	1.5	1.5
Assembly of God (AOG)	2.6	3.0	2.9
Constitutional Church of Tonga (CCOT)	0.8	0.4	0.6
Gospel Church	0.2	0.3	0.3
Bahai Faith	0.6	0.6	0.6
Buddhist	0.0	0.1	0.1
The Salvation Army	0.3	0.1	0.2
Jehovah's Witnesses	0.3	0.7	0.6
Other Pentecostal Denomination	1.3	1.8	1.6
Others	0.3	0.5	0.4
<b>Life or health insurance</b>			
Family assurance	0.6	1.1	1.0
Dominion Insurance	0.1	0.3	0.3
Paradise First Insurance	0.0	0.0	0.0
SPBD	1.0	0.8	0.9
Others	0.6	0.7	0.7
<b>Birth certificate</b>			
Yes - has a certificate with proof of certificate	47.4	51.4	50.1
Yes - has a certificate with no proof of certificate	52.3	48.4	49.7
Not registered and no certificate	0.3	0.2	0.2

## Chapter 4

# EDUCATION

### 4.1 School attendance

Information on education was collected from individuals aged 3 years and older, which include ever attended school, highest level of schooling attended, highest grade completed and reasons for not attending school or dropping out of school.

Out of the estimated total population of 93,387 persons aged 3 years and above, 94.0 percent has ever attended school, either they are currently attending, have completed or dropped out of school. This consists of 94.0 percent females and 93.9 percent males.

Table 4.1 (page 35) compares school attendance for persons with and without disability, with 6.6 percent of those with disability currently attending school, compared to 38.3 percent without disability. For those who have completed school between the two groups, there were 24.2 percent persons with disability compared to 25.4 percent without disability. For the category for those who have dropped out of school, 61.2 percent were recorded for those who have disabilities whilst 30.4 percent recorded for those without, whereas, 8.1 percent of persons with disability have never attended school, compared to 5.8 percent without disability.

Similar trends could also be found in comparing males and females between each group. For those who have dropped out of school, females with disabilities recorded 64.0 percent and 30.0 percent males, compared to 58.3 percent and 30.9 percent respectively for those without disabilities. Same trend happens for those currently attending school where there were 4.6 percent females with disabilities compared to 36.7 percent without disability, whereas, there were 8.6 percent males with disabilities compared to 40.1 percent without disability. 8.2 percent females with disabilities never attended school compared to 5.8 percent without disability, whilst there were 8.0 percent males with disabilities compared to 5.9 percent respectively.

Table 4.2 (page 36) provides information for those who have ever attended school, including those currently attending, who have completed school or those who have dropped out of school. Comparison between the two groups within the age groups shows that those in age group 3-4, 0.4 percent persons with disability have attended

Table 4.1: *Percentage of population aged 3 years and above by school attendance, Tonga, 2018*

School attendance	No functional difficulty			With functional difficulty			Total		
	M	F	T	M	F	T	M	F	T
Currently attending	40.1	36.7	<b>38.3</b>	8.6	4.6	<b>6.6</b>	37.5	34.3	<b>35.9</b>
Completed school	23.1	27.4	<b>25.4</b>	25.1	23.2	<b>24.2</b>	23.3	27.1	<b>25.3</b>
Dropped out of school	30.9	30.0	<b>30.4</b>	58.3	64.0	<b>61.2</b>	33.1	32.5	<b>32.8</b>
Never attended	5.9	5.8	<b>5.8</b>	8.0	8.2	<b>8.1</b>	6.1	6.0	<b>6.0</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

school compared to 1.3 percent for those without disability. At age 5-17, 6.6 with disability have attended school (36.1 percent without disability) whilst at age 18-24, 4.4 percent with disability attended compared to 14.2 percent without disability.

Those in the age group 25-49 recorded 30.5 percent with disability compared to 32.6 percent without disability, whereas those aged 50 years and above recorded proportional occurrences of 58.2 percent for persons with disability to 15.8 percent without disability.

Looking at the area, there is not much disparity in between urban and rural areas but breakdown by islands shows some disparity between the islands. Vava'u shows not much disparity whilst Ha'apai, Eua and Ongo Niua shows disparity in the school attendance.

Table 4.2: *Percentage population aged 3 years and above who have ever attended school by age group, sex and region, Tonga, 2018*

Characteristic	No functional difficulty			With functional difficulty			Total		
	M	F	T	M	F	T	M	F	T
<b>Age group</b>									
3-4	1.3	1.3	<b>1.3</b>	0.7	0.1	<b>0.4</b>	1.2	1.2	<b>1.2</b>
5-17	38.9	33.5	<b>36.1</b>	7.8	5.4	<b>6.6</b>	36.5	31.4	<b>33.9</b>
18-24	14.0	14.4	<b>14.2</b>	5.2	3.5	<b>4.4</b>	13.3	13.6	<b>13.5</b>
25-49	30.2	34.8	<b>32.6</b>	34.1	26.8	<b>30.5</b>	30.5	34.2	<b>32.5</b>
50+	15.5	16.0	<b>15.8</b>	52.2	64.2	<b>58.2</b>	18.4	19.5	<b>19.0</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Area</b>									
Urban	23.2	22.9	<b>23.0</b>	20.6	22.3	<b>21.5</b>	23.0	22.8	<b>22.9</b>
Rural	76.8	77.1	<b>77.0</b>	79.4	77.7	<b>78.5</b>	77.0	77.2	<b>77.1</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Region</b>									
Tongatapu Urban	23.2	22.9	<b>23.0</b>	20.6	22.3	<b>21.5</b>	23.0	22.8	<b>22.9</b>
Tongatapu Rural	51.6	51.7	<b>51.6</b>	48.4	45.3	<b>46.9</b>	51.3	51.2	<b>51.2</b>
Vava'u	13.3	13.8	<b>13.6</b>	13.9	13.1	<b>13.5</b>	13.4	13.8	<b>13.6</b>
Ha'apai	5.7	5.7	<b>5.7</b>	10.7	11.0	<b>10.9</b>	6.1	6.1	<b>6.1</b>
'Eua	4.9	4.7	<b>4.8</b>	5.5	7.7	<b>6.6</b>	5.0	4.9	<b>4.9</b>
Ongo Niua	1.2	1.2	<b>1.2</b>	0.8	0.6	<b>0.7</b>	1.2	1.2	<b>1.2</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Table 4.3 (page 37) shows those currently attending school in single years from 3 to 24 years, and it is interesting to note that school attendance for children with disability aged 3-11 is higher than those without disabilities, although rates for all children are low, possibly because the survey was conducted during the school holidays when children were not attending school. However, the general trend is that as age increases the proportion those with disability attending decreases.

Table 4.4 (page 38) provides information on reasons for never attending school, with results showing that persons with disability were not attending because of their illness or disability (78.6 percent compared to 0.5 percent without disability), more likely to be less interested in school than those without disability; or they were not attending because they were needed to help at home with 0.7 percent stating that they have to help at with household activities.

Similar to the previous table, Table 4.5 (page 38) shows those who have dropped out of school and reasons for dropping out. Results show that 23.7 percent of persons with disability dropped out of school to help at home with household activities, compared to 21.7 percent without disability. The disparities between the groups of those with and without disability include persons with disability being more likely to have dropped out because of their illness or disability, helping at home as well as problems to do with access including that the school is too far, that they didn't like the school environment; as well as issues of serious concern related to being bullied and because of corporal punishment.



Table 4.3: *Population aged 3 - 24 years currently attending school, Tonga, 2018*

Single Age	No functional difficulty			With functional difficulty			Total		
	M	F	T	M	F	T	M	F	T
3 years	0.6	1.0	<b>0.8</b>	4.2	0.0	<b>2.7</b>	0.7	1.0	<b>0.8</b>
4 years	2.4	2.4	<b>2.4</b>	4.2	1.2	<b>3.1</b>	2.4	2.4	<b>2.4</b>
5 years	5.7	5.7	<b>5.7</b>	3.9	10.4	<b>6.1</b>	5.7	5.8	<b>5.7</b>
6 years	7.5	7.3	<b>7.4</b>	4.6	8.6	<b>6.1</b>	7.5	7.3	<b>7.4</b>
7 years	7.5	7.2	<b>7.3</b>	8.1	7.4	<b>7.9</b>	7.5	7.2	<b>7.3</b>
8 years	9.1	6.9	<b>8.0</b>	26.1	11.7	<b>20.7</b>	9.4	6.9	<b>8.2</b>
9 years	7.1	5.9	<b>6.5</b>	8.8	7.4	<b>8.5</b>	7.1	5.9	<b>6.5</b>
10 years	7.6	7.3	<b>7.5</b>	7.1	14.1	<b>9.7</b>	7.6	7.4	<b>7.5</b>
11 years	6.9	6.5	<b>6.7</b>	9.9	4.3	<b>7.9</b>	7.0	6.5	<b>6.7</b>
12 years	7.5	7.6	<b>7.5</b>	1.4	5.5	<b>3.1</b>	7.4	7.6	<b>7.5</b>
13 years	6.6	6.6	<b>6.6</b>	3.2	4.9	<b>4.0</b>	6.5	6.5	<b>6.5</b>
14 years	6.2	6.1	<b>6.1</b>	4.6	3.1	<b>4.0</b>	6.2	6.0	<b>6.1</b>
15 years	7.1	7.4	<b>7.3</b>	2.1	3.7	<b>2.9</b>	7.1	7.4	<b>7.2</b>
16 years	4.5	5.3	<b>4.9</b>	2.1	8.6	<b>4.5</b>	4.5	5.4	<b>4.9</b>
17 years	4.6	5.0	<b>4.8</b>	1.1	1.8	<b>1.3</b>	4.6	5.0	<b>4.8</b>
18 years	3.7	4.4	<b>4.1</b>	3.2	4.9	<b>3.6</b>	3.7	4.4	<b>4.0</b>
19 years	2.2	2.0	<b>2.1</b>	1.8	0.6	<b>1.3</b>	2.2	2.0	<b>2.1</b>
20 years	1.2	1.9	<b>1.6</b>	0.4	0.6	<b>0.4</b>	1.2	1.9	<b>1.5</b>
21 years	1.0	1.5	<b>1.2</b>	1.4	0.0	<b>0.9</b>	1.0	1.5	<b>1.2</b>
22 years	0.4	1.0	<b>0.7</b>	0.0	0.0	<b>0.0</b>	0.4	1.0	<b>0.7</b>
23 years	0.4	0.5	<b>0.5</b>	0.0	0.0	<b>0.0</b>	0.4	0.5	<b>0.5</b>
24 years	0.1	0.4	<b>0.3</b>	0.7	1.8	<b>1.1</b>	0.1	0.5	<b>0.3</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## 4.2 Highest level of schooling attended

Table 4.6 (page 39) provides information on persons aged 3 years and above and the highest level of schooling they have attended. Results show the disparity between persons with and without disability as it can be seen that 8.1 percent of persons with disability have never attended school, compared to 5.8 percent without disability. 66.5 percent persons with disabilities have attended secondary school, compared to 59.3 percent without disabilities. Those that have attended technical and vocation school recorded 5.8 percent for persons with disability compared to 9.0 percent without disability. The same trend could be seen between males and females.

Table 4.7 (page 39) shows statistics on those persons aged 3 years and over living in case and control households and their highest level of school attended. There are differences between case and control households in lower levels of education, with 7.6 percent of people living case households have never been to school, compared with 5.3 percent in control households. However, for pre-school, primary and lower secondary case households had slightly higher rates at 1.8 percent (1.6 in control), 20.2 percent (17.7 in control) and 30.2 percent (29.5 percent in control) respectively. The opposite trend happens in the upper secondary, technical and vocational and university attainment where those in control households recorded higher proportions than the case households.

## 4.3 School accessibility, adaptation, needs, participation and perspective for persons aged 5 years and over with disability

Table 4.8 (page 39) provides responses from persons with disability about education accessibility, showing that 62.4 percent viewed that their disability affected or limited their access to education; with 21.5 percent stating that due to their disability they had to stop their education sooner than they wanted; although a high proportion stated that their disability didn't stop their education; possibly because they intended to only complete primary

Table 4.4: *Population aged 3 years and older who had never attended school by main reason, Tonga, 2018*

Reasons for never attending school	No functional difficulty			With functional difficulty			Total		
	M	F	T	M	F	T	M	F	T
No school/ school is too far	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1
Not able to obtain school supplies and uniforms	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.1
Could not obtain tuition fee	0.2	0.6	0.4	0.0	0.7	0.3	0.1	0.6	0.4
No dormitory available at school	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.2	0.1
Myself not interested in school	1.0	0.5	0.8	0.7	2.0	1.4	1.0	0.7	0.8
Help at home with household activities and in the farm	0.1	0.0	0.0	1.4	0.3	0.7	0.2	0.0	0.1
Family does not allow schooling	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.1	0.2
Illness/ Disabled	0.8	0.2	0.0	74.9	82.2	78.6	8.8	8.5	8.6
No Birth Certificate	0.6	0.2	0.4	0.0	0.0	0.0	0.5	0.1	0.3
Too Young	96.3	98.0	97.2	23.4	14.8	19.0	88.5	89.4	89.0
Other	0.7	0.0	0.3	0.0	0.0	0.0	0.6	0.0	0.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Table 4.5: *Population aged 3 years and older who dropped out of school by main reason, Tonga, 2018*

Reasons for dropping out from school	No functional difficulty			With functional difficulty			Total		
	M	F	T	M	F	T	M	F	T
Not like school's environment	5.7	4.2	4.9	4.5	6.0	5.3	5.6	4.5	5.0
School is too far	2.3	2.0	2.2	3.1	4.0	3.6	2.4	2.3	2.4
Not able to obtain school supplies and uniforms	1.1	1.4	1.3	1.7	1.1	1.4	1.2	1.4	1.3
Could not obtain tuition fee	17.4	21.1	19.3	15.3	18.3	16.8	17.1	20.7	18.9
Underachiever/not interested in school	35.7	32.8	34.2	26.2	22.9	24.4	34.3	31.4	32.8
Working to contribute to family income	12.0	8.2	10.0	16.3	6.0	10.9	12.6	7.8	10.2
Due to migration	1.6	2.2	1.9	0.8	1.6	1.2	1.5	2.1	1.8
Dormitory is not available	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Help at home with household activities and in the farm	20.5	22.9	21.7	20.1	26.9	23.7	20.4	23.5	22.0
Family does not allow schooling	0.3	0.6	0.5	0.3	0.9	0.6	0.3	0.7	0.5
Illness	0.9	2.4	1.7	3.7	5.5	4.7	1.3	2.9	2.1
Disabled	0.1	0.0	0.1	4.7	3.4	4.0	0.8	0.5	0.6
Bullied	0.1	0.0	0.1	0.5	0.1	0.3	0.2	0.1	0.1
Corporal punishment	0.4	0.1	0.2	0.8	0.5	0.7	0.5	0.1	0.3
Others	1.6	2.1	1.9	2.0	2.9	2.5	1.7	2.2	2.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

school. Persons with disabilities in rural areas were more deprived of access to education than those in urban areas.

For those who mentioned that they have to stopped their education due to their disability (see Table 4.8 on page 39), Table 4.9 (page 39) shows that 14.8 percent stated that finance issues was the reason for stopping education; 13.1 percent were due to lack of education information and 12.0 percent stated they were just not interested in learning. However, 37.3 percent had reasons other than those listed for stopping school and other reasons for stopping school, and that could include reasons like they had completed their desired level of schooling.

Questions were asked to persons with disability on selected needs to be adopted by the school educational institutions in order for them to complete their education as well as relevant support to allow them to follow their education and exams. Information gathered from here provide information on their needs and areas where support and intervention could be aligned. It could be clearly seen in Table 4.10 (page 40) that the majority of them stated the need for the adaptation of harmonising the transport services, whereas in the area for support, majority indicated having personal computer, personal assistant and talking books as their need for support.

Children aged 5-17 years of age were asked extra questions about what they think equity and equality in access to and participation in education. Table 4.11 (page 40) shows that 34.0 percent agreed that everyone should go to the same school, irrespective of their status; with 66.0 percent disagreeing, possibly implying their preference for special schools for children with disability. There were 78.2 percent who agreed that children from different ethnicities and castes should access the same school whilst 84.5 percent indicated both sexes should attend the same school.

Table 4.6: Percentage of population aged 3 years and older by highest level of school attended, Tonga, 2018

Highest Level of school attended	No functional difficulty			With functional difficulty			Total		
	M	F	T	M	F	T	M	F	T
Never Attended	5.9	5.8	5.8	8.0	8.2	8.1	6.1	6.0	6.0
Pre-school	1.8	1.8	1.8	1.0	0.1	0.5	1.7	1.7	1.7
Primary	20.7	17.3	19.0	12.1	14.6	13.3	20.0	17.1	18.5
Secondary	57.6	60.9	59.3	65.9	67.1	66.5	58.3	61.3	59.9
Technical and Vocational	9.3	8.7	9.0	5.6	6.0	5.8	9.0	8.5	8.7
University	4.7	5.4	5.1	4.4	3.3	3.8	4.6	5.3	5.0
Special school	0.0	0.0	0.0	2.9	0.7	1.8	0.2	0.0	0.1
Other (specify)	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Table 4.7: Percentage population aged 3 years and above by school attainment, Tonga, 2018

Background characteristics	Never been to school	Pre-school	Primary	Lower secondary	Upper secondary	Technical and Vocational	University	Special school	Other	Total
<b>Case</b>										
<b>Sex</b>										
Male	7.8	2.1	21.5	30.5	26.1	7.8	3.5	0.7	0.0	100.0
Female	7.4	1.6	19.1	30.0	30.6	7.1	4.0	0.2	0.1	100.0
<b>Region</b>										
Urban	7.3	2.7	18.1	21.4	31.9	11.9	6.1	0.3	0.1	100.0
Rural	7.6	1.6	20.9	32.8	27.5	6.1	3.0	0.5	0.0	100.0
<b>Age group</b>										
3-4	81.6	18.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	100.0
5-17	3.9	2.1	53.7	30.6	8.3	0.7	0.0	0.7	0.1	100.0
18-49	2.1	0.0	2.0	25.7	47.6	15.5	6.6	0.5	0.0	100.0
50+	0.9	0.0	11.9	48.2	30.0	4.0	4.8	0.0	0.0	100.0
<b>TOTAL CASE</b>	<b>7.6</b>	<b>1.8</b>	<b>20.2</b>	<b>30.2</b>	<b>28.5</b>	<b>7.4</b>	<b>3.7</b>	<b>0.4</b>	<b>0.1</b>	<b>100.0</b>
<b>Control</b>										
<b>Sex</b>										
Female	5.2	1.5	19.4	31.2	27.9	9.6	5.2	0.0	0.0	100.0
Male	5.3	1.7	16.2	27.8	33.9	9.2	5.9	0.0	0.0	100.0
<b>Region</b>										
Urban	4.2	1.9	15.3	21.7	33.9	14.5	8.3	0.0	0.1	100.0
Rural	5.6	1.5	18.4	31.7	30.1	7.8	4.7	0.0	0.0	100.0
<b>Age group</b>										
3-4	79.2	20.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1	100.0
5-17	2.7	1.5	48.7	34.7	11.5	0.9	0.0	0.0	0.0	100.0
18-49	0.1	0.0	0.5	24.5	47.9	17.4	9.6	0.0	0.0	100.0
50+	0.2	0.0	7.3	41.7	35.2	7.8	7.7	0.0	0.0	100.0
<b>TOTAL CONTROL</b>	<b>5.3</b>	<b>1.6</b>	<b>17.7</b>	<b>29.5</b>	<b>31.0</b>	<b>0.9</b>	<b>5.6</b>	<b>0.0</b>	<b>0.0</b>	<b>100.0</b>

Table 4.8: Population aged 5 years and older with difficulty by education accessibility, Tonga, 2018

Education accessibility	Urban	Rural	National
Disability affect or limit access to education	54.5	64.3	62.4
Disability does not affect or limit access to education	45.5	35.7	37.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Stop his/her education sooner than he/she wanted due to disability	27.0	20.4	21.5
Does not stop his/her education sooner than he/she wanted due to disability	73.0	79.6	78.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Table 4.9: Population aged 5 years and older with difficulty by reasons for stopping education, Tonga, 2018

Reasons for stopping	Urban	Rural	National
Transport is inadequate and insufficient	0.0	1.6	1.3
Buildings and equipment is not appropriate and not adapted to the needs	0.0	0.2	0.1
School does not provide personal assistant and educational support needed	5.0	7.3	6.8
Not interested in learning	12.8	11.8	12.0
People and family's negative attitude	5.1	4.3	4.5
Lack of family support	4.3	11.5	10.0
Finance issues	6.0	17.1	14.8
Lack of education information	7.1	14.7	13.1
Other	59.8	31.4	37.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Table 4.10: Population aged 5 years and older with disability by needs and region, Tonga, 2018

Tools	Urban			Rural			National		
	Does not need	Yes, need and available	Need but unavailable	Does not need	Yes, need and available	Need but unavailable	Does not need	Yes, need and available	Need but unavailable
<b>Needs to be adapted</b>									
Transportation Harmonisation	48.5	34.6	16.9	54.7	36.2	9.1	53.4	35.9	10.7
Building Harmonisation	32.1	67.4	0.5	45.6	54.2	0.2	42.7	57.0	0.3
Classrooms and Tools Harmonisation	31.1	67.7	1.2	45.2	54.6	0.2	42.2	57.4	0.4
Wheelchair or scooter	33.2	66.2	0.7	48.3	51.6	0.1	45.1	54.7	0.2
<b>Needs for support</b>									
Personal assistant	63.9	17.7	18.4	63.9	31.1	5.0	63.9	28.3	7.8
Sign language interpreter	94.0	1.7	4.3	92.8	6.2	1.0	93.1	5.2	1.7
Reading material such as a line amplifier zoom lens	93.8	2.4	3.8	91.0	7.7	1.3	91.6	6.6	1.8
Talking books	90.4	1.2	8.5	94.6	1.9	3.5	93.7	1.8	4.5
Braille	95.7	0.5	3.8	95.3	2.0	2.7	95.4	1.7	2.9
Personal computer	84.9	5.0	10.1	82.2	8.7	9.0	82.8	7.9	9.3
Logging tools or devices to take note	95.1	1.2	3.7	90.7	7.9	1.4	91.6	6.5	1.9
Others	99.6	0.0	0.4	99.8	0.1	0.1	99.8	0.1	0.1

Table 4.11: Population aged 5 to 17 years with disability and whether or not they agree with certain statements about inclusive education, Tonga, 2018

Statement	Urban		Rural		National	
	Yes	No	Yes	No	Yes	No
Children with and without disability should go to the same schools	29.8	70.2	35.1	64.9	34.0	66.0
Children from different Ethnicities or Castes should go to the same schools	86.7	13.3	75.9	24.1	78.2	21.8
Girls and boys should go to the same schools	86.5	13.5	84.0	16.0	84.5	15.5

## Chapter 5

# ACTIVITY, EMPLOYMENT AND INCOME

### 5.1 Economic activity and occupation by disability status

Table 5.1 shows that there were an estimated 63,962 persons aged 15 years and over in the survey, out of which 32.1 percent (20,551) were from the case households and 67.9 percent (43,411) from the control households.

Comparing the two types of households, 47.3 percent of control households were involved in paid work compared to 42.0 percent of case households. 8.4 percent were from the control households who were involved in unpaid work compared with 7.6 percent of case households. Case households were more likely to have people not in the labour force (49.4 percent) compared with control households (42.9 percent), due to disability, inability to work and doing home duties.

Table 5.1: Percentage population aged 15 years and over by economic activity, Tonga, 2018

Activity	Case			Control			Total		
	M	F	T	M	F	T	M	F	T
<b>Paid work</b>									
Employer	1.4	0.3	0.8	1.1	0.4	0.7	360	119	479
Self- Employed	20.0	17.2	18.5	21.7	19.4	20.5	6,310	6,386	12,696
Employee	29.7	16.8	22.8	33.0	19.9	26.1	9,541	6,459	16,000
<b>Unpaid work</b>									
Subsistence	8.5	1.9	4.9	10.4	1.5	5.7	2,916	558	3,474
Volunteer work	0.1	0.1	0.1	0.6	0.6	0.6	122	142	264
Unpaid family worker	4.3	1.1	2.5	3.2	1.2	2.1	1,059	396	1,455
<b>Unemployed</b>									
Unemployed	0.9	1.1	1.0	1.3	1.5	1.4	362	469	831
<b>Not in the Labour Force</b>									
Student	10.4	40.8	10.6	16.1	16.2	16.2	4,268	4,937	9,205
Home duties	13.2	38.9	27.1	11.5	38.3	25.7	3,588	13,129	16,717
Unable to work (retired/too old)	1.4	1.5	1.5	0.5	0.6	0.5	232	302	534
Did not pursue any activity (no work)	1.9	2.0	1.9	0.5	0.3	0.4	276	290	567
Physically/mentally disabled	8.3	8.3	8.3	0.1	0.0	0.1	813	928	1,741
<b>GRAND TOTAL</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>29,847</b>	<b>34,114</b>	<b>63,962</b>

Table 5.2 (page 42) provides further information by comparing persons with disability to those without disability for people aged 15 years and over. There were 10.3 percent (6,619) with functional difficulties compared to 89.7 percent (57,343) who have no functional difficulties.

Again, there is a trend for persons with disability to not be active in the labour force, with 30.0 percent of persons with disability involved in paid work compared to 47.4 percent for those without disability; 6.9 percent of persons with disability were involved in unpaid work compared to 8.3 percent with no disability. There were 0.7 percent

of persons with disabilities who were unemployed, compared to 1.4 percent who do not have any disability. However, 62.4 persons with disability were not in the labour force compared with 43.0 of those without disability.

Table 5.2: *Percentage population aged 15 years and over by economic activity by functional difficulty, Tonga, 2018*

Activity	No functional difficulty			With functional difficulty			Total		
	M	F	T	M	F	T	M	F	T
<b>Paid work</b>									
Employer	1.1	0.4	0.7	2.4	0.2	1.3	360	119	479
Self- Employed	21.5	19.4	20.4	18.0	12.7	15.3	6,310	6,386	12,696
Employee	33.6	20.1	26.4	19.0	8.0	13.4	9,541	6,459	16,000
<b>Unpaid work</b>									
Subsistence	10.0	1.6	5.5	8.1	1.9	5.0	2,916	558	3,474
Volunteer work	0.4	0.4	0.4	0.1	0.1	0.1	122	142	264
Unpaid family worker	3.6	1.2	2.3	3.0	0.8	1.9	1,059	396	1,455
<b>Unemployed</b>									
Unemployed	1.3	1.5	1.4	0.7	0.7	0.7	362	469	831
<b>Not in the Labour Force</b>									
Student	15.9	15.9	15.9	1.0	1.0	1.0	4,268	4,937	9,205
Home duties	11.6	38.7	26.1	15.5	36.3	26.1	3,588	13,129	16,717
Unable to work (retired/too old)	0.4	0.5	0.4	3.7	4.8	4.2	232	302	534
Did not pursue any activity (no work)	0.5	0.3	0.4	4.8	6.2	5.5	276	290	567
Physically/mentally disabled	0.1	0.0	0.1	23.8	27.4	25.6	813	928	1,741
<b>GRAND TOTAL</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>29,847</b>	<b>34,114</b>	<b>63,962</b>

Table 5.3 (page 42) provides data on occupation for those in paid and unpaid work by disability status, illustrating that 35.3 percent of persons with disabilities were involved in skilled agriculture, livestock, forestry and fisheries occupations, notably men, compared with 26.2 percent of those with no disability. Women with disability who work are most likely to be working in craft and related trades occupations. There were 12.8 percent persons without disability in professional occupations compared to 10.4 percent with disability, whereas in the clerical support workers category, 5.3 percent were those without disability compared to 2.3 percent with disability.

Table 5.3: *Percentage population aged 15 years and over by economic activity by functional difficulty, Tonga, 2018*

Occupation	No functional difficulty			With functional difficulty			Total		
	M	F	T	M	F	T	M	F	T
Legislators and managers	3.7	3.2	3.4	4.3	2.9	3.8	296	898	1,194
Professionals	10.4	16.2	12.8	9.9	11.5	10.4	1,108	3,240	4,348
Technicians/associate professionals	5.7	6.0	5.8	4.1	3.8	4.0	474	1,484	1,958
Clerical support workers	2.2	9.6	5.3	0.5	6.1	2.3	537	1,203	1,741
Service and sales workers	8.3	15.7	11.4	7.5	10.7	8.5	1,222	2,618	3,841
Skilled agriculture, livestock, forestry & fisheries	43.9	1.3	26.2	51.3	2.1	35.3	2,740	6,493	9,232
Craft, related trade workers	11.5	43.8	24.9	9.2	59.3	25.5	2,726	5,842	8,569
Plant and Machine Operators and Assemblers	4.0	0.6	2.6	4.8	0.4	3.4	273	639	912
Elementary occupation	9.0	3.3	6.6	7.2	2.9	5.8	698	1,551	2,249
Armed force	1.3	0.5	0.9	1.2	0.3	0.9	121	205	325
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>10,195</b>	<b>24,173</b>	<b>34,368</b>

Table 5.4 (page 43) provides information on persons with disability in paid and unpaid work and the hours worked in the past 7 days. Results shows that 27.0 percent worked a 'standard' work week between 40-49 hours, followed by those who worked between 50-59 hours (19.7 percent) and 60-69 hours (18.3 percent). There were 1,011 who were self-employed followed those who were working as an employee in the private sector (550).

Respondents who had left work or had not worked because of their disability were asked to give the reasons why. This question was only asked to those who were not in the labour force, and respondents were able to select more than one reason why they were not working. Table 5.5 (page 43) shows of the 1,173 persons in this group, 52.2 percent (612) were females and 47.8 percent (561) males. Most respondents were from rural areas, 73.4 percent (861) compared to urban areas, 26.7 percent (331). Most of them, 82.3 percent stated their reason of leaving or

Table 5.4: *Population aged 15 years and older with disability by type of activity by hours worked in the last 7 days, Tonga, 2018*

Activity	Hours worked									
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	Missing	Total
Employer	0.4	0.0	0.0	4.8	40.5	39.3	2.4	14.3	0.0	<b>84</b>
Self- Employed	1.1	0.0	3.1	23.9	27.7	15.0	16.2	9.9	3.1	<b>1,011</b>
Employee in public sector	0.0	0.0	0.0	4.5	28.1	27.2	27.8	12.2	0.0	<b>335</b>
Employee in NGO & International Agencies	0.0	0.0	0.0	33.3	66.7	0.0	0.0	0.0	0.0	<b>3</b>
Employee in private sector	0.2	0.0	1.1	9.1	23.1	20.4	31.6	12.5	1.8	<b>550</b>
Subsistence	3.4	0.0	18.3	17.7	24.4	17.1	3.7	1.5	14.0	<b>328</b>
Unpaid family worker (family business)	0.0	0.0	14.5	20.2	32.3	29.8	0.0	2.4	1.6	<b>124</b>
Volunteer work 33.3 0.0 0.0 50.0 16.7 0.0 0.0 0.0 16.7 6	33.3	0.0	0.0	50.0	16.7	0.0	0.0	0.0	16.7	<b>6</b>
<b>Total</b>	<b>1.0</b>	<b>0.0</b>	<b>4.7</b>	<b>16.3</b>	<b>27.0</b>	<b>19.7</b>	<b>18.3</b>	<b>9.4</b>	<b>3.7</b>	<b>2,443</b>

not working was that the work was not suitable for their difficulty or disability, followed by 78.3 percent who mentioned that it was due to their health conditions and 27.7 percent who stated that the work was difficult.

The percent of females was higher than males across all reasons for not working, with the exception of the work being not suitable for their disability, with 79.2 percent stating that work is not suitable for their disability, compared to 85.6 of males.

Table 5.5: *Population aged 15 years and older with disability who are not working or leaving work by reasons, Tonga, 2018*

Reasons for leaving work or not working	Male			Female			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Transportation is inconvenient	4.8	3.6	<b>3.9</b>	2.4	6.7	<b>5.6</b>	3.5	5.2	<b>4.7</b>
Working environment is not adaptable	0.7	6.0	<b>4.8</b>	1.2	11.0	<b>8.3</b>	1.3	8.6	<b>6.6</b>
Isolation and discrimination of the employer and colleagues	0.7	2.7	<b>2.3</b>	0.0	4.7	<b>3.6</b>	0.6	3.8	<b>3.0</b>
Work is difficulty	6.8	33.3	<b>26.4</b>	5.4	37.9	<b>28.9</b>	6.1	35.5	<b>27.7</b>
Cannot adapt	2.7	24.4	<b>18.5</b>	4.2	28.0	<b>21.6</b>	3.2	26.2	<b>20.1</b>
Health condition	66.0	81.6	<b>77.5</b>	78.3	79.4	<b>78.9</b>	72.5	80.3	<b>78.3</b>
Work is not suitable for my difficulty/disability	77.6	88.4	<b>85.6</b>	68.1	83.2	<b>79.2</b>	72.5	85.7	<b>82.3</b>
Work is out of interest	0.7	13.3	<b>10.2</b>	3.0	15.2	<b>11.9</b>	2.2	14.3	<b>11.1</b>
Other	10.2	1.0	<b>3.4</b>	8.4	0.7	<b>2.8</b>	9.3	0.8	<b>3.1</b>
<b>Total</b>	<b>147</b>	<b>414</b>	<b>561</b>	<b>166</b>	<b>446</b>	<b>612</b>	<b>313</b>	<b>861</b>	<b>1,173</b>

## 5.2 Source of income by disability status

Table 5.6 (page 44) shows 58,842 persons received some sort of income in the month before the survey, 67.2 percent (39,571) from the control households and 32.8 percent (19,271) from the case households, with 6,560 (11.1 percent) with functional difficulties. A higher proportion of control households received income in the form of salaries (32.4 percent) compared with case households (27.6 percent); selling products like food and handicrafts (25.0 percent compared to 21.8 percent in case) and overseas remittances (51.4 percent compared to 50.4 percent in case). Case households were more likely to receive social benefits, probably through the Disability Welfare Scheme, (11.3 percent compared with 4.4 percent in control) and remittances from within Tonga (41.5 percent to 36.3 percent in control). Social benefits are an income source for 29.3 percent of persons with disability, a much higher proportion than the 11.3 percent of case households recording this income source. Though half the case households (50.2%) received remittances from overseas, a slightly higher proportion, 59.0 percent of persons with disability reported this source of income, showing the importance of this income source.

Table 5.6: *Population aged 15 years and older by source of income, Tonga, 2018*

<b>Source of income</b>	<b>Case</b>	<b>Control</b>	<b>Total</b>	<b>With functional difficulty</b>
Salary & income	27.6	32.4	<b>30.8</b>	16.7
Social benefit	11.3	4.4	<b>6.7</b>	29.3
Selling products (food, handicrafts, etc.)	21.8	25.0	<b>24.0</b>	18.4
Rental (house, land, etc.)	0.5	0.6	<b>0.6</b>	1.1
Remittance - within Tonga	41.5	36.3	<b>38.0</b>	44.8
Remittance - overseas	50.2	51.4	<b>51.0</b>	59.0
Other	5.0	6.3	<b>5.9</b>	4.0
<b>Total</b>	<b>19,271</b>	<b>39,571</b>	<b>58,842</b>	<b>6,560</b>



## Chapter 6

# HEALTH CARE AND SUPPORT

### 6.1 Number of visits and health facility visited

Table 6.1 provides information about persons aged 15 years and above and their visits, or lack thereof, to a health facility or if they accessed a health service. Persons from control households comprised 74.8 percent of those who have visited or accessed a health facility between 1-4 times, compared to 69.3 percent of case household members. People living in case household were more likely to have accessed health services 5-9 times, at 15.2 percent compared to 12.3 percent from control households, whilst for those who visited between 10-19 times 4.4 percent were from case households, compared to 2.9 percent from control households. Most of them visited the Government facility.

For those who have disabilities, 56.6 percent visited between 1-4 times, followed by 25.6 percent who visited between 5-9 times, whilst 9.3 percent visited between 10-19 times.

### 6.2 Reason of visiting in the last visit

Table 6.2 (page 6.2) shows information on the reasons for the last visit to a health facility and the provider of the services. Members of case households were more likely to visit a health provider for a regular medical check-up, with 12.5 percent compared to 6.8 percent of control households, as well as other health tests or exams. Women with functional disability were more likely to have a normal medical check-up than men with disability; while

Table 6.1: Population aged 15 years and older who ever visited the health facility by number of visits and type of health facility visited, Tonga, 2018

Health Care Visit	Case	Control	Total	With functional difficulty
<b>Number of visits:</b>				
None	10.1	9.8	9.9	6.5
1-4	69.3	74.8	73.0	56.6
5-9	15.2	12.3	13.2	25.6
10-19	4.4	2.9	3.4	9.3
20-39	0.8	0.2	0.4	1.7
40+	0.1	0.0	0.1	0.3
<b>Type of health facility visited:</b>				
Government	92.7	92.2	92.4	92.6
Private	6.7	6.7	6.7	6.7
Other	0.5	1.1	0.9	0.7

Table 6.2: *Population aged 15 years and older who ever visited the health facility by main reason of visit by health provider, Tonga, 2018*

Reason for Health Care Visit	Case	Control	Total	With functional difficulty		
				Male	Female	Total
Normal medical check up	12.5	6.8	<b>8.7</b>	26.0	33.7	<b>29.9</b>
Sickness and seeking for medicine	80.6	87.9	<b>85.5</b>	67.2	60.9	<b>64.0</b>
Pregnancy test	2.4	2.1	<b>2.2</b>	0.0	0.5	<b>0.3</b>
Other health test/exam	2.3	1.7	<b>1.9</b>	4.3	3.3	<b>3.8</b>
Other reproductive health service	0.3	0.2	<b>0.2</b>	0.0	0.0	<b>0.0</b>
Other sexual health services	0.1	0.1	<b>0.1</b>	0.0	0.1	<b>0.0</b>
Other health information	1.2	0.9	<b>1.0</b>	1.7	1.2	<b>1.4</b>
Community/group health training	0.1	0.1	<b>0.1</b>	0.0	0.1	<b>0.1</b>
Other reason	0.5	0.3	<b>0.3</b>	0.8	0.2	<b>0.5</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Health provider</b>						
Doctor	92.5	93.0	<b>92.8</b>	92.9	94.3	<b>93.6</b>
Nurse	4.7	4.5	<b>4.6</b>	3.7	3.8	<b>3.8</b>
Other health personal	0.7	0.9	<b>0.8</b>	0.8	0.3	<b>0.6</b>
Other	0.0	0.0	<b>0.0</b>	0.0	0.0	<b>0.0</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

men were more likely to visit to get medicines because of sickness. However, 87.9 percent of control households visited the health facility for sickness and seeking medicine, compared to 80.6 percent from case households.

## Chapter 7

# TRANSPORT

### 7.1 Private transport use and limitations

This section provides information on private transport use by persons with and without disabilities and the limitations they have in using it. Out of the 6,527 population aged 15 years and over with functional difficulties, 57.7 percent (3,763) use private transport as a passenger only (significantly more women than men), followed by 23.8 percent (1,555) using private transport as both a driver and passenger (significantly more men than women). Functional ability does not seem to be a significant factor in transport use by men and women with little difference in proportions between those with no functional difficulties and those with functional difficulties (Table 7.1 on the next page).

Further analysis shows that out of the 6,527 persons with disabilities, 4,196 persons have no difficulty using private transport whilst 799 have some difficulties and 744 have a lot of difficulties.

Table 7.2 ( on page 49) is based on the question asking about other causes or limitations resulting in difficulty using private transport, apart from the disability or functioning difficulty. Note that it was possible to select more than one reason so the percentages are greater than 100 in the columns. Persons with functional difficulties were far more likely to cite reasons associated with difficulties getting in and out of vehicles, with 67.8 percent stating this compared to 3.4 percent of those without disability; understandably, and other ‘access’ issues including the vehicle not being harmonised to their needs, no parking for persons with disability and needing assistance from another person. Conversely, persons without disability were more likely (87.5 percent) to cite the high cost of a private car compared to 48.5 percent of persons with disability.

Women with disability were slightly more likely than men with disability to cite reasons related to access (listed above); however, men with disability were more likely than women to cite the high cost as a difficulty.

Table 7.1: Percentage of the population aged 15 years and over by use of private transport and functional difficulties, Tonga, 2018

Private Transport Use	Male				Female				Total						
	Use no trans- port	No diffi- culty	Some diffi- culty	A lot diffi- culty	Total	Use no trans- port	No diffi- culty	Some diffi- culty	A lot diffi- culty	Total	Use no trans- port	No diffi- culty	Some diffi- culty	A lot diffi- culty	Total
	No Functional Difficulties														
Do not use private transport	100.0	0.0	0.0	0.0	2,300	100.0	0.0	0.0	0.0	2,807	100.0	0.0	0.0	0.0	5,106
Use as a passenger only	0.0	96.8	2.6	0.6	8,027	0.0	96.3	3.6	0.1	15,371	0.0	96.5	3.3	0.3	23,398
Use as a driver only	0.0	97.6	2.4	0.0	2,502	0.0	97.4	2.6	0.0	1,237	0.0	97.5	2.5	0.0	3,739
Use as both driver and passenger	0.0	98.5	1.4	0.1	13,792	0.0	98.0	2.0	0.0	11,399	0.0	98.3	1.6	0.0	25,191
TOTAL	2,300	23,797	463	61	26,621	2,807	27,185	807	15	30,814	5,106	50,982	1,271	76	57,435
With Functional Difficulties															
Do not use private transport	100.0	0.0	0.0	0.0	378	100.0	0.0	0.0	0.0	410	100.0	0.0	0.0	0.0	788
Use as a passenger only	0.0	67.1	15.6	17.3	1,446	0.0	61.7	19.2	19.2	2,317	0.0	63.7	17.8	18.5	3,763
Use as a driver only	0.0	93.1	4.2	2.4	280	0.0	92.3	0.7	7.7	141	0.0	92.8	3.0	4.2	421
Use as both driver and passenger	0.0	89.8	8.1	2.1	1,122	0.0	94.8	4.7	0.4	433	0.0	91.3	7.1	1.6	1,555
TOTAL	378	2,238	328	282	3,226	410	1,958	471	462	3,300	788	4,196	799	744	6,527
Total															
Do not use private transport	100.0	0.0	0.0	0.0	2,678	100.0	0.0	0.0	0.0	3,217	100.0	0.0	0.0	0.0	5,894
Use as a passenger only	0.0	92.2	4.6	3.2	9,474	0.0	91.7	5.7	2.6	17,687	0.0	91.9	5.3	2.8	27,161
Use as a driver only	0.0	97.1	2.6	0.3	2,782	0.0	96.9	2.3	0.8	1,379	0.0	97.0	2.5	0.4	4,160
Use as both driver and passenger	0.0	97.9	1.9	0.2	14,915	0.0	97.9	2.1	0.0	11,832	0.0	97.9	2.0	0.1	26,746
GRAND TOTAL	2,678	26,036	792	343	29,847	3,217	29,143	1,278	477	34,114	5,894	55,178	2,070	820	63,962

Table 7.2: Population aged 15 years and over with disability reporting difficulty in using private transportation by reasons, Tonga, 2018

Reasons of Difficulty of Using Private Transportation	No functional difficulty			With functional difficulty			Total		
	M	F	T	M	F	T	M	F	T
Difficulty to climb in and out of the car	2.3	4.2	3.4	61.5	72.5	67.8	18.7	24.3	21.9
The car is not available when needed	20.3	22.2	21.4	17.3	25.7	22.2	19.5	23.2	21.6
Lack of harmonization of private car	7.4	9.2	8.4	12.8	17.5	15.5	8.9	11.6	10.5
No parking vehicles of persons with disability	0.4	1.5	1.0	26.1	30.3	28.6	7.5	9.9	8.9
Need assistance from another person	7.0	10.5	9.0	59.6	66.3	63.4	21.5	26.9	24.6
High cost of a private car	87.6	87.4	87.5	51.1	46.7	48.5	77.4	75.5	76.3
Other	8.6	6.4	7.4	9.1	5.4	6.9	8.8	6.1	7.2
<b>Total</b>	<b>2,459</b>	<b>3,131</b>	<b>5,590</b>	<b>942</b>	<b>1,304</b>	<b>2,247</b>	<b>3,402</b>	<b>4,435</b>	<b>7,837</b>

## 7.2 Use of Public transport

This section briefly describes information related to public transport use by people with and without functional difficulties and, similar to the previous section, will only make an analysis about those with functional difficulties. Table 7.3 ( on the next page) shows that out of the 6,527 persons with functional difficulties, 10.3 percent (675) stated that they used the bus only, followed by 9.5 percent (619) who indicated that they used both bus and taxi and 8.2 percent (535) used taxi only. The rest, 72.0 percent (4,697) do not use any public transport.

Analysis on sex disaggregation show that females with functional difficulties used the public transport more than males except for those who used both bus and taxi where there were more males.

Similarly, to the previous table, out of the 6,527 persons with disability, 1,251 have no difficulty using public transport, whereas, 423 have some difficulty and 155 have a lot of difficulty using the public transport service.

Table 7.4 on page 51 compares difficulties in using public transport between persons with and without disability. Given the constraints discussed above, it is not surprising that almost three times as many persons with functional difficulty had difficulty in accessing the bus service than those without functional difficulties (39.8 percent compared with 14.3 percent), along with challenges associated with boarding and disembarking from the means of transportation.

A higher proportion of persons with functional difficulty did not know how to use transportation than those without functional difficulty (12.7 percent compared with 6.7 percent), more women than men, implying that they were not aware if or how they could use public transport, or perhaps that there was no public transport available to them. The survey results show broader issues for all people using public transport in terms of access to public transport, its reliability, the service not being adjusted to needs and the affordability of it.

Table 7.3: Percentage of population aged 15 years and over by public transport use, sex and limitations, Tonga, 2018

Using Public Transport	Male				Female				Total						
	Use no trans- port	No diffi- culty	Some diffi- culty	A lot diffi- culty	Total	Use no trans- port	No diffi- culty	Some diffi- culty	A lot diffi- culty	Total	Use no trans- port	No diffi- culty	Some diffi- culty	A lot diffi- culty	Total
	No Functional Difficulties														
Do not use public transport	100.0	0.0	0.0	0.0	14,490	100.0	0.0	0.0	0.0	16,575	100.0	0.0	0.0	0.0	31,064
Bus only	0.0	94.2	5.6	0.3	6,394	0.0	94.1	5.9	0.0	7,173	0.0	94.1	5.7	0.1	13,567
Taxi only	0.0	85.1	14.8	0.1	1,033	0.0	80.3	19.6	0.1	1,692	0.0	82.1	17.8	0.1	2,725
Both bus and taxi	0.0	87.1	12.9	0.0	4,705	0.0	88.3	11.5	0.2	5,374	0.0	87.7	12.2	0.1	10,079
TOTAL	14,490	10,996	1,117	0?	26,621	16,575	12,851	1,376	13	30,814	31,064	23,847	2,493	31	57,435
With Functional Difficulties															
Do not use public transport	100.0	0.0	0.0	0.0	2,265	100.0	0.0	0.0	0.0	2,433	100.0	0.0	0.0	0.0	4,697
Bus only	0.0	76.0	19.6	4.5	334	0.0	60.2	34.1	5.7	341	0.0	67.8	27.0	5.2	675
Taxi only	0.0	68.4	26.4	5.2	246	0.0	57.3	26.0	16.7	289	0.0	62.4	26.2	11.5	535
Both bus and taxi	0.0	78.0	11.6	10.4	381	0.0	71.5	22.3	6.2	237	0.0	75.4	15.7	8.8	619
TOTAL	2,265	716	176	70	3,226	2,433	535	247	85	3,300	4,697	1,251	423	155	6,527
Total															
Do not use public transport	100.0	0.0	0.0	0.0	16,754	100.0	0.0	0.0	0.0	19,007	100.0	0.0	0.0	0.0	35,761
Bus only	0.0	93.2	6.3	0.5	6,728	0.0	92.5	7.2	0.3	7,514	0.0	92.9	6.8	0.4	14,242
Taxi only	0.0	81.8	17.0	1.1	1,279	0.0	76.8	20.6	2.6	1,981	0.0	78.8	19.2	2.0	3,260
Both bus and taxi	0.0	86.4	12.8	0.8	5,086	0.0	87.5	12.0	0.4	5,612	0.0	87.0	12.4	0.6	10,698
GRAND TOTAL	16,754	11,713	1,292	88	29,847	19,007	13,386	1,623	98	34,114	35,761	25,098	2,916	186	63,962

Table 7.4: Percentage of population aged 15 years and over reporting difficulty in using public transportation by reasons and sex, Tonga, 2018

Difficulty Using Private Transportation	No functional difficulty			With functional difficulty			Total		
	M	F	T	M	F	T	M	F	T
The service is not available where I live	25.9	23.2	24.4	21.8	23.4	22.7	25.3	23.3	24.2
Unreliability of transportation service	35.3	40.7	38.3	28.4	40.3	34.8	34.3	40.6	37.8
Service is not adjusted to my needs	64.4	64.1	64.3	62.6	61.0	61.7	64.1	63.7	63.9
Do not know how to use transportation	6.2	7.1	6.7	10.0	15.0	12.7	6.8	8.3	7.6
Boarding and disembarking from the means of transportation	5.9	5.9	5.9	12.0	20.6	16.7	6.8	8.0	7.5
Difficulty to access the service	14.1	14.5	14.3	36.9	42.2	39.8	17.4	18.4	18.0
Cannot afford the cost of using public transportation	33.1	31.5	32.2	30.0	32.2	31.2	32.6	31.6	32.1
<b>Total</b>	10,852	13,246	24,098	1,871	2,215	4,086	12,723	15,462	28,185

## Chapter 8

# AWARENESS, NEEDS AND USE OF SERVICES

### 8.1 Awareness of specific services available

This section provides some information about awareness of services available to people aged 15 years and over for their uptake. Table 8.1 shows that persons with functional disability are more aware about support services for rehabilitation, assistive devices and welfare than those with no functional disability. For some services, there is not much disparity between those with and without disability, with high overall awareness. However, significant differences can be seen in vocational training where 39.7 percent of those with disabilities are aware of the service, compared to 47.2 percent for those without disabilities, with women with functional disability least likely to be aware of this service, possibly because most vocational training opportunities are for trades stereotypically the domain of men (automotive, electrical, plumbing, building etc). Persons, notably women, with functional disability are not as aware of counselling services (40.7 percent) compared with persons with no functional difficulties (44.9 percent) indicating that awareness and advocacy programmes could be more targeted.

Table 8.1: Percentage of population aged 15 years who were aware of specific services by disability status by sex, Tonga, 2018

Service	No functional difficulty			With functional difficulty			Total		
	M	F	T	M	F	T	M	F	T
Medical rehabilitation	39.0	39.0	<b>39.0</b>	42.9	44.5	<b>43.7</b>	39.5	39.6	<b>39.5</b>
Assistive devices service	43.9	45.4	<b>44.7</b>	58.3	60.2	<b>59.3</b>	45.4	46.8	<b>46.2</b>
Educational services	97.0	96.2	<b>96.6</b>	93.1	94.5	<b>93.9</b>	96.5	96.1	<b>96.3</b>
Vocational training	48.0	46.4	<b>47.2</b>	44.6	35.0	<b>39.7</b>	47.7	45.3	<b>46.4</b>
Counselling services	44.0	45.7	<b>44.9</b>	43.0	38.5	<b>40.7</b>	43.9	45.0	<b>44.5</b>
Welfare services	55.0	56.3	<b>55.7</b>	60.7	64.4	<b>62.6</b>	55.6	57.1	<b>56.4</b>
Health services	98.8	99.2	<b>99.0</b>	99.6	99.2	<b>99.4</b>	98.9	99.2	<b>99.0</b>
Traditional healer/faith healer	72.2	77.0	<b>74.8</b>	73.2	77.1	<b>75.2</b>	72.3	77.0	<b>74.8</b>
Legal services	43.9	41.5	<b>42.6</b>	46.9	40.9	<b>43.8</b>	44.2	41.4	<b>42.7</b>
Religious services	89.4	90.4	<b>89.9</b>	89.7	88.8	<b>89.2</b>	89.4	90.3	<b>89.9</b>
Sport service	60.4	57.0	<b>58.6</b>	60.4	56.1	<b>58.2</b>	60.4	56.9	<b>58.6</b>
Other	0.0	0.0	<b>0.0</b>	0.2	0.1	<b>0.1</b>	0.0	0.0	<b>0.0</b>
<b>Total</b>	<b>26,589</b>	<b>30,754</b>	<b>57,343</b>	<b>3,259</b>	<b>3,361</b>	<b>6,619</b>	<b>29,847</b>	<b>34,114</b>	<b>63,962</b>



## 8.2 Services needed and received

Questions were asked about selected services needed and the type of services they had received so far, Table 8.2 shows the different responses from persons with and without functional difficulties. It is noted that totals are different for each of the category due to the structure of the questionnaire, whereby question on the services needed was asked separately, while services needed are based awareness of services available.

Table 8.2 illustrates gaps in services needed and received by persons with functional difficulty in the areas of education and vocational training, counselling services, traditional healing and sports; with ongoing needs for medical rehabilitation, health services, assistive devices and legal services.

Table 8.2: *Percentage of population aged 15 years who were aware of services and type of services needed and received, Tonga, 2018*

Services	No functional difficulty			With functional difficulty			Total		
	M	F	T	M	F	T	M	F	T
<b>Services needed</b>									
Medical rehabilitation	7.2	6.7	<b>6.9</b>	27.6	30.0	<b>28.9</b>	4.9	9.0	<b>9.2</b>
Assistive devices service	4.1	4.5	<b>4.3</b>	42.2	49.0	<b>45.7</b>	8.3	8.9	<b>8.6</b>
Educational services	35.5	35.2	<b>35.4</b>	19.2	20.2	<b>19.7</b>	33.7	33.7	<b>33.7</b>
Vocational training	12.7	10.8	<b>11.6</b>	4.6	3.5	<b>4.0</b>	11.8	10.1	<b>10.8</b>
Counselling services for person with difficulties or family	11.6	11.9	<b>11.8</b>	10.3	7.6	<b>9.0</b>	11.4	11.5	<b>11.5</b>
Welfare services	5.6	5.1	<b>5.4</b>	21.1	30.7	<b>25.9</b>	7.3	7.7	<b>7.5</b>
Health services	90.9	91.4	<b>91.2</b>	92.6	90.5	<b>91.5</b>	91.1	91.3	<b>91.2</b>
Traditional healer/faith healer	31.4	36.3	<b>34.0</b>	34.7	39.7	<b>37.2</b>	31.7	36.6	<b>34.4</b>
Legal services	7.8	6.0	<b>6.8</b>	10.1	6.2	<b>8.1</b>	8.1	6.0	<b>7.0</b>
Religious services	75.3	76.1	<b>75.7</b>	71.8	73.6	<b>72.7</b>	74.9	75.8	<b>75.4</b>
Sports service	18.5	14.1	<b>16.1</b>	15.4	9.0	<b>12.2</b>	18.2	13.6	<b>15.7</b>
Other	0.1	0.1	<b>0.1</b>	0.1	0.1	<b>0.1</b>	0.1	0.1	<b>0.1</b>
<b>Total</b>	<b>25,961</b>	<b>30,109</b>	<b>56,070</b>	<b>3,223</b>	<b>3,309</b>	<b>6,532</b>	<b>29,184</b>	<b>33,418</b>	<b>62,602</b>
<b>Services Received</b>									
Medical rehabilitation	7.5	7.9	<b>7.7</b>	20.2	20.3	<b>20.3</b>	8.9	9.1	<b>9.0</b>
Assistive devices service	2.3	2.8	<b>2.6</b>	24.7	30.0	<b>27.4</b>	4.8	5.5	<b>5.2</b>
Educational services	90.8	90.0	<b>90.4</b>	82.3	84.9	<b>83.6</b>	89.9	89.5	<b>89.7</b>
Vocational training	18.7	15.5	<b>17.0</b>	14.1	9.4	<b>11.7</b>	18.2	14.9	<b>16.4</b>
Counselling services for person with difficulties or family	14.9	15.8	<b>15.4</b>	14.1	12.8	<b>13.5</b>	14.8	15.5	<b>15.2</b>
Welfare services	3.9	4.1	<b>4.0</b>	19.1	28.8	<b>24.0</b>	5.6	6.6	<b>6.1</b>
Health services	96.5	97.1	<b>96.8</b>	99.0	98.5	<b>98.8</b>	96.8	97.2	<b>97.0</b>
Traditional healer/faith healer	49.7	57.5	<b>53.9</b>	58.9	63.4	<b>61.2</b>	50.7	58.1	<b>54.6</b>
Legal services	12.4	9.3	<b>10.8</b>	18.4	12.2	<b>15.3</b>	13.1	9.6	<b>11.2</b>
Religious services	79.0	80.9	<b>80.1</b>	79.7	82.2	<b>81.0</b>	79.1	81.1	<b>80.2</b>
Sports service	25.2	21.0	<b>23.0</b>	21.6	19.8	<b>20.7</b>	24.9	20.9	<b>22.7</b>
Other	0.0	0.0	<b>0.0</b>	0.2	0.1	<b>0.1</b>	0.0	0.0	<b>0.0</b>
<b>Total</b>	<b>26,589</b>	<b>30,754</b>	<b>57,343</b>	<b>3,259</b>	<b>3,361</b>	<b>6,619</b>	<b>29,847</b>	<b>34,114</b>	<b>63,962</b>

## Chapter 9

# PARTICIPATION AND ACCESSIBILITY

### 9.1 Participation in activities

This section provides a detailed analysis about people aged 15 years and above and their participation in selected activities or services by comparing those with and without functional difficulties. Questions were asked about whether people had any difficulty in participating in selected activities and their responses were categorised similarly as to the functioning difficulties, which are no difficulty, some difficulty, a lot of difficulty and cannot do at all. The following analysis is based on those who have a lot of difficulty participating, which include those who stated that they have a lot of difficulty or cannot do at all, with respect to the status of their functional difficulties.

In Table 9.1, it is noted that for those persons with disabilities, 75.4 percent have stated that they have a lot of difficulty participating in community activities, compared to 17.2 percent without disabilities. There is stark disparity as well in employment with 75.0 percent with disability compared to 5.9 percent without disability. Likewise, for education with 41.4 percent to 2.5 percent respectively; household decision making with 32.4 percent to 11.8 percent and other activities with 69.3 percent to 2.4 percent. It is interesting to note that there was higher proportion of persons without disabilities able to participate in Government decision-making with 94.2 percent compared to 68.4 for those with disabilities, indicating that Government decision making could be more inclusive. There are no significant differences between men and women with functional disability and participation rates, and the disparities between those with and without functional difficulties are stark. However, it is interesting to note women with disability find it difficult to participate in household decision making than women with no functional disability.

Table 9.1: *Percentage of population aged 15 years and older who stated they have a lot of difficulty in participating in selected activities, Tonga, 2018*

Participation in:	No functional difficulty			With functional difficulty			Total		
	M	F	T	M	F	T	M	F	T
Community activities	16.6	17.6	<b>17.2</b>	74.2	76.5	<b>75.4</b>	32.9	34.3	<b>33.6</b>
Education	3.6	1.6	<b>2.5</b>	42.7	40.4	<b>41.4</b>	14.6	12.5	<b>13.5</b>
Employment	6.9	5.1	<b>5.9</b>	72.4	77.3	<b>75.0</b>	25.4	25.5	<b>25.5</b>
Household decision making	13.6	10.3	<b>11.8</b>	31.8	32.9	<b>32.4</b>	18.7	16.7	<b>17.6</b>
Government decision making	94.2	94.2	<b>94.2</b>	67.2	69.5	<b>68.4</b>	86.5	87.2	<b>86.9</b>
Other activities	3.6	1.4	<b>2.4</b>	67.7	70.6	<b>69.3</b>	21.8	21.0	<b>21.3</b>
<b>Total</b>	<b>3,576</b>	<b>4,299</b>	<b>7,875</b>	<b>1,411</b>	<b>1,695</b>	<b>3,106</b>	<b>4,988</b>	<b>5,994</b>	<b>10,982</b>

## 9.2 Accessibility to activities and services

Similar to the participation question, Table 9.2 allows comparison between those who have a lot of difficulties (a lot of and cannot do at all) and those without accessing various activities and services available to them.

There is large disparity between those with and without disabilities in term of accessing selected activities and services that are available. More persons with disability stated they have a lot of difficulties accessing the selected services like transportation (land, air and sea), education, health, community services and employment.

Table 9.2: *Population aged 15 years and older who stated they have a lot of difficulty in accessing selected activities and services, Tonga, 2018*

Access in:	No functional difficulty			With functional difficulty			Total		
	M	F	T	M	F	T	M	F	T
Community activities	39.5	41.9	<b>40.8</b>	74.7	75.3	<b>75.0</b>	56.6	59.0	<b>57.9</b>
Education	17.6	14.3	<b>15.8</b>	73.5	71.9	<b>72.6</b>	44.7	43.9	<b>44.3</b>
Employment	13.1	13.5	<b>13.3</b>	81.3	80.7	<b>81.0</b>	46.3	48.0	<b>47.2</b>
Health	1.9	2.8	<b>2.4</b>	37.5	39.6	<b>38.6</b>	19.2	21.7	<b>20.6</b>
Public transport (Land)	12.1	9.0	<b>10.4</b>	64.8	70.8	<b>68.2</b>	37.8	40.8	<b>39.4</b>
Public transport (Sea)	13.7	14.1	<b>13.9</b>	75.1	81.9	<b>78.9</b>	43.6	49.0	<b>46.5</b>
Public transport (Air)	59.2	55.4	<b>57.1</b>	68.5	71.2	<b>70.0</b>	63.7	63.5	<b>63.6</b>
Private transport	12.4	14.3	<b>13.4</b>	55.9	61.4	<b>59.0</b>	33.5	38.5	<b>36.3</b>
Other activities	4.6	1.1	<b>2.7</b>	62.2	64.5	<b>63.5</b>	32.6	33.7	<b>33.2</b>
<b>Total</b>	<b>1,359</b>	<b>1,557</b>	<b>2,916</b>	<b>1,287</b>	<b>1,646</b>	<b>2,933</b>	<b>2,646</b>	<b>3,203</b>	<b>5,849</b>

Table 9.3 provides information about the reasons why people experience difficulties participating in various activities and services, disaggregated by their disability status. It is clearly evident that people with functional disabilities face significantly larger obstacles and barriers to participate than persons without disabilities in participation. Note that persons with no difficulty include people who have ‘some difficulty’ in the domains and that is why functional disability is a reason for this group.

Table 9.4 on the following page provides information on those that have difficulties accessing services and the reasons they are not able to access these services. Significant results are shown for those persons with disabilities where they have higher proportions in people’s attitude, transport, functional difficulties, customs and traditions and gender as reasons for their difficulty in accessing the selected services. Also interesting to note that 73.3 percent of persons without disability stated people’s attitude as the reason for not accessing, compared to 59.1 percent with disabilities.

Additional questions were asked about the participation of persons with disabilities in other selected activities and responses were based on the same categories of the extended set questions – some difficulty, a lot of difficulty and cannot do at all. Respondents provided responses about each activity, making this a multiple response question, presented in Table 9.5 on the next page.

Table 9.3: *Percentage of population aged 15 years and older having difficulties in participation in activities / services by reason, Tonga, 2018*

Activities/Services	Financial	Functional difficulties	Transport	People's attitude	Unfriendly Service	Too young	Customs/tradition	Relationship	Gender	Other	Total
No Difficulty											
Community activities	51.6	47.1	19.7	85.5	90.3	66.3	46.4	15.6	37.8	91.5	<b>63.1</b>
Education	0.0	22.8	8.1	4.9	11.2	2.0	4.6	0.0	0.0	1.1	<b>3.6</b>
Employment	0.0	40.7	8.1	3.4	11.2	2.8	2.9	0.0	1.9	3.9	<b>4.0</b>
Hhld. decision making	3.2	11.3	29.4	11.0	0.0	13.2	10.6	1.9	7.5	0.0	<b>10.6</b>
Govt. decision making	99.3	70.4	100.0	89.9	86.5	93.8	95.8	91.6	79.4	50.8	<b>89.9</b>
Other activities	18.6	38.2	12.5	8.0	61.6	4.8	5.1	1.9	7.5	16.7	<b>7.9</b>
<b>TOTAL</b>	<b>32</b>	<b>92</b>	<b>77</b>	<b>795</b>	<b>31</b>	<b>1,241</b>	<b>509</b>	<b>263</b>	<b>61</b>	<b>176</b>	<b>3,284</b>
With Functional Difficulty											
Community activities	96.4	89.6	94.4	93.5	98.9	100.0	96.9	97.3	100.0	100.0	<b>91.3</b>
Education	28.5	45.0	24.7	40.2	51.1	38.5	40.3	42.0	76.1	73.6	<b>43.3</b>
Employment	62.5	84.0	63.9	76.7	78.0	72.1	69.3	62.1	76.1	85.7	<b>80.5</b>
Hhld. decision making	14.6	37.2	13.4	30.6	34.3	21.3	27.4	26.6	76.1	31.1	<b>34.1</b>
Govt. decision making	35.8	68.9	52.3	54.1	50.1	67.7	77.9	76.0	76.1	83.8	<b>65.7</b>
Other activities	53.0	80.4	68.2	81.1	78.9	76.3	80.4	76.1	96.2	91.7	<b>79.5</b>
<b>TOTAL</b>	<b>56</b>	<b>2,514</b>	<b>195</b>	<b>483</b>	<b>86</b>	<b>14</b>	<b>147</b>	<b>58</b>	<b>17</b>	<b>27</b>	<b>3,596</b>

Table 9.4: *Percentage of population aged 15 years and older having difficulties in accessing services by reason, Tonga, 2018*

Activities	Financial	Functional difficulties	Transport	People's attitude	Unfriendly Service	Too young	Customs/tradition	Relationship	Gender	Other	Total
<b>No Difficulty</b>											
Community activities	0.5	35.3	28.6	73.3	9.6	74.5	71.4	46.8	31.6	55.0	<b>38.7</b>
Education	18.2	24.5	0.4	23.4	3.3	2.2	21.2	13.0	21.1	32.9	<b>15.9</b>
Employment	2.6	26.2	21.4	6.9	0.6	26.2	10.7	15.4	8.7	7.4	<b>9.8</b>
Health	0.0	7.4	7.5	1.6	4.6	4.4	1.4	15.9	8.7	7.0	<b>2.2</b>
Land transport	4.8	35.3	16.7	6.5	17.6	7.0	16.6	8.9	64.7	14.5	<b>8.7</b>
Sea transport	10.0	38.2	2.4	1.9	20.1	3.6	0.0	0.0	0.0	0.0	<b>7.1</b>
Air transport	82.8	48.6	35.6	9.0	52.5	2.7	0.0	0.0	0.0	0.0	<b>39.6</b>
Private transport	19.4	19.4	0.2	0.6	1.4	0.0	0.0	0.0	0.0	0.0	<b>8.4</b>
Other activities	0.7	24.9	11.8	2.5	0.7	0.0	0.0	0.0	0.0	0.0	<b>1.6</b>
<b>TOTAL</b>	<b>1,902</b>	<b>125</b>	<b>65</b>	<b>888</b>	<b>232</b>	<b>935</b>	<b>433</b>	<b>37</b>	<b>13</b>	<b>129</b>	<b>4,762</b>
<b>With Functional Difficulty</b>											
Community activities	4.4	76.7	30.1	59.1	37.8	24.8	63.1	56.0	77.3	28.1	<b>56.8</b>
Education	25.3	73.8	31.2	50.1	45.0	4.8	47.8	38.6	69.8	66.7	<b>57.0</b>
Employment	5.7	82.8	31.3	51.4	50.6	31.1	41.9	27.5	70.2	63.7	<b>59.0</b>
Health	4.6	39.9	22.9	20.1	16.3	4.8	26.2	24.5	45.8	15.6	<b>28.6</b>
Land transport	24.0	70.3	41.2	42.0	43.2	10.0	56.8	36.7	66.0	38.0	<b>54.7</b>
Sea transport	46.4	79.2	51.4	38.3	35.7	20.0	0.0	0.0	0.0	0.0	<b>59.1</b>
Air transport	74.1	67.4	36.9	38.7	40.0	31.6	0.0	0.0	0.0	0.0	<b>56.0</b>
Private transport	27.9	59.1	32.3	24.5	25.4	26.9	0.0	0.0	0.0	0.0	<b>42.1</b>
Other activities	8.0	65.4	17.3	31.6	39.2	11.9	0.0	0.0	0.0	0.0	<b>42.7</b>
<b>TOTAL</b>	<b>770</b>	<b>2,783</b>	<b>439</b>	<b>707</b>	<b>219</b>	<b>25</b>	<b>218</b>	<b>61</b>	<b>28</b>	<b>64</b>	<b>5,315</b>

A high proportion of people with disability, notably women, find it very difficult to go out in public places, including participating in the election, and shopping, implying that much needs to be done to make public places, facilities for compulsory events like voting and commercial precincts accessible to people with disability.

Table 9.5: *Percentage of population aged 15 years and older with disability by level of difficulty in participation in other selected activities, Tonga, 2018*

Service	Some difficulty			A lot of difficulty			Cannot do at all			Total		
	M	F	T	M	F	T	M	F	T	M	F	T
Shopping	61.56	77.94	<b>70.27</b>	83.19	89.17	<b>86.58</b>	82.04	83.45	<b>82.82</b>	34.98	47.68	<b>41.33</b>
Travel for vacation or leave	68.25	79.41	<b>74.19</b>	74.71	86.87	<b>81.61</b>	71.16	71.03	<b>71.17</b>	32.29	44.80	<b>38.56</b>
Visit friends and family	51.25	53.43	<b>52.41</b>	57.33	73.63	<b>66.58</b>	61.66	59.59	<b>60.43</b>	25.79	36.30	<b>31.03</b>
Friends and family visiting you	33.70	37.50	<b>35.72</b>	16.52	23.30	<b>20.37</b>	15.37	14.21	<b>14.72</b>	8.92	12.87	<b>10.89</b>
Going out to public places	87.74	85.54	<b>86.57</b>	80.46	92.01	<b>87.02</b>	71.50	76.00	<b>74.00</b>	35.36	47.76	<b>41.56</b>
Participate in the election	59.05	58.33	<b>58.54</b>	61.49	73.52	<b>68.32</b>	71.33	60.83	<b>65.49</b>	28.89	37.06	<b>32.96</b>
Other	0.00	0.00	<b>0.00</b>	0.43	0.98	<b>0.68</b>	0.17	0.00	<b>0.08</b>	0.11	0.25	<b>0.16</b>
<b>Total</b>	<b>359</b>	<b>408</b>	<b>767</b>	<b>696</b>	<b>914</b>	<b>1,610</b>	<b>579</b>	<b>725</b>	<b>1,304</b>	<b>3,645</b>	<b>3,645</b>	<b>7,290</b>

# CONCLUSION AND RECOMMENDATIONS

This report reveals in-depth information on the prevalence of disability in Tonga and the characteristics of persons with disability, and those without, in terms of their access to and participation in various activities and services, including employment and civic and societal participation. The report highlights how different cut-off points in functional difficulties that policy interventions and development plans could focus on in terms of identifying not only immediate needs but also those that are imminent. Throughout the report, the analysis has been based on the conservative cut-off point of severe functional difficulties, which in this report is referred to ‘a lot of difficulty’. It is anticipated that results from this report will allow Government, NGO’s and private sectors develop appropriate policies, programmes, and budgetary resources to reduce the barriers and limitations that restricts people with disabilities have equal opportunities to services and activities.

With the different thematic areas of analysis done in this report, the following recommendations have been drawn up to provide some directions on the type of support and assistance that may be required:

## 1) Housing

- Government to provide housing scheme to ensure independent living of persons with disabilities and their families.

## 2) Education

- Review Education laws and policies to ensure school infrastructure and curricula are accessible for all, and that all communication and information materials are available in all formats
- Develop and implement policies which support disability-inclusive post-school education and training
- Ensure bilingual education for deaf children across primary, secondary and tertiary levels.
- Ensure that teacher training is inclusive of disability, including teacher-training curriculum.
- Ensure appropriate assistive device to enable children and persons with disabilities to attend school.
- Better collaboration between Ministry of Health and other organizations for screening and early detection of disability in children
- Better resourcing through the Ministry of Education to implement these recommendations.

## 3) Employment and income

- Review existing employment laws and policies to ensure that it is inclusive of persons with disabilities
- Ensure that there is economic empowerment programs for persons with disabilities.

## 4) Health care and support

- Review relevant legislation and policies to ensure that it is inclusive of persons with disabilities.
- Ensure accessibility of primary health care clinics (physical access, communication and information), including outreach services.
- Removal of communication and attitudinal barriers in the health system, including training of medical staff.

## 5) Transport

- Review relevant legislation relating to transportation (air, and and water) to ensure that it is inclusive of persons with disabilities.

## 6) Assistive products or devices.

- Appropriate assessment done and that assistive device or products is appropriate for persons with disabilities
- Assistive device that is made available to the public is affordability, of good quality and appropriate
- Training is needed for technicians and users of the assistive device

## 7) Accessibility

- Tonga needs to review all its accessibility standards To ensure that it is inclusive of persons with disabilities and that enables persons with disabilities to access all services
  - build environment – buildings, parks, airports, jetties etc
  - transport – air, land, water
  - Information, communication and technology

## 8) Awareness

- There is a need for awareness across Ministries to better understand disabilities and the services that is required under each Ministry
- Awareness raising at all levels, family, communities and national level to fight the stigma associated with disability

Based on the above thematic recommendations, the following overall recommendations are:

## 1) The allocation of adequate financial and other resources to support

- (i) the enforcement of laws protecting the rights of persons with disabilities;
- (ii) the implementation of national disability policies and plans and
- (iii) the delivery of essential services to persons with disabilities

## 2) Support the formulation and implementation of laws and policies to advance disability-inclusive development through capacity development for policymakers and other key stakeholders at the national level

## 3) Expand and develop the arm of the Disability Department in the Ministry of Internal Affairs through it budget allocation to fully coordinate and implement relevant disability programmes and plans for the improvement of the lives of the population with disabilities.

## 4) Further research and studies to identify the root causes of disparity shown in the data, especially when disaggregation by gender, regions, urban/rural, wealth status and other demographic characteristics that is available in the survey data.

# APPENDICES

## APPENDIX 1 – Sample Design

### Sample Implementation - Design and Selection

#### Frame - 2016 Population Census

Identification of the Disable and Non-Disabled Households in each geographical group from the 2016 Population Census data.

Domain	Strata 1	Strata 2
	Household with disability	Household without disability
Tongatapu Urban	858	3,231
Tongatapu Rural	2,173	6,691
Vava'u	606	2,109
Ha'apai	337	842
'Eua	208	677
Ongo Niuas	49	224
<b>Total</b>	<b>4,231</b>	<b>13,774</b>

#### Allocation of the Sample Size Strata 1

The sampling design is guided by the distribution of the disable households across the country. This step consists of allocating the desired sample size of strata 1 across the 6 island groups (2,700 households).

Domain	Strata 1	Average number of	Number of EAs
	Sample allocation	Diabled Households per EA	to select
Tongatapu Urban	660	8.1	82
Tongatapu Rural	990	9.4	105
Vava'u	525	6.9	76
Ha'apai	315	7.3	43
'Eua	190	8.7	22
Ongo Niuas	30	4.9	6

## Allocation of the Total Sample (Strata 1 and Strata 2)

Domain	Strata1 Sample allocation	Strata12 Sample allocation	Total Sample Size	Number of EAs to select
Tongatapu Urban	660	660	1,320	82
Tongatapu Rural	990	990	1,980	105
Vava'u	525	525	1,050	76
Ha'apai	315	315	630	43
'Eua	190	190	380	22
Ongo Niuas	30	30	60	6
<b>Total</b>	<b>2,710</b>	<b>2,710</b>	<b>5,420</b>	<b>334</b>

## Final Sample – After Selection

Domain	Number of Selected PSUs	Strata1 Total households	Strata12 Total households	Total households selected
Tongatapu Urban	65	668	668	82
Tongatapu Rural	74	942	942	105
Vava'u	64	530	530	76
Ha'apai	35	275	275	43
'Eua	16	176	176	22
Ongo Niuas	5	27	27	6
<b>Total</b>	<b>259</b>	<b>2,618</b>	<b>2,618</b>	<b>334</b>

Due to heterogeneity between the sizes of the blocks, some blocks were selected several times (two or three times). At the end, the actual number of selected blocks amounts to 259.

## EA Selection (Primary Sampling Units labelled as Blocks in the 2016 Tonga Population Census)

The EA were selected using Probability Proportional to Size (size means number of households with disability within the EA). Within all selected EAs, all households with disability are selected for interview and the same number of households with no disability. Households with no disability to interview in the EA were randomly selected, using Uniform Probability of Selection.

To summarise the sampling procedure:

- **Sample size** - the total number of households to be interviewed were approximately 5,500 households based on the budget allocation available.
- **Selection process** - the selection of the sample is based on different steps (as mentioned in the previous section)
- **Stratification** - this sample design is a stratified multi stage random survey. Stratification happened based on the disability status of the households and their geographical residence.
- **Stages of selection**
  - 1) The first stage of selection focussed on the selection of Enumeration Areas or Census Blocks as Primary Sampling Unit for households with disability. In total 334 PSUs have to be selected in order to cover the expected sample size.



2) The stage 2 of the selection concerns only the households with no disability as all households with disability from the selected EA are selected for interview

- **Level of representation** - the survey will provide a comparison of the status between households with and without disability at the island group level.
- **Replacement** - All non-responses were replaced according to the disability status of the household. Disable households that had to be replaced were replaced by another household with disability from the closest block.
- **Sampling frame** - The sampling frame used was the 2016 Population Census data. No additional listing was conducted.

## Deviation from Sample Design

Deviation from the original sampling plan was observed due to some challenges faced in the field. One of these challenges was to identify the selected households (that were selected from the 2016 Census Frame), especially after Cyclone Gita had hit Tonga before the field enumeration begins. Due to this, the geography and composition of households have changed and there was no household listing done to update the frame.

Due to those circumstances, the total number of households interviewed has changed.

Domain	Original Sampling Plan		Survey Achievements	
	Strata 1	Strata 2	Strata 1	Strata 2
Tongatapu Urban	660	660	692	699
Tongatapu Rural	990	990	1,023	1,035
Vava'u	525	525	556	537
Ha'apai	315	315	316	317
'Eua	190	190	171	191
Niua	30	30	61	70
<b>Total</b>	2,710	2,710	2,819	2,849

## Response Rate

It finally ended up that more households than expected were interviewed. Looking at the original plan, based on the original selection, the response rate were:

Domain	Strata 1	Strata 2	Total
Tongatapu Urban	87.0%	78.3%	<b>82.7%</b>
Tongatapu Rural	83.2%	78.9%	<b>81.1%</b>
Vava'u	93.7%	91.6%	<b>92.7%</b>
Ha'apai	83.8%	77.5%	<b>80.6%</b>
'Eua	87.4%	93.7%	<b>90.5%</b>
Niua*	193.3%	226.7%	<b>210.0%</b>
<b>Total</b>	<b>87.7%</b>	<b>83.7%</b>	<b>85.7%</b>

\* Niua had only one island planned but finally both islands were included within the selection, which explains why more households were interviewed.

On the overall, almost 86% of the selected households were interviewed (4647 households out of 5668 interviewed). The difference represents changes that happened in the field due to some households that were classified as disabled households during the census but are no longer disabled (576); and households that were classified as non-disabled households during the census who are now classified as disabled households (440 households)

The final response rate were then confirmed as shown below. Note that due to the Inclusion of all the replacements due to the changes in the HH listing, the response rate were higher than 100%.

<b>Domain</b>	<b>Strata 1</b>	<b>Strata 2</b>	<b>Total</b>
Tongatapu Urban	104.8%	105.9%	105.4%
Tongatapu Rural	103.3%	104.5%	103.9%
Vava'u	105.9%	102.3%	104.1%
Ha'apai	100.3%	100.6%	100.5%
'Eua	90.0%	100.5%	95.3%
Niua	203.3%	233.3%	218.3%
<b>Total</b>	104.0%	105.1%	104.6%

## APPENDIX 2 Sampling Error Tables

Table 9.6: Sampling Error Table A - Percentage of children aged 2-4 years with functional difficulty in at least one domain, Tonga, 2018

Sampling Error Table A												
Percentage of children aged 2-4 years with functional difficulty in at least one domain, Tonga, 2018												
	Percentage of children aged 2-4 years who have functional difficulty for the indicated domains											
	Seeing			Hearing			Walking			Fine motor		
	%	SE	95% conf interval	%	SE	95% conf interval	%	SE	95% conf interval	%	SE	95% conf interval
TONGA	0.2%	0.0013	0.00% 0.48%	0.83%	0.0025	0.3% 1.3%	0.50%	0.0016	0.18% 0.83%	0.17%	0.0007	0.03% 0.31%
<b>Sex</b>												
Male	0.1%	0.0010	0.00% 0.35%	0.50%	0.0023	0.10% 1.00%	0.66%	0.0023	0.20% 1.13%	0.19%	0.0012	0.00% 0.42%
Female	0.3%	0.0023	0.00% 0.76%	1.08%	0.0045	0.19% 1.90%	0.35%	0.0024	0.00% 0.82%	0.15%	0.0009	0.00% 0.32%
<b>Region</b>												
Tongatapu Urban	0.1%	0.0009	0.00% 0.26%	0.38%	0.0022	0.00% 0.82%	0.28%	0.0016	0.00% 0.60%	0.06%	0.0006	0.00% 0.19%
Tongatapu Rural	0.3%	0.0023	0.00% 0.76%	1.05%	0.0045	0.16% 1.95%	0.72%	0.0029	0.15% 1.30%	0.23%	0.0012	0.00% 0.47%
Vava'u	0.4%	0.0025	0.00% 0.87%	0.86%	0.0052	0.00% 1.89%	0.29%	0.0029	0.00% 0.86%	0.22%	0.0022	0.00% 0.66%
Ha'apai	0.0%			0.66%	0.0046	0.00% 1.57%	0.00%			0.00%		
'Eua	0.0%			0.95%	0.0070	0.00% 2.33%	0.00%			0.00%		
Ongo Niua	0.0%			0.00%			1.25%	0.0129	0.00% 3.79%	0.00%		
<b>Area</b>												
Urban	0.1%	0.0009	0.00% 0.26%	0.38%	0.0022	0.00% 0.82%	0.28%	0.0016	0.00% 0.60%	0.06%	0.0006	0.00% 0.19%
Rural	0.3%	0.0017	0.00% 0.60%	0.97%	0.0033	0.32% 1.62%	0.57%	0.0021	0.16% 0.98%	0.20%	0.0009	0.02% 0.38%
<b>Age</b>												
2 years	0.0%	0.0004	0.00% 0.13%	0.52%	0.0023	0.07% 0.96%	0.37%	0.0017	0.04% 0.71%	0.17%	0.0012	0.00% 0.41%
3 years	0.3%	0.0016	0.00% 0.59%	0.37%	0.0026	0.00% 0.89%	0.57%	0.0029	0.01% 1.14%	0.14%	0.0014	0.00% 0.42%
4 years	0.3%	0.0032	0.00% 0.97%	1.51%	0.0064	0.25% 2.78%	0.54%	0.0035	0.00% 1.22%	0.19%	0.0012	0.00% 0.42%
<b>Attendance to early childhood education</b>												
Attending	0.3%	0.0022	0.00% 0.70%	0.00%			0.64%	0.0049	0.00% 1.60%	0.19%	0.0019	0.00% 0.56%
Not attending	0.2%	0.0015	0.00% 0.51%	0.96%	0.0029	0.38% 1.55%	0.48%	0.0018	0.13% 0.83%	0.17%	0.0008	0.01% 0.32%
<b>Wealth index quintile</b>												
Lowest quintile	0.1%	0.0008	0.00% 0.25%	0.90%	0.0039	0.13% 1.66%	0.70%	0.0044	0.00% 1.56%	0.18%	0.0018	0.00% 0.54%
Second quintile	0.1%	0.0011	0.00% 0.33%	0.37%	0.0027	0.00% 0.90%	0.75%	0.0039	0.00% 1.52%	0.54%	0.0033	0.00% 1.18%
Middle quintile	0.0%	0.0002	0.00% 0.07%	1.60%	0.0086	0.00% 3.29%	0.21%	0.0021	0.00% 0.62%	0.00%		
High quintile	0.9%	0.0061	0.00% 2.12%	0.46%	0.0038	0.00% 1.20%	0.84%	0.0058	0.00% 1.99%	0.20%	0.0015	0.00% 0.49%
Highest quintile	0.0%			0.65%	0.0049	0.00% 1.62%	0.14%	0.0013	0.00% 0.39%	0.00%		

Table 9.7: Sampling Error Table A - cont' - Percentage of children aged 2-4 years with functional difficulty in at least one domain, Tonga, 2018

Sampling Error Table A - cont'																			
Percentage of children aged 2-4 years with functional difficulty in at least one domain, Tonga, 2018																			
Percentage of children aged 2-4 years who have functional difficulty for the indicated domains																			
	Learning			Playing			Controlling behaviour			Percentage of children with functional difficulty in at least one domain			Number of children aged 2-4 years						
	%	SE	95% conf interval	%	SE	95% conf interval	%	SE	95% conf interval	%	SE	95% conf interval	%	SE	95% conf interval				
TONGA	0.31%	0.0010	0.12%	0.50%	0.0025	0.11%	1.09%	0.70%	0.0023	0.25%	1.15%	2.20%	0.0039	1.44%	2.97%	7,735	230	7,282	8,187
Sex																			
Male	0.41%	0.0016	0.09%	0.73%	0.0051	0.14%	2.16%	1.22%	0.0046	0.32%	2.13%	2.68%	0.0063	1.45%	3.92%	3,734	158	3,423	4,044
Female	0.22%	0.0011	0.00%	0.43%	0.0006	0.00%	0.21%	0.21%	0.0011	0.00%	0.43%	1.76%	0.0053	0.72%	2.79%	4,001	178	3,651	4,351
Region																			
Tongatapu Urban	0.41%	0.0021	0.00%	0.82%	0.0065	0.00%	2.13%	1.23%	0.0068	0.00%	2.57%	2.21%	0.0076	0.72%	3.71%	1,782	81	1,623	1,940
Tongatapu Rural	0.23%	0.0012	0.00%	0.47%	0.0037	0.00%	1.33%	0.55%	0.0028	0.00%	1.09%	2.47%	0.0061	1.26%	3.67%	4,093	192	3,716	4,470
Vavau	0.37%	0.0025	0.00%	0.86%	0.0032	0.00%	1.07%	0.48%	0.0048	0.00%	1.43%	1.90%	0.0081	0.31%	3.50%	1,036	82	875	1,197
Haapai	0.86%	0.0086	0.00%	2.56%	0.0032	0.00%	0.97%	1.19%	0.0092	0.00%	3.00%	1.52%	0.0098	0.00%	3.45%	406	37	332	479
'Eua	0.00%				0.00%			0.00%				0.95%	0.0070	0.00%	2.33%	318	38	242	394
Ongo Niua	0.00%				0.00%			0.00%				1.25%	0.0129	0.00%	3.79%	101	15	71	130
Area																			
Urban	0.41%	0.0021	0.00%	0.82%	0.0065	0.00%	2.13%	1.23%	0.0068	0.00%	2.57%	2.21%	0.0076	0.72%	3.71%	1,782	81	1,623	1,940
Rural	0.28%	0.0011	0.06%	0.50%	0.0026	0.01%	1.03%	0.54%	0.0022	0.11%	0.97%	2.20%	0.0045	1.31%	3.09%	5,953	215	5,529	6,377
Age																			
2 years	0.25%	0.0016	0.00%	0.57%	0.0006	0.00%	0.18%	0.14%	0.0014	0.00%	0.42%	1.18%	0.0034	0.51%	1.86%	2,332	114	2,108	2,557
3 years	0.40%	0.0021	0.00%	0.82%	0.0046	0.00%	1.51%	0.83%	0.0033	0.18%	1.48%	2.26%	0.0065	0.98%	3.53%	2,579	136	2,311	2,847
4 years	0.27%	0.0013	0.02%	0.53%	0.0054	0.00%	2.10%	1.04%	0.0054	0.00%	2.10%	3.00%	0.0088	1.27%	4.73%	2,823	144	2,540	3,107
Attendance to early childhood education																			
Attending	0.04%	0.0004	0.00%	0.13%	0.0091	0.00%	3.09%	1.49%	0.0099	0.00%	3.44%	2.40%	0.0111	0.21%	4.58%	1,074	97	883	1,264
Not attending	0.35%	0.0011	0.13%	0.57%	0.49%	0.0025	0.98%	0.57%	0.0021	0.15%	0.99%	2.17%	0.0042	1.34%	3.00%	6,661	215	6,238	7,085
Wealth index quintile																			
Lowest quintile	0.27%	0.0020	0.00%	0.66%	1.38%	0.0087	3.10%	0.64%	0.0034	0.00%	1.30%	2.87%	0.0095	0.99%	4.75%	1,254	159	941	1,566
Second quintile	0.10%	0.0010	0.00%	0.30%	0.78%	0.0067	2.10%	1.04%	0.0072	0.00%	2.45%	2.02%	0.0083	0.39%	3.65%	1,410	97	1,218	1,602
Middle quintile	0.28%	0.0020	0.00%	0.68%	0.00%			0.44%	0.0032	0.00%	1.07%	2.32%	0.0094	0.47%	4.17%	1,913	131	1,655	2,170
High quintile	0.57%	0.0030	0.00%	1.16%	1.14%	0.0075	2.61%	1.27%	0.0077	0.00%	2.79%	2.58%	0.0102	0.56%	4.60%	1,595	105	1,387	1,803
Highest quintile	0.30%	0.0021	0.00%	0.72%	0.00%			0.17%	0.0017	0.00%	0.51%	1.30%	0.0059	0.15%	2.46%	1,564	103	1,361	1,766

Table 9.8: Sampling Error Table B - cont' - Percentage of children aged 5-17 years with functional difficulty in at least one domain, Tonga, 2018

Percentage of children aged 5-17 years who have functional difficulty for the indicated domains																
	Concentrating			Accepting change			Controlling behaviour			Making friends			Anxiety			Percentage of children with functional difficulty in at least one domain
	%	SE	95% conf interval	%	SE	95% conf interval	%	SE	95% conf interval	%	SE	95% conf interval	%	SE	95% conf interval	
<b>TONGA</b>	<b>0.64%</b>	<b>0.0016</b>	<b>0.33%</b>	<b>0.95%</b>	<b>0.53%</b>	<b>0.0016</b>	<b>0.22%</b>	<b>0.83%</b>	<b>0.56%</b>	<b>0.0016</b>	<b>0.25%</b>	<b>0.88%</b>	<b>0.54%</b>	<b>0.0015</b>	<b>0.24%</b>	<b>0.84%</b>
<b>Sex</b>																
Male	0.62%	0.0028	0.07%	1.18%	0.59%	0.0028	0.04%	1.15%	0.59%	0.0028	0.04%	1.14%	0.66%	0.0028	0.11%	1.21%
Female	0.66%	0.0014	0.38%	0.93%	0.45%	0.0012	0.21%	0.69%	0.54%	0.0014	0.27%	0.81%	0.41%	0.0010	0.20%	0.61%
<b>Region</b>																
Tongatapu Urban	0.36%	0.0012	0.13%	0.59%	0.28%	0.0010	0.07%	0.49%	0.19%	0.0009	0.02%	0.36%	0.28%	0.0010	0.09%	0.47%
Tongatapu Rural	0.74%	0.0028	0.19%	1.29%	0.54%	0.0027	0.04%	1.08%	0.53%	0.0028	0.09%	1.18%	0.64%	0.0028	0.09%	1.19%
Vara'u	0.82%	0.0034	0.14%	1.49%	0.68%	0.0032	0.04%	1.31%	0.84%	0.0034	0.16%	1.51%	0.50%	0.0020	0.10%	0.90%
Hāpapai	0.30%	0.0015	0.01%	0.59%	0.59%	0.0026	0.08%	1.10%	0.58%	0.0026	0.07%	1.09%	0.34%	0.0017	0.01%	0.68%
'Eua	0.72%	0.0036	0.00%	1.44%	1.02%	0.0046	0.11%	1.92%	1.02%	0.0046	0.11%	1.92%	1.02%	0.0046	0.11%	1.92%
Ongu Nua	0.35%	0.0028	-0.20%	0.91%	0.00%				0.00%				0.00%			
<b>Area</b>																
Urban	0.36%	0.0012	0.13%	0.59%	0.28%	0.0010	0.07%	0.49%	0.19%	0.0009	0.02%	0.36%	0.28%	0.0010	0.09%	0.47%
Rural	0.72%	0.0020	0.32%	1.11%	0.59%	0.0020	0.21%	0.98%	0.61%	0.0019	0.23%	1.05%	0.61%	0.0019	0.23%	0.99%
<b>Age</b>																
5-9	0.83%	0.0036	0.13%	1.53%	0.71%	0.0035	0.02%	1.40%	0.79%	0.0036	0.09%	1.49%	0.75%	0.0036	0.19%	1.61%
10-14	0.55%	0.0015	0.27%	0.84%	0.44%	0.0014	0.18%	0.71%	0.44%	0.0014	0.17%	0.71%	0.24%	0.0007	0.10%	0.38%
15-17	0.43%	0.0016	0.12%	0.74%	0.33%	0.0015	0.04%	0.62%	0.37%	0.0015	0.07%	0.67%	0.30%	0.0014	0.02%	0.58%
<b>School attendance</b>																
Attending	0.28%	0.0016	0.00%	0.59%	0.27%	0.0016	0.00%	0.58%	0.27%	0.0016	0.00%	0.58%	0.24%	0.0015	0.00%	0.55%
Not attending	5.76%	0.0097	3.85%	7.67%	4.24%	0.0081	2.64%	5.83%	4.80%	0.0083	2.97%	6.63%	4.71%	0.0082	2.90%	6.52%
<b>Education Level currently attending</b>																
Pre-school	0.00%				0.00%				0.00%				0.00%			
Primary	0.25%	0.0010	0.06%	0.44%	0.21%	0.0010	0.02%	0.40%	0.22%	0.0010	0.03%	0.41%	0.18%	0.0006	0.05%	0.30%
Lower secondary	0.07%	0.0004	0.00%	0.16%	0.05%	0.0003	0.00%	0.12%	0.03%	0.0002	0.00%	0.07%	0.01%	0.0001	0.00%	0.02%
Upper secondary	0.00%				0.02%	0.0002	0.00%	0.05%	0.04%	0.0003	0.00%	0.10%	0.03%	0.0003	0.00%	0.08%
Technical and Vocational	0.00%				0.00%				0.00%				0.00%			
University	0.00%				0.00%				0.00%				0.00%			
Special school	72.10%	0.1956	33.58%	110.61%	67.99%	0.2232	24.04%	111.94%	76.30%	0.1704	42.75%	100.00%	75.69%	0.1739	41.45%	109.94%
Other (specify)	14.61%	0.1388	0.00%	41.95%	14.61%	0.1388	0.00%	41.95%	14.61%	0.1388	0.00%	41.95%	14.61%	0.1388	0.00%	41.95%
<b>Wealth index quintile</b>																
Lowest quintile	0.64%	0.0023	0.18%	1.10%	0.54%	0.0020	0.14%	0.93%	0.56%	0.0023	0.12%	1.01%	0.46%	0.0019	0.09%	0.83%
Second quintile	1.05%	0.0030	0.00%	1.64%	0.78%	0.0028	0.23%	1.33%	0.85%	0.0029	0.28%	1.41%	0.68%	0.0021	0.26%	1.09%
Middle quintile	0.99%	0.0064	0.00%	2.24%	0.94%	0.0064	0.00%	2.20%	0.94%	0.0064	0.00%	2.20%	1.03%	0.0064	0.00%	2.30%
High quintile	0.47%	0.0017	0.13%	0.81%	0.33%	0.0011	0.10%	0.55%	0.39%	0.0017	0.06%	0.73%	0.41%	0.0017	0.08%	0.75%
Highest quintile	0.13%	0.0006	0.02%	0.24%	0.10%	0.0004	0.02%	0.18%	0.13%	0.0005	0.02%	0.23%	0.11%	0.0005	0.01%	0.21%
Percentage of children aged 5-17 years with functional difficulty in at least one domain, Tonga, 2018																
Percentage of children with functional difficulty in at least one domain																
Children aged 5-17 years																
					%	SE	95% conf interval	%	SE	95% conf interval	%	SE	95% conf interval	Nb	SE	95% conf interval
					<b>1.96%</b>	<b>0.0020</b>	<b>1.58%</b>	<b>2.35%</b>	<b>1.96%</b>	<b>0.0020</b>	<b>1.58%</b>	<b>2.35%</b>	<b>1.96%</b>	<b>0.0020</b>	<b>1.58%</b>	<b>2.35%</b>
					2.07%	0.0033	1.42%	2.71%	0.28%	0.0008	0.13%	0.44%	0.28%	0.0008	0.13%	0.44%
					1.85%	0.0021	1.44%	2.27%	0.29%	0.0008	0.13%	0.45%	0.29%	0.0008	0.13%	0.45%
					1.50%	0.0023	1.05%	1.95%	0.15%	0.0008	0.00%	0.32%	0.15%	0.0008	0.00%	0.32%
					2.17%	0.0033	1.52%	2.82%	0.16%	0.0006	0.04%	0.28%	0.16%	0.0006	0.04%	0.28%
					2.09%	0.0044	1.23%	2.95%	1.02%	0.0029	0.45%	1.58%	1.02%	0.0029	0.45%	1.58%
					2.15%	0.0057	1.03%	3.27%	0.18%	0.0018	0.00%	0.53%	0.18%	0.0018	0.00%	0.53%
					1.50%	0.0054	0.44%	2.57%	0.29%	0.0021	0.00%	0.69%	0.29%	0.0021	0.00%	0.69%
					0.35%	0.0028	0.00%	0.91%	0.00%				0.00%			
					1.50%	0.0023	1.05%	1.95%	0.15%	0.0008	0.00%	0.32%	0.15%	0.0008	0.00%	0.32%
					2.09%	0.0024	1.61%	2.57%	0.62%	0.0020	0.24%	1.01%	0.62%	0.0020	0.24%	1.01%
					2.40%	0.0039	1.63%	3.18%	0.42%	0.0011	0.21%	0.63%	0.42%	0.0011	0.21%	0.63%
					1.73%	0.0026	1.23%	2.24%	0.15%	0.0006	0.04%	0.27%	0.15%	0.0006	0.04%	0.27%
					1.54%	0.0026	1.02%	2.06%	0.27%	0.0013	0.01%	0.54%	0.27%	0.0013	0.01%	0.54%
					1.35%	0.0019	0.97%	1.72%	0.11%	0.0003	0.04%	0.17%	0.11%	0.0003	0.04%	0.17%
					10.70%	0.0129	8.16%	13.24%	3.67%	0.0088	1.94%	5.40%	3.67%	0.0088	1.94%	5.40%
					2.47%	0.0206	0.00%	6.52%	0.00%				0.00%			
					1.53%	0.0019	1.15%	1.91%	0.19%	0.0006	0.07%	0.31%	0.19%	0.0006	0.07%	0.31%
					1.04%	0.0023	0.58%	1.49%	0.04%	0.0002	0.00%	0.08%	0.04%	0.0002	0.00%	0.08%
					0.34%	0.0014	0.05%	0.62%	0.00%				0.00%			
					0.66%	0.0066	0.00%	1.97%	0.00%				0.00%			
					0.00%				0.00%				0.00%			
					100.00%				0.61%	0.0072	0.00%	2.02%	0.61%	0.0072	0.00%	2.02%
					65.74%	0.2516	16.18%	115.29%	14.61%	0.1388	0.00%	41.95%	14.61%	0.1388	0.00%	41.95%
					1.99%	0.0038	1.23%	2.75%	0.62%	0.0023	0.17%	1.08%	0.62%	0.0023	0.17%	1.08%
					2.24%	0.0040	1.46%	3.02%	0.32%	0.0015	0.02%	0.62%	0.32%	0.0015	0.02%	0.62%
					2.75%	0.0071	1.36%	4.14%	0.38%	0.0013	0.13%	0.64%	0.38%	0.0013	0.13%	0.64%
					1.70%	0.0030	1.11%	2.30%	0.17%	0.0010	0.00%	0.36%	0.17%	0.0010	0.00%	0.36%
					1.20%	0.0020	0.80%	1.59%	0.07%	0.0004	0.00%	0.15%	0.07%	0.0004	0.00%	0.15%
					4.48%	0.379	3.734	5.227	0.62%	0.0023	0.17%	1.07%	0.62%	0.0023	0.17%	1.07%
					5.792	297	5.207	6.378	0.51%	0.0018	0.15%	0.87%	0.68%	0.0021	0.26%	1.09%
					6.718	343	6.043	7.394	1.15%	0.0065	0.00%	2.42%	1.03%	0.0064	0.00%	2.30%
					6.843	324	6.204	7.482	0.39%	0.0011	0.10%	0.55%	0.33%	0.0011	0.10%	0.55%
					6.810	350	6.121	7.499	0.10%	0.0004	0.02%	0.18%	0.13%	0.0005	0.02%	0.23%



Table 9.9: Sampling Error Table C - Percentage of persons aged 18+ years with functional difficulty in at least one domain, Tonga, 2018

Sampling Error Table C															
Percentage of persons aged 18+ years with functional difficulty in at least one domain, Tonga, 2018															
Percentage of person aged 18+ years who have functional difficulty for the indicated domains															
	Seeing			Hearing			Walking			Communication			Cognition		
	%	SE	95% conf interval	%	SE	95% conf interval	%	SE	95% conf interval	%	SE	95% conf interval	%	SE	95% conf interval
Total	1.82%	0.0010	1.63% 2.01%	1.67%	0.0009	1.48% 1.86%	5.35%	0.0017	5.02% 5.69%	0.66%	0.0006	0.55% 0.77%	1.31%	0.0010	1.11% 1.51%
<b>Sex</b>															
Male	1.53%	0.0014	1.26% 1.80%	1.81%	0.0013	1.54% 2.07%	4.67%	0.0025	4.18% 5.16%	0.80%	0.0008	0.64% 0.97%	1.44%	0.0013	1.19% 1.68%
Female	2.07%	0.0014	1.80% 2.34%	1.55%	0.0012	1.32% 1.78%	5.94%	0.0023	5.49% 6.39%	0.54%	0.0007	0.39% 0.69%	1.21%	0.0015	0.91% 1.50%
<b>Region</b>															
Tongatapu Urban	1.89%	0.0017	1.55% 2.24%	0.95%	0.0009	0.76% 1.13%	3.70%	0.0021	3.28% 4.12%	0.62%	0.0010	0.43% 0.81%	1.13%	0.0015	0.84% 1.42%
Tongatapu Rural	1.41%	0.0013	1.16% 1.66%	1.65%	0.0016	1.34% 1.96%	4.67%	0.0023	4.22% 5.13%	0.50%	0.0008	0.35% 0.65%	1.21%	0.0017	0.89% 1.54%
Vavau	2.99%	0.0033	2.35% 3.63%	2.50%	0.0026	1.99% 3.02%	5.44%	0.0041	4.64% 6.25%	0.69%	0.0013	0.44% 0.94%	1.50%	0.0020	1.12% 1.89%
Haapai	1.76%	0.0033	1.11% 2.40%	2.36%	0.0032	1.73% 2.99%	11.59%	0.0079	10.05% 13.14%	1.32%	0.0037	0.59% 2.05%	1.92%	0.0045	1.03% 2.81%
Eua	2.90%	0.0080	1.33% 4.47%	2.41%	0.0049	1.44% 3.39%	11.34%	0.0187	7.66% 15.01%	1.54%	0.0038	0.79% 2.29%	1.84%	0.0041	1.03% 2.65%
Ongo Niua	0.61%	0.0032	0.00% 1.23%	0.73%	0.0021	0.32% 1.15%	5.12%	0.0088	3.38% 6.85%	0.51%	0.0018	0.16% 0.86%	1.48%	0.0030	0.88% 2.08%
<b>Area</b>															
Urban	1.89%	0.0017	1.55% 2.24%	0.95%	0.0009	0.76% 1.13%	3.70%	0.0021	3.28% 4.12%	0.62%	0.0010	0.43% 0.81%	1.13%	0.0015	0.84% 1.42%
Rural	1.80%	0.0012	1.57% 2.02%	1.89%	0.0012	1.65% 2.13%	5.86%	0.0022	5.44% 6.29%	0.67%	0.0007	0.54% 0.81%	1.37%	0.0012	1.13% 1.61%
<b>Age</b>															
18-29 years	0.32%	0.0006	0.20% 0.45%	0.43%	0.0010	0.24% 0.62%	0.78%	0.0015	0.48% 1.07%	0.54%	0.0008	0.37% 0.71%	0.80%	0.0012	0.56% 1.04%
30-49 years	0.98%	0.0012	0.75% 1.20%	0.71%	0.0011	0.50% 0.93%	1.54%	0.0014	1.27% 1.82%	0.58%	0.0009	0.40% 0.76%	0.88%	0.0012	0.64% 1.12%
50+ years	4.58%	0.0030	4.00% 5.16%	4.30%	0.0027	3.77% 4.82%	15.43%	0.0054	14.36% 16.50%	0.90%	0.0012	0.67% 1.14%	2.45%	0.0028	1.89% 3.01%
<b>Attendance to early childhood education</b>															
Attending	0.29%	0.0013	0.04% 0.54%	0.33%	0.0014	0.06% 0.60%	0.17%	0.0012	0.00% 0.41%	0.25%	0.0016	0.00% 0.57%	0.66%	0.0032	0.04% 1.29%
Not attending	1.93%	0.0010	1.72% 2.13%	1.76%	0.0010	1.57% 1.96%	5.72%	0.0018	5.36% 6.08%	0.69%	0.0006	0.57% 0.81%	1.36%	0.0010	1.15% 1.57%
<b>Education Level Attained</b>															
Pre-school	0.00%			0.00%			100.00%			0.00%			0.00%		
Primary	9.51%	0.0141	6.73% 12.30%	8.69%	0.0131	6.12% 11.27%	23.37%	0.0187	19.69% 27.05%	3.90%	0.0068	2.57% 5.24%	9.99%	0.0214	5.77% 14.20%
Lower secondary	2.52%	0.0022	2.08% 2.96%	2.55%	0.0022	2.11% 2.99%	8.89%	0.0042	8.07% 9.70%	0.49%	0.0008	0.32% 0.66%	1.29%	0.0013	1.04% 1.55%
Upper secondary	1.09%	0.0011	0.88% 1.30%	0.94%	0.0010	0.75% 1.13%	3.10%	0.0018	2.74% 3.46%	0.24%	0.0006	0.12% 0.35%	0.48%	0.0008	0.33% 0.63%
Technical and Vocational	0.63%	0.0013	0.38% 0.88%	0.47%	0.0010	0.26% 0.67%	1.11%	0.0016	0.79% 1.42%	0.07%	0.0004	0.00% 0.15%	0.15%	0.0005	0.06% 0.25%
University	1.01%	0.0020	0.61% 1.41%	0.41%	0.0013	0.15% 0.66%	2.15%	0.0042	1.33% 2.97%	0.04%	0.0002	0.00% 0.08%	0.27%	0.0009	0.09% 0.44%
Special school	7.36%	0.0487	0.00% 16.95%	3.89%	0.0210	0.00% 8.01%	11.40%	0.0710	0.00% 25.37%	25.20%	0.1034	4.84% 45.56%	44.28%	0.1442	15.88% 72.68%
Other (specify)	5.04%	0.0539	0.00% 15.65%	0.00%			0.00%			0.00%			0.00%		
<b>Wealth index quintile</b>															
Lowest quintile	2.01%	0.0026	1.51% 2.51%	2.24%	0.0025	1.74% 2.74%	7.04%	0.0052	6.02% 8.05%	1.05%	0.0017	0.71% 1.39%	2.14%	0.0047	1.21% 3.07%
Second quintile	1.91%	0.0026	1.39% 2.42%	2.30%	0.0037	1.57% 3.03%	6.98%	0.0049	6.01% 7.96%	0.99%	0.0017	0.66% 1.31%	1.58%	0.0024	1.10% 2.05%
Middle quintile	1.53%	0.0018	1.18% 1.88%	1.59%	0.0018	1.24% 1.94%	4.96%	0.0034	4.29% 5.62%	0.60%	0.0011	0.39% 0.81%	1.30%	0.0018	0.93% 1.66%
High quintile	2.11%	0.0027	1.58% 2.64%	1.57%	0.0020	1.18% 1.96%	5.38%	0.0039	4.61% 6.15%	0.57%	0.0012	0.34% 0.79%	1.16%	0.0016	0.83% 1.48%
Highest quintile	1.62%	0.0019	1.24% 1.99%	1.04%	0.0013	0.79% 1.29%	3.50%	0.0027	2.98% 4.03%	0.34%	0.0008	0.18% 0.49%	0.79%	0.0012	0.55% 1.02%

Table 9.10: Sampling Error Table C - cont' - Percentage of persons aged 18+ years with functional difficulty in at least one domain, Tonga, 2018

Sampling Error Table C - cont'																
Percentage of persons aged 18+ years with functional difficulty in at least one domain, Tonga, 2018																
	Percentage of person aged 18+ years who have functional difficulty for the indicated domains															
	Upper body				Anxiety				Depression				Pain			
	%	SE	95% conf interval		%	SE	95% conf interval		%	SE	95% conf interval		%	SE	95% conf interval	
Total	2.06%	0.0013	1.81%	2.31%	0.87%	0.0008	0.71%	1.03%	0.86%	0.0008	0.70%	1.01%	0.36%	0.0005	0.25%	0.46%
<b>Sex</b>																
Male	1.97%	0.0017	1.63%	2.30%	1.08%	0.0014	0.81%	1.35%	1.06%	0.0013	0.80%	1.32%	0.51%	0.0010	0.31%	0.70%
Female	2.15%	0.0016	1.83%	2.46%	0.70%	0.0008	0.54%	0.86%	0.68%	0.0008	0.52%	0.84%	0.23%	0.0005	0.14%	0.33%
<b>Region</b>																
Tongatapu Urban	1.85%	0.0020	1.45%	2.25%	0.59%	0.0010	0.39%	0.80%	0.50%	0.0010	0.31%	0.69%	0.35%	0.0008	0.19%	0.51%
Tongatapu Rural	1.33%	0.0016	1.01%	1.66%	0.30%	0.0007	0.15%	0.44%	0.26%	0.0007	0.12%	0.40%	0.32%	0.0009	0.15%	0.49%
Vavau	3.17%	0.0034	2.50%	3.83%	3.58%	0.0044	2.72%	4.44%	3.51%	0.0043	2.67%	4.35%	0.29%	0.0008	0.13%	0.46%
Hāpapai	1.83%	0.0043	0.98%	2.68%	0.66%	0.0023	0.21%	1.10%	0.82%	0.0023	0.37%	1.27%	1.00%	0.0032	0.37%	1.64%
'Eua	7.99%	0.0142	5.20%	10.79%	1.41%	0.0079	0.00%	2.96%	1.79%	0.0080	0.21%	3.37%	0.23%	0.0011	0.02%	0.44%
Ongo Nua	0.88%	0.0028	0.34%	1.42%	0.08%	0.0004	0.01%	0.15%	0.08%	0.0004	0.01%	0.15%	0.00%	0.0000	-0.08%	0.36%
<b>Area</b>																
Urban	1.85%	0.0020	1.45%	2.25%	0.59%	0.0010	0.39%	0.80%	0.50%	0.0010	0.31%	0.69%	0.35%	0.0008	0.19%	0.51%
Rural	2.13%	0.0015	1.83%	2.43%	0.96%	0.0010	0.76%	1.16%	0.96%	0.0010	0.77%	1.16%	0.36%	0.0007	0.23%	0.49%
<b>Age</b>																
18-29 years	0.28%	0.0006	0.16%	0.39%	0.54%	0.0012	0.30%	0.76%	0.49%	0.0012	0.25%	0.71%	0.05%	0.0002	0.00%	0.01%
30-49 years	0.83%	0.0012	0.59%	1.06%	0.69%	0.0009	0.51%	0.87%	0.60%	0.0008	0.44%	0.76%	0.36%	0.0010	0.15%	0.56%
50+ years	5.66%	0.0037	4.92%	6.39%	1.48%	0.0018	1.12%	1.85%	1.60%	0.0019	1.23%	1.98%	0.70%	0.0011	0.49%	0.91%
<b>Attendance to early childhood education</b>																
Attending	0.38%	0.0020	0.00%	0.77%	0.18%	0.0015	0.00%	0.47%	0.16%	0.0014	0.00%	0.44%	0.00%	0.0002	0.00%	0.06%
Not attending	2.18%	0.0013	1.92%	2.45%	0.92%	0.0009	0.75%	1.09%	0.90%	0.0009	0.74%	1.07%	0.39%	0.0006	0.27%	0.50%
<b>Education Level Attained</b>																
Pre-school	0.00%				0.00%				0.00%				0.00%			
Primary	10.21%	0.0139	7.48%	12.94%	5.40%	0.0142	2.61%	8.19%	4.97%	0.0136	2.29%	7.66%	1.78%	0.0084	0.12%	3.45%
Lower secondary	2.75%	0.0022	2.33%	3.18%	0.88%	0.0011	0.66%	1.10%	0.90%	0.0011	0.67%	1.12%	0.47%	0.0011	0.25%	0.69%
Upper secondary	1.32%	0.0017	0.99%	1.65%	0.55%	0.0008	0.39%	0.70%	0.53%	0.0008	0.39%	0.69%	0.27%	0.0006	0.16%	0.38%
Technical and Vocational	0.69%	0.0013	0.44%	0.95%	0.31%	0.0008	0.15%	0.47%	0.35%	0.0009	0.18%	0.52%	0.13%	0.0007	0.00%	0.26%
University	0.97%	0.0030	0.38%	1.55%	0.28%	0.0012	0.05%	0.51%	0.28%	0.0012	0.05%	0.51%	0.08%	0.0004	0.00%	0.16%
Special school	17.97%	0.0096	0.00%	37.58%	30.34%	0.0128	0.25%	60.44%	30.20%	0.0130	0.07%	60.32%	0.00%	0.0000	0.00%	3.21%
Other (specify)	4.47%	0.0441	0.00%	13.16%	4.47%	0.0441	0.00%	13.16%	4.47%	0.0441	0.00%	13.16%	4.47%	0.0441	0.00%	13.16%
<b>Wealth index quintile</b>																
Lowest quintile	2.56%	0.0038	1.80%	3.31%	1.27%	0.0020	0.88%	1.67%	1.18%	0.0019	0.81%	1.55%	0.41%	0.0013	0.15%	0.66%
Second quintile	1.91%	0.0021	1.51%	2.32%	0.91%	0.0018	0.56%	1.25%	0.93%	0.0017	0.59%	1.28%	0.58%	0.0021	0.17%	0.99%
Middle quintile	2.54%	0.0029	1.97%	3.11%	0.72%	0.0013	0.47%	0.97%	0.71%	0.0011	0.48%	0.93%	0.34%	0.0009	0.16%	0.51%
High quintile	2.24%	0.0030	1.75%	2.92%	1.05%	0.0023	0.59%	1.51%	1.01%	0.0023	0.56%	1.47%	0.35%	0.0011	0.13%	0.58%
Highest quintile	1.22%	0.0014	0.94%	1.51%	0.58%	0.0011	0.37%	0.79%	0.58%	0.0010	0.39%	0.78%	0.20%	0.0006	0.08%	0.32%
Percentage of adult with functional difficulty in at least one domain																
Population aged 18 years and older																
Nb SE 95% conf interval																
Total	57,341	854	55,660	59,022	11.20%	0.0030	10.61%	11.80%	11.20%	0.0030	10.61%	11.80%	11.20%	0.0030	10.61%	11.80%
<b>Sex</b>																
Male	26,477	472	25,548	27,407	12.03%	0.0048	11.07%	12.98%	12.03%	0.0048	11.07%	12.98%	12.03%	0.0048	11.07%	12.98%
Female	30,864	519	29,841	31,886	10.50%	0.0034	9.84%	11.16%	10.50%	0.0034	9.84%	11.16%	10.50%	0.0034	9.84%	11.16%
<b>Region</b>																
Tongatapu Urban	13,508	272	12,972	14,045	10.27%	0.0052	9.24%	11.29%	10.27%	0.0052	9.24%	11.29%	10.27%	0.0052	9.24%	11.29%
Tongatapu Rural	28,832	723	27,408	30,256	10.19%	0.0045	9.27%	11.10%	10.19%	0.0045	9.27%	11.10%	10.19%	0.0045	9.27%	11.10%
Vavau	7,507	246	7,023	7,990	11.38%	0.0065	10.10%	12.67%	11.38%	0.0065	10.10%	12.67%	11.38%	0.0065	10.10%	12.67%
Hāpapai	3,846	128	3,594	4,099	19.64%	0.0110	17.47%	21.81%	19.64%	0.0110	17.47%	21.81%	19.64%	0.0110	17.47%	21.81%
'Eua	2,917	229	2,466	3,368	15.10%	0.0200	11.15%	19.04%	15.10%	0.0200	11.15%	19.04%	15.10%	0.0200	11.15%	19.04%
Ongo Nua	731	49	634	827	6.99%	0.0099	5.03%	8.94%	6.99%	0.0099	5.03%	8.94%	6.99%	0.0099	5.03%	8.94%
<b>Area</b>																
Urban	13,508	272	12,972	14,045	10.27%	0.0052	9.24%	11.29%	10.27%	0.0052	9.24%	11.29%	10.27%	0.0052	9.24%	11.29%
Rural	43,832	809	42,239	45,426	11.49%	0.0036	10.78%	12.21%	11.49%	0.0036	10.78%	12.21%	11.49%	0.0036	10.78%	12.21%
<b>Age</b>																
18-29 years	18,378	508	17,377	19,379	4.17%	0.0037	3.45%	4.89%	4.17%	0.0037	3.45%	4.89%	4.17%	0.0037	3.45%	4.89%
30-49 years	22,217	412	21,405	23,029	7.91%	0.0048	6.96%	8.86%	7.91%	0.0048	6.96%	8.86%	7.91%	0.0048	6.96%	8.86%
50+ years	16,747	333	16,091	17,402	23.29%	0.0067	21.97%	24.62%	23.29%	0.0067	21.97%	24.62%	23.29%	0.0067	21.97%	24.62%
<b>Attendance to early childhood education</b>																
Attending	3,798	182	3,439	4,157	1.62%	0.0042	0.80%	2.44%	1.62%	0.0042	0.80%	2.44%	1.62%	0.0042	0.80%	2.44%
Not attending	53,543	780	52,007	55,079	11.88%	0.0032	11.25%	12.52%	11.88%	0.0032	11.25%	12.52%	11.88%	0.0032	11.25%	12.52%
<b>Education Level Attained</b>																
Pre-school	1	1	0	3	100.00%				100.00%				100.00%			
Primary	1,904	113	1,682	2,127	37.92%	0.0270	32.61%	43.24%	37.92%	0.0270	32.61%	43.24%	37.92%	0.0270	32.61%	43.24%
Lower secondary	17,486	508	16,486	18,487	15.10%	0.0065	13.83%	16.37%	15.10%	0.0065	13.83%	16.37%	15.10%	0.0065	13.83%	16.37%
Upper secondary	24,972	552	23,886	26,059	8.07%	0.0040	7.29%	8.84%	8.07%	0.0040	7.29%	8.84%	8.07%	0.0040	7.29%	8.84%
Technical and Vocational	7,897	253	7,399	8,395	5.01%	0.0052	4.00%	6.03%	5.01%	0.0052	4.00%	6.03%	5.01%	0.0052	4.00%	6.03%
University	4,627	230	4,173	5,081	5.97%	0.0070	4.59%	7.34%	5.97%	0.0070	4.59%	7.34%	5.97%	0.0070	4.59%	7.34%
Special school	68	20	29	107	93.75%	0.0594	82.05%	100.00%	93.75%	0.0594	82.05%	100.00%	93.75%	0.0594	82.05%	100.00%
Other (specify)	17	11	0	37	9.51%	0.0799	0.00%	25.23%	9.51%	0.0799	0.00%	25.23%	9.51%	0.0799	0.00%	25.23%
<b>Wealth index quintile</b>																
Lowest quintile	8,491	423	7,658	9,325	14.67%	0.0108	12.55%	16.78%	14.67%	0.0108	12.55%	16.78%	14.67%	0.0108	12.55%	16.78%
Second quintile	9,968	372	9,235	10,701	12.27%	0.0073	10.82%	13.71%	12.27%	0.0073	10.82%	13.71%	12.27%	0.0073	10.82%	13.71%
Middle quintile	11,806	443	10,933	12,679	10.98%	0.0066	9.68%	12.27%	10.98%	0.0066	9.68%	12.27%	10.98%	0.0066	9.68%	12.27%
High quintile	12,968	548	11,889	14,046	10.93%	0.0068	9.59%	12.27%	10.93%	0.0068	9.59%	12.27%	10.93%	0.0068	9.59%	12.27%
Highest quintile	14,108	538	13,049	15,167	8.82%	0.0053	7.76%	9.87%	8.82%	0.0053	7.76%	9.87%	8.82%	0.0053	7.76%	9.87%

Table 9.11: Sampling Error Table D - *Percentage of persons aged 18+ years with functional difficulty in at least one domain, Tonga, 2018*

<b>Sampling Error Table D</b>													
Percentage of persons aged 18+ years with functional difficulty in at least one domain, Tonga, 2018													
	Percentage of persons aged 18-49 years with functional difficulty in at least one domain			Number of persons aged 18-49 years			Percentage of persons aged 50+ years with functional difficulty in at least one domain			Population aged 50+ years			
	%	SE	95% conf interval	Nb	SE	95% conf interval	%	SE	95% conf interval	Nb	SE	95% conf interval	
<b>Total</b>	6.22%	0.0033	5.57% 6.86%	40,594	672	39,271 41,918	23.29%	0.0070	21.92% 24.67%	16,747	320	16,117 17,376	
<b>Sex</b>													
Male	7.64%	0.0050	6.65% 8.63%	18,663	388	17,900 19,427	22.51%	0.0103	20.48% 24.53%	7,814	208	7,404 8,224	
Female	5.01%	0.0036	4.30% 5.71%	21,931	436	21,073 22,790	23.98%	0.0092	22.18% 25.79%	8,932	219	8,501 9,364	
<b>Region</b>													
Tongatapu Urban	6.57%	0.0057	5.44% 7.69%	9,804	233	9,346 10,263	20.06%	0.0119	17.72% 22.40%	3,704	111	3,485 3,923	
Tongatapu Rural	6.22%	0.0053	5.18% 7.27%	21,160	555	20,066 22,253	21.11%	0.0108	18.99% 23.23%	7,672	262	7,157 8,187	
Vavau	5.76%	0.0065	4.48% 7.04%	5,050	201	4,653 5,446	22.94%	0.0160	19.79% 26.08%	2,457	103	2,254 2,660	
Ha'apai	7.96%	0.0113	5.74% 10.19%	2,355	101	2,156 2,553	38.07%	0.0232	33.50% 42.65%	1,491	54	1,385 1,598	
Eua	3.95%	0.0088	2.22% 5.69%	1,769	193	1,390 2,148	32.28%	0.0365	25.09% 39.46%	1,148	81	988 1,308	
Ongo Niua	3.25%	0.0089	1.49% 5.01%	457	35	387 526	13.22%	0.0276	7.79% 18.65%	274	34	208 340	
<b>Area</b>													
Urban	6.57%	0.0057	5.44% 7.69%	9,804	233	9,346 10,263	20.06%	0.0119	17.72% 22.40%	3,704	111	3,485 3,923	
Rural	6.11%	0.0039	5.33% 6.88%	30,790	630	29,549 32,031	24.21%	0.0084	22.56% 25.87%	13,043	300	12,453 13,632	
<b>Attendance to early childhood education</b>													
Attending	1.58%	0.0042	0.75% 2.41%	3,788	185	3,424 4,152	17.05%	0.1808	0.00% 52.64%	10	9	0 27	
Not attending	6.69%	0.0036	5.99% 7.40%	36,807	608	35,610 38,003	23.30%	0.0070	21.92% 24.68%	16,736	320	16,106 17,366	
<b>Education Level Attained</b>													
Pre-school	41.96%	0.0599	30.15% 53.76%	388	46	298 478	100.00%	.	.	1	1	0 3	
Primary	7.06%	0.0069	5.71% 8.42%	10,092	391	9,321 10,862	36.89%	0.0314	30.71% 43.07%	1,516	107	1,307 1,726	
Lower secondary	4.89%	0.0040	4.09% 5.69%	19,399	468	18,477 20,321	26.07%	0.0112	23.85% 28.28%	7,394	232	6,938 7,850	
Upper secondary	4.12%	0.0055	3.04% 5.19%	6,830	236	6,365 7,295	19.13%	0.0106	17.04% 21.22%	5,573	208	5,163 5,983	
Technical and Vocational	2.82%	0.0055	1.74% 3.89%	3,516	199	3,123 3,909	10.75%	0.0155	7.69% 13.80%	1,067	79	911 1,224	
University	93.58%	0.0619	81.39% 105.78%	66	20	27 106	15.93%	0.0261	10.79% 21.07%	1,111	87	940 1,283	
Special school	5.27%	0.0588	0.00% 16.84%	16	11	-5 37	100.00%	.	.	2	1	0 4	
Other (specify)	0.00%						100.00%	.	.	1	1	0 2	
<b>Wealth index quintile</b>													
Lowest quintile	7.52%	0.0098	5.60% 9.45%	5,733	332	5,079 6,388	29.52%	0.0211	25.35% 33.68%	2,758	149	2,465 3,051	
Second quintile	6.39%	0.0068	5.04% 7.73%	7,173	299	6,585 7,761	27.37%	0.0182	23.79% 30.94%	2,795	136	2,527 3,062	
Middle quintile	6.67%	0.0068	5.33% 8.01%	8,595	353	7,900 9,289	22.51%	0.0160	19.36% 25.65%	3,211	176	2,866 3,557	
High quintile	5.92%	0.0067	4.60% 7.23%	9,184	420	8,358 10,011	23.09%	0.0155	20.04% 26.15%	3,783	189	3,411 4,155	
Highest quintile	5.23%	0.0051	4.23% 6.22%	9,908	413	9,094 10,723	17.28%	0.0125	14.81% 19.74%	4,199	197	3,812 4,587	



## List of people involved

Project Coordinator		
Sione Lolohea - Tonga Statistics Department		
Headquarters		
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Team Leaders		
Paea Maile Elenoa Moala Tavite Fisi'italia Pelatouna Tupou Elioti Tu'utafaiva	Nancy Savelio Ofa Pilivi Ikani Tonga Sione Tu'iono 'Otukolo	Fonopulu Latu Fe'iloaki Mafi Carter Pasikala Kalala Faka'utoki
Interviewers		
Sione 'Ataata Tu'ipulotu Matelita Tangulu Belinda Fahiu Tupou Haieti Pohiva Tama Tu'itavuki Meleane Lupe Palu Hale Vakalahi Keliti Pilinzinger Mosese Lasike Ilaisaane Tuihalangingie Rhema Misa Lupe Tonga Palaki Mele 'Otukolo Mele'eva Manukeu Maamaloa Kavakava Akosita Paongo	Setaita Toafa Sunia Foliaki Fonua Matafolau ki moana Fa'aoa Cindy Tu'ipulotu Timote Afu Vaolose Mokena Fe'ofa'aki Leka Katoanga Lokotui Siaosi Vaka Ofeina Leka Alama Lilo Salote Lonitaise Vuna Ilami 'Aholotu Vaisima 'Aisake Faiva Paongo Mele Fifita Hoeft	Vealoloko Metui Fatima Lave Kaukauola Siuta Moreen Havili Uinise Hoko Hina Vaimo'ui Leka Iotili Lo'amanu William Tukala Ana Tonga Unaloto Halafihi (P.A Soana Poafa) Vulase Havea Mele'ana Ika Lemeki Taufu Asela Tangimausia

## TDS 20218 Questionnaire

The questionnaire and other relevant information and documentation can be accessed in the following link:  
<https://microdata.pacificdata.org/index.php/home>