Tonga 2006 Census of Population and Housing, Volume 2: Analytical Report

Tongan Statistics Department
and the SPC Statistics and Demography Programme,
Noumea, New Caledonia, 2008

Statistics Department,PO Box 149, Nuku'alofa.TONGA
Email: dept@stats.gov.to
www.spc.int/prism/country/to/stats

Original text: English

Report prepared by
Sione Lolohea , Statistics Department, Tonga
Andreas Demmke, Secretariat of the Pacific Community, Noumea, New Caledonia

Secretariat of the Pacific Community Cataloguing-in-publication data

Tonga 2006 Census of Population and Housing, Volume 2: Analytical report / Statistics Department Tonga

1. Tonga — Census, 2006.

I. Title. II. Statistics Department Tonga III. Secretariat of the Pacific Community

319.612 AACR2

ISBN 978-982-00-0273-9

Secretariat of the Pacific Community (SPC)
BP D5, 98848 Nouméa Cedex
New Caledonia
Telephone: +687 26 20 00
Facsimile: +687 26 38 18
Email: spc@spc.int
http://www.spc.int/

Prepared for publication at the Secretariat of the Pacific Community
Noumea, New Caledonia, 2008
and printed with Ultimo Group, Auckland, New Zealand

CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDICES

FOREWORD

We are happy to join with the Government of the Kingdom of Tonga in launching the 'Tonga 2006 census of population and housing, Volume 2: Analytical report'. The report is based on Tonga's 2006 population census and was prepared by SPC's Statistics and Demography Programme in close collaboration with the Statistics Department Tonga.

The report contains an analysis of Tonga's recent population growth and dynamics, in particular the level, trends and patterns of fertility, mortality, and migration. The likely impacts of some of these dynamics on wider cross-cutting issues, such as the environment, health, education and economic activity, are discussed. The report also presents a set of population projections to provide planners and policy-makers with scenarios of the size and structure of Tonga's future population with the aim of assisting decision-makers to effectively plan for the needs of different population groups at different points in time.

Since 1967, the Secretariat of the Pacific Community (SPC) has assisted Pacific Island countries and territories in the areas of population data collection and demographic analysis. Generous support from bilateral and multilateral donors, most notably the Australian Agency for International Development (AusAID) and the United Nations Population Fund (UNFPA), has enabled SPC to provide technical assistance on population censuses and surveys, covering all aspects from design, data collection and processing, to analysis and dissemination, with a strong emphasis on training and institutional capacity building. More recently the programme has widened its focus to provide assistance in data utilisation, paying greater attention to the interrelationship between population and development. This change of emphasis was a direct response to requests from SPC's 22 island members.

Evidence-based decision-making and effective planning are essential to good governance. An important aspect of data dissemination is therefore to provide technical information in formats that can be understood and applied by technical and non-technical users, to ensure that planners and policy-makers can take key features of their national socioeconomic and demographic situation into account.

SPC also emphasises the importance of close collaboration with national counterparts in transferring knowledge for improving analytical methodologies, and planning and organising national reports. This emphasis facilitates the long-term sustainability of regional and national capacity in demographic analysis.

The information presented here is the result of intensive effort and collaboration between many people at all levels of the Government of the Kingdom of Tonga and SPC. I acknowledge their valuable work and trust the results will be immensely useful in planning for Tonga's future development.

Dr Jimmie Rodgers

Director-General
Secretariat of the Pacific Community

ACKNOWLEDGEMENT FROM THE KINGDOM OF TONGA GOVERNMENT

Tonga's 2006 census and this report could not have been completed without the kind permission, direction, cooperation and assistance from a number of individuals and organisations.

His Majesty's Cabinet approved the Population Census Proposal 2006 and the Amendments of Census Regulation 2006. Under the direction of the Minister of Finance, the Statistics Department carried out this census according to the Census Proposal and Census Regulation 2006.

The Secretariat of the Pacific Community provided technical assistance to Tonga's Statistics Department through its Statistics and Demography Programme. Dr. Gerald Haberkorn, Demographer, assisted Tonga's government statistician in the preparation of the census proposal, which was approved by His Majesty's Cabinet in June 2005. Rick Baxter, Population Specialist, often visited Tonga's Statistics Department to monitor its census preparations, management and operations. Scott Pontifex, Cartographer, visited the department to assist with digitising of census maps (PopGis) at Tonga's Ministry of Lands, Survey and Natural Resources. Leilua Taulealo, Census Data Processor, set up the computer system for processing the census data. Andreas Demmke, Population Specialist, carried out the demographic analysis and assisted with report writing.

The Census Steering Committee, chaired by the Secretary for Finance, had frequent meetings. Its main task was to monitor the progress of census activities throughout the entire census operation. The Statistics Department provided the secretariat for this committee with the government statistician, providing a quarterly progress report to the committee at each meeting.

The census was funded through local (32%) and international (68%) donor sources. AusAID was the sole international donor, and provided 50% of the donors' share (or 34% of the total budget). This left a 34% shortfall in the census budget, and census expenditures were therefore reduced and prioritised to fit within the available funds. In addition, NZAID provided financial assistance for the digitisation of census maps from the Ministry of Lands, Survey and Natural Resources.

Several government ministries within Tonga also assisted. The Ministry of Lands, Survey and Natural Resources provided the technical assistance to update and digitise census maps; the Ministry of Education provided over 500 primary school teachers and education officers to carry out census enumeration and supervision of census fieldwork; and other government departments and private businesses also provided assistance, including the Roman Catholic Diocese of Tonga (financial assistance) and Data Line for census publicity.

Thanks are also due to the private households and institutions that warmly welcomed the census enumerators and provided the necessary information for the census, and to everyone who rendered their support and encouragement to Tonga's Statistics Department to proceed with the census during the difficult period after the 16 November fire in Nuku'alofa

And last but not least, thanks to the staff of Tonga's Statistics Department who worked tirelessly to complete the census and the very kind assistance of the Secretariat of the Pacific Community to edit and publish this report.

Mr 'Ata'ata Finau

Government Statistician
Statistics Department
TONGA

SUMMARY OF MAIN INDICATORS

	Total	Males	Females
Total enumerated population (30 November 2006)	**101,991**	**51,772**	**50,219**
Growth rate (%) of total population, 1996–2006	0.4		
Rate of natural increase (CBR – CDR)	2.2		
Implied net migration rate (rate of growth – rate of natural increase)	-1.8		
Population density (number of people/km^2)			
Tonga	157		
Tongatapu	280		
Median age (in years)	21.0	20.1	21.8
Per cent of population younger than 15 years of age	38	39	37
Per cent of population 15–24 years of age (youth)	19	19	19
Per cent of population 15–59 years of age	54	53	54
Per cent of population 60 years and older	8	8	9
Age dependency ratio	86		
Urban population (Nuku'alofa)	23,658	11,860	11,798
Per cent urban (%)	23.2		
Households			
Number of private households (head of households)	17,462	13,855	3,607
Number of people in private households	101,144	51,122	50,022
Average household size	5.8		
Number of institutions (non-private households)	67		
Number of people in institutions	847		
Fertility			
Estimated number of births, 2006	2,945		
Crude birth rate (CBR), 2006 (per 1000)	29		
Total fertility rate (TFR), 2006			4.2
Teenage fertility rate, 2006 (per 1000)			24
Mean age at childbearing, 2006			30.8
Average age at first marriage (SMAM$^+$), 2006	26.8	28.0	25.6
Mortality			
Estimated number of deaths, 2006	709		
Crude death rate (CDR), 2006 (per 1000)	7		
Life expectancy at birth, 2006	70.2	67.3	73.0
Infant mortality rate (IMR), 2006 (per 1000)	19	22	16
Child mortality rate (1q5^{++}), 2006 (per 1000)	3	4	2

SUMMARY OF MAIN INDICATORS (continued)

	Total	Males	Females
International migration			
International net migration (1996–2006)	-18,000	-9,000	-9,000
Labour force			
Employed population (number)	35,290	19,956	15,334
Paid workers (number)	23,438	14,273	9,165
Subsistence workers (number)	11,497	5,499	5,998
Other unspecified workers (number)	355	184	171
Unemployed (number)	388	214	174
Unemployed (number) – adjusted definition*	1,824	924	900
Non-labour force			
Students	8,906	4,396	4,510
Retired, or disabled, or family responsibilities	10,312	3115	7,197
Other	8,189	3,760	4,429
Other (according to adjusted unemployed)*	6,753	3,050	3,703
Labour force participation rate	56.6	64.2	49.0
Employment–population ratio	37.2	45.4	29.0
Unemployment rate (%)	1.1	1.1	1.1
Unemployment rate (%) – adjusted definition*	4.9	4.4	5.5
Unemployment rate (%) if 'subsistence work' is classified as unemployed	35.9	30.8	42.5
Education			
School enrolment rates of 6–14 year-olds (%)	97.9	97.4	98.4
Proportion of population aged 15 and older with:			
secondary education	62.7	62.5	63.0
tertiary education	10.3	10.9	9.7
secondary qualification	26.2	25.1	27.4
tertiary qualification	2.7	3.2	2.1
vocational/professional qualification	8.1	8.3	8.0
Literacy			
Proportion of population aged 15–24 who are able to read and write a simple sentence	98.6	98.4	98.8

[+] = single mean age at marriage
[++] = probability of dying between exact age 1 and exact age 5
* = unemployed includes people that did not work, but did not look for work because they believed that no work was available, or because of weather conditions, or because they could not afford transportation costs

EXECUTIVE SUMMARY

The aim of this report is to provide an analysis of the 2006 Tonga census data with a strong emphasis on demographic trends, patterns and levels.

The 2006 census determined that the total population was **101,991**. This compares with 97,784 people in 1996, and represents an increase of 4.3% or 4,207 people. This population increase represents an **average annual growth rate of 0.4%**, or an increase of 421 people per year.

The 2006 census enumerated 51,772 males and 50,219 females, representing a **sex ratio of 103 males per 100 females**.

Tongatapu's population was 72,045, which constitutes 71% of Tonga's total population.

The **urban** population was **23,658** people (**23.2%** of the total population), and includes the villages of Kolofo'ou, Ma'ufanga, and Kolomotu'a, which are all part of Nuku'alofa, Tongatapu.

The average **population density was 157 people/km^2**. This varies widely between division and district. For example, Tongatapu had 280 people/km^2, while Ongo Niua had only 23 people/km^2.

The census counted **17,462 private households** with 101,144 household members, which represents **5.8 people per household** on average. Almost one-quarter (23,057) of all people that live in private households live in households with 10 or more people, and 3,750 people live in households with 15 or more people.

The 2006 census data show a **net flow of people from the "Outer Islands"** of Vava'u, Ha'apai, 'Eua, and Ongo Niuas **towards Tongatapu** during the intercensal period 1996–2006. However, the main destination of Outer Island migrants was to overseas locations.

Tonga has a young population with a **median age of 21** years. More than one-third (38%) of the population was younger than 15 years of age, and only 8% were 60 years and older.

The **age dependency ratio** was calculated using the 15–59 year-old age group as the "working age population". For every 100 people of working age, **86** were in the **age dependent** category.

The **number of births** was estimated at **2,945** in 2006. This accounts for a **crude birth rate (CBR)** of **29** per 1000.

The total fertility rate (TFR) — the average number of births per woman — declined only marginally, from about 4.3 in 1996 to about **4.2 in 2006.**

Based on census data for the number of children ever born and still alive, the **infant mortality rate (IMR)** was estimated at **19**; 22 for males and 16 for females. This estimate is similar to 1996 levels.

Based on estimated childhood mortality rates, in combination with reported number of births by age and sex during the period 2003–2006, **life expectancies at birth** were estimated to be **67.3** and **73.0** years for males and females**,** respectively.

Based on the derived life tables, a **crude death rate** (**CDR**) of **7** per 1,000 was calculated.

The estimated mortality indicators show more positive mortality indicators for females than for males, with females expected to live, on average, almost six years longer than males.

Net international migration is estimated indirectly by applying the demographic balancing equation to the known 1996–2006 intercensal population growth rate, and estimated CBR and CDR. The **net migration rate** is estimated at **-18 per 1,000** population, which equals **y** on average, or -150 people per month during the intercensal period 1996–2006.

Women marry at younger ages than men. The average **age at marriage was 28.0 and 25.6 years for males and females,** respectively.

Methodism is the **dominant religion** in Tonga, and 37% of the population is affiliated with the **Free Wesleyan Church**. The Church of Latter Day Saints is the second largest, with 17%, followed by the Roman Catholic Church 16% and the Free Church of Tonga 11%.

The 2006 census questionnaire included a question on **smoking habits** of the population aged 6 and older**.** It was found that **21% of the population smokes on a daily basis; of this 21%,** 33% are males and 9% are females. The age group that most likely smokes is 25–29 year-olds. In general, about half of all males aged 20–65 smoke, while it 10–15% of females aged 20 and older smoke.

Data on **disabilities** indicate that **5% of the total population** reported a **disability**. The proportion of the population with a disability increases with age, and there is very little difference in the proportion of males and females with a disability. While about 5% of children younger than 5 years of age had a disability, it was lower for all age groups between 5 and 49 years of age. At age 50 and older, the proportion of the population with a disability increases continuously until it reaches about 45% of people aged 75 and older.

The most commonly mentioned **disability** was *vision*, followed by difficulties with *walking*. Other disabilities were problems *hearing*, or *remembering* and/or *concentrating*. Almost 200 people could not walk at all, and the same number of people reportedly could not remember or concentrate. Forty-four people were blind, and 39 were deaf.

During the two-week period prior to the census, about **5% of the total population** reported a **"health complaint"** (illness or injury). The age pattern of people with a health complaint is generally the same as those with a disability (i.e. it increases with age). The vast majority of people with a health complaint sought care, mainly in a hospital. Others self-treated the complaint or went to a private doctor. Three per cent of all people with a health complaint did not seek any care.

School enrolment data show that **98%** of children in the age group 6–14 years (compulsory school age) were enrolled in schools. School enrollment rates declined rapidly after the age of 15, and about 15% of 16 year-olds were not attending school. In general, female school enrollment rates were higher than male enrollment rates.

Data on **educational attainment** indicate that in 2006, about one-quarter of the population had only a primary level education. More than 60% of the population aged 15 and older had a secondary level education, and about **10% of the population aged 15 and older had a tertiary level education**. Educational levels were higher in the urban area than in rural areas.

The proportion of the population aged 15 and older with a secondary **educational qualification** was 27% females, 25% males. While only **2–3% had a tertiary qualification**, more than 60% had no qualification at all. About **8% had a vocational/professional qualification**. Populations in the urban area had better qualifications than those in rural areas.

Almost everyone older than 10 years of age was literate in Tongan. **Literacy** in English was almost equally high as Tongan language skills for youth aged 10–14 years of age. It gradually declines after that, and is below 90% of the population at age 40–44 years, and further decrease by age.

The **literacy rate** of 15–25 year-olds was **98.4%** and **98.8%** for males and females, respectively. Literacy was measured by a respondent's ability to read and write a simple sentence in Tongan and English.

Although a high percentage (57%) of Tonga's population aged 15 and older was **economically active**, only a relatively small proportion (37%) received a regular **paid income**; this group consisted of 45% males and 29% females.

Subsistence work — such as growing or gathering produce or fishing to feed families — was the **main activity of 17% of Tonga's males and 19% females** aged 15 and older. About 21% of the population in rural areas (outer islands) were subsistence workers compared with 9% in the urban centre..

Only 388 people were categorised as being unemployed. However, 195 people did not work because of poor weather conditions, or because they could not afford the transportation costs to work. In addition, 1,241 people did not work and did not look for work, because they believed that no work was available. Using the international definition of unemployment, these people were not classified as unemployed because they did not look for work and did not indicate that they were available for work. However, if all of these people were included in the unemployed category, the unemployment rate would increase to **4.9%.** The unemployment rate for males would increase to 4.4%, and for females to 5.5%; unemployment in urban areas would be 5.4% and 4.8% for rural areas.

If subsistence workers were included as part of the unemployed — on the grounds that these people would look for work if they believed cash work was available in their labour market community — the total unemployment level would increase to 13,321 people, or an **unemployment rate** of **36%** (31% for males and 42% for females, and 23% for the urban area and 40% in rural areas). While this assumption would not apply to all individuals in this group, it would likely apply to a proportion of them. Depending on the assumptions a user of these data may wish to use, the resulting unemployment rate would fall somewhere between 4.9% and 36%.

Eighty-one per cent of all households obtained their **drinking water** from a cement tank. The second most important source was piped water (15%). However, piped water was only used by a significant proportion of households in Tongatapu and 'Eua. Otherwise, 3% of all households used bottled water to obtain their drinking water.

The most frequently recorded **toilet facility** used by **70%** of all Tongan households was a **flush toilet**, although there were significant differences by division. While 80% of all households in Tongatapu had a flush toilet, this percentage was much lower in Ha'apai (38%) and Ongo Niua (34%).

The main source of **lighting** in Tonga was **electricity**, used by an average of **89%** of all households, although this percentage varied between 80% and 95% by division. There was no electricity in Ongo Niua. Instead, half of all households there relied on kerosene, and another 44% on solar power as their main lighting source.

The main energy source for **cooking** for just over half of all households was **gas**. Although its use was most common in Tongatapu, where about two-thirds of all households relied on it. This percentage was much lower in all other divisions, where firewood was the most common energy source for cooking.

About **85% of all households dispose of their waste** by burning it. In Tongatapu, one out of ten households (11%) deposited their waste at the local dump, and another 5% used a commercial waste collection.

Information on **tenure** reveals that **72%** of all households **owned their dwelling** outright, while 4% rented their dwelling, and another 23% resided in their dwelling rent-free.

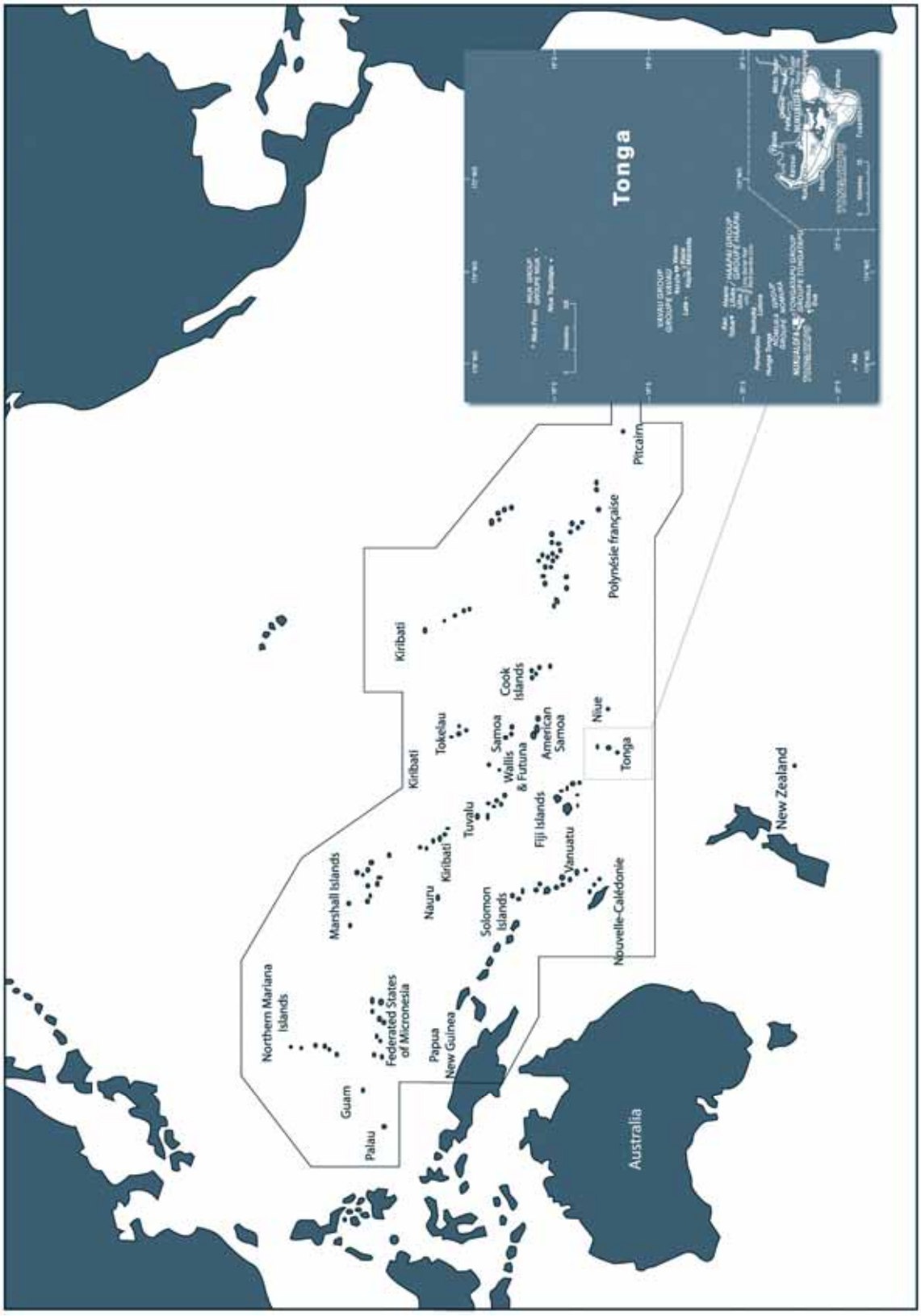
Regarding the availability of **household items**, a higher proportion of households in Tongatapu (compared with all other divisions) used items such as a hot water system, motor vehicle, refrigerator,

washing machine, TV, video/DVD player, mobile phone, and computers Several items were used by a higher proportion of households in divisions other than Tongatapu. For example, boats were more common in Vava'u and Ha'apai, a bath or shower was more common in Vava'u and 'Eua, and a landline telephone line was most common in Ongo Niua.

According to **population projections** prepared for this report, Tonga's population in 2030 will increase to about 115,400 people. The population will age, with a decreasing proportion of young people aged 15 and younger, and an increase in people aged 60 and older. The working age population (aged 15–59) will increase to about 68,000 people.

Analysis of census data provides timely and accurate information about demographic trends, patterns and levels. Through census data analysis, governments acquire comprehensive and consistent information about their country's population structure, population processes and socioeconomic characteristics. The population data provided in this report can be an effective tool for planning and policy-making. Because policies are aimed at achieving goals in the future, knowledge about future population trends is required. Understanding and anticipating population changes enables development planners to formulate effective programmes in areas as diverse as health, education, environment, poverty reduction, social progress, and economic growth.

TONGA AND THE PACIFIC ISLANDS REGION



1. INTRODUCTION

This report provides an analysis of the Tonga 2006 census data and, where data are available, presents comparisons with census data from 1996.

1.1 Geographic setting

Tonga consists of five administrative divisions of islands: Tongatapu, Vava'u, Ha'apai, 'Eua, and Ongo Niua, spread over an area of 360,000 km^2 in the South Pacific with a total land area of 650 km^2. It includes 171 islands, of which, about 40 are permanently inhabited. Nuku'alofa, the capital, is located on the island of Tongatapu and is the most populous island division (Vava'u is second).

Nuku'alofa is 890 km due south of Apia, Samoa; 750 km southeast of Suva, Fiji; and 2,000 km northeast of Auckland, New Zealand (see map).

1.2 Background to report

This report is a collaborative effort between the Statistics Department Tonga (SDT) — particularly the Assistant Government Statistician Viliami Fifita, and Sione F. Lolohea — and the Statistics and Demography Programme of the Secretariat of the Pacific Communoity (SPC). For this purpose, Mr Lolohea visited SPC in Noumea, New Caledonia from 25 August–15 September 2007, and again from 9–23 February 2008. Ata'ata Finau, Tonga's Government Statistician, reviewed and commented on the final draft of this report.

This report is based on data collected during the population census enumeration, with 30 November 2006 being census day. The main purpose of the report is to:

- provide a general overview of the vast amount of detailed information that is available from the 2006 census enumerations;
- generate interest, curiosity, and a desire for more detailed information, especially for Tongan decision-makers and the general public; and
- enhance the decision-making process by policy-makers.

Data users are encouraged to contact either SDT or SPC's Statistics and Demography Programme for further information.

Statistics Department Tonga

PO Box 149
Nuku'alofa
Tonga
Telephone: + 676 23300
Facsimile: + 676 23303
Email: dept@stats.gov.to
http://www.spc.int/prism/Country/TO/stats/

SPC's Statistics & Demography Programme

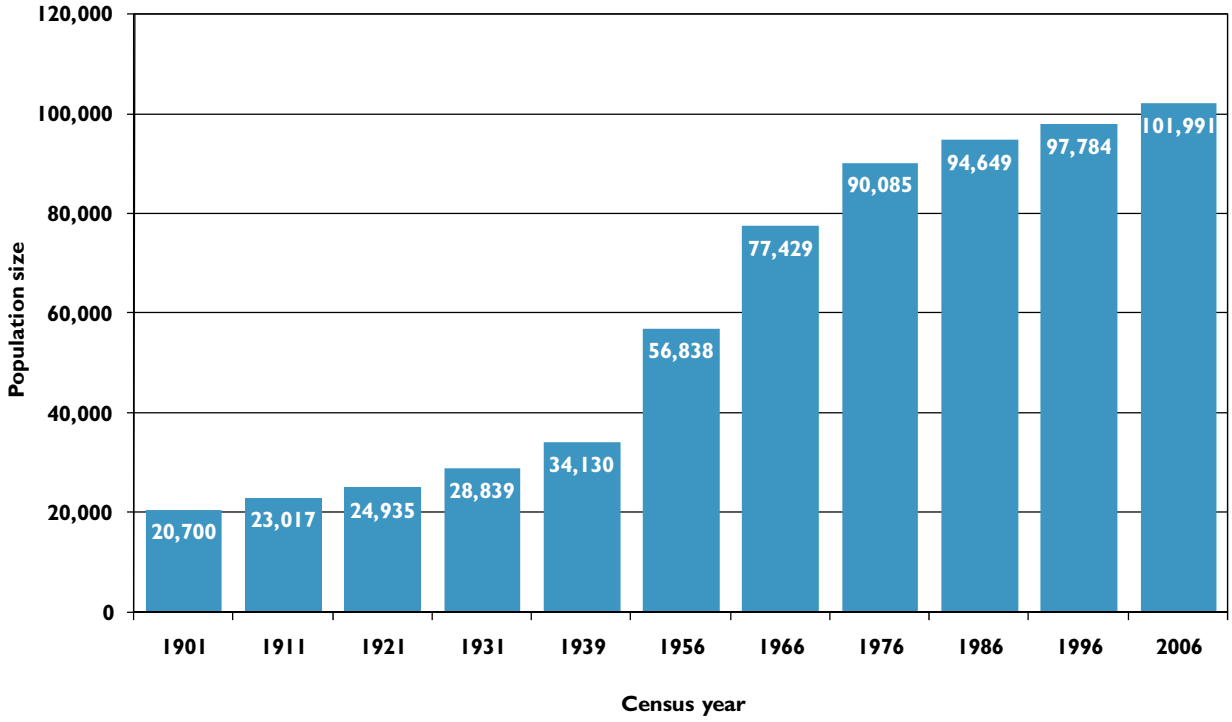
Secretariat of the Pacific Community
BP D5, 98848 Noumea Cedex
New Caledonia
Telephone: +687 26 20 00
Facsimile: +687 26 38 18
Email: Stats&Demog@spc.int
http://www.spc.int

2. POPULATION SIZE, TREND, DISTRIBUTION AND STRUCTURE

2.1 Population size and trend

The population of Tonga, as enumerated on 30 November 2006, was 101,991 people: 51,772 males and 50,219 females. This is an increase of 4,207 people in 10 years — the 1996 population was 97,784 — and represents an annual rate of growth of 0.4%.

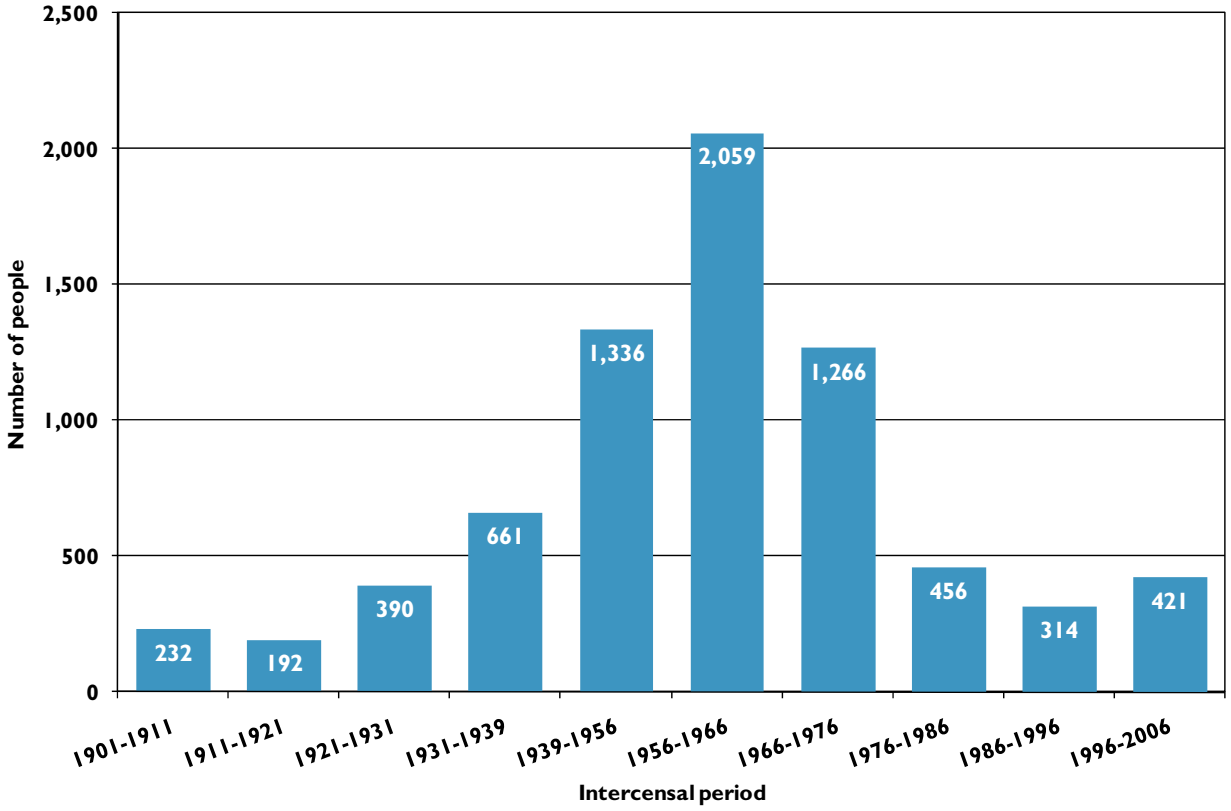
Figure 1: Total population size, Tonga: 1901–2006



Tonga's population has steadily increased since 1901 when the first census was conducted (Fig. 1). However, the population experienced an accelerated growth during the period 1939–1976 when at times the population increased by more than 2,000 people per year (Fig. 2). From the late 1970s until today, the population has increased only very slowly, with an annual growth rate of less than 0.5% (or about 400 people per year).

Population growth has varied extensively by division and district (Table 1, Fig. 3). While Tonga's overall growth rate was 0.4% per annum, Tongatapu's population grew slightly faster at a rate of 0.7%, while Vava'u, Ha'apai, and especially Ongo Niua, experienced negative growth (i.e. population loss). Ongo Niua's population experienced a negative annual growth rate of almost -2%; its population decreased from 2,018 in 1996 to only 1,665 in 2006. However, the districts of Ha'ano (-2.2%) in Ha'apai, and especially the district Motu (-4.3%) in Vava'u experienced an even bigger negative growth than Ongo Niua's.

Figure 2: Intercensal average annual population change (in numbers), Tonga: 1901–2006



Several districts experienced a significantly faster growth rate than average: Vaini (1.2%), Nukunuku (1.0%), Kolomotu'a (0.9%), and Kolofo'ou (0.9%), all situated in Tongatapu.

Figure 3: Average annual population growth rate (%) by division, Tonga: 1996–2006

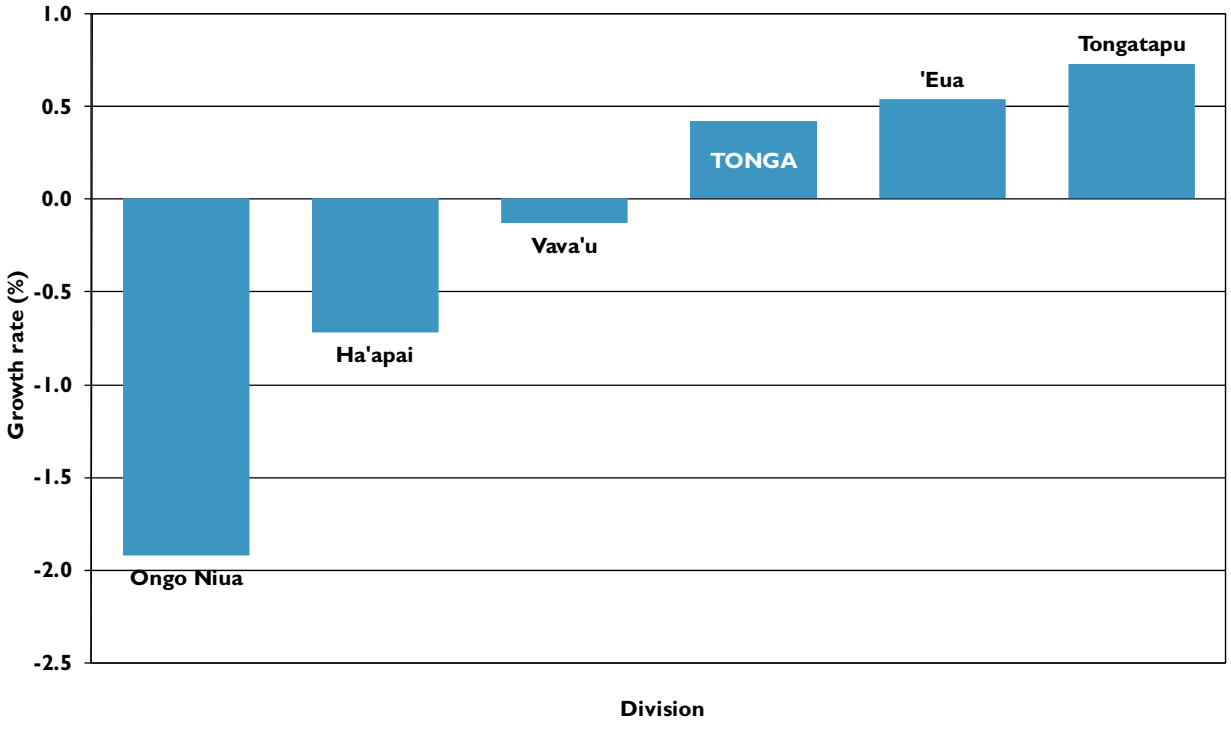


Table 1: Total population size and growth by division and district, Tonga: 1986, 1996 and 2006

Division/District	Census total population			Population change					
				(in numbers)		(in %)		Annual growth rate	
	1986	1996	2006	1986-1996	1996-2006	1986-1996	1996-2006	1986-1996	1996-2006
TONGA	**94,649**	**97,784**	**101,991**	**3,135**	**4,207**	**3.3**	**4.3**	**0.3**	**0.4**
Tongatapu	**63,794**	**66,979**	**72,045**	**3,185**	**5,066**	**5.0**	**7.6**	**0.5**	**0.7**
Kolofo'ou	15,903	16,953	18,463	1,050	1,510	6.6	8.9	0.6	0.9
Kolomotu'a	13,115	14,451	15,848	1,336	1,397	10.2	9.7	1.0	0.9
Vaini	11,104	11,180	12,594	76	1,414	0.7	12.6	0.1	1.2
Tatakamotonga	6,773	6,828	6,969	55	141	0.8	2.1	0.1	0.2
Lapaha	7,005	7,370	7,255	365	-115	5.2	-1.6	0.5	-0.2
Nukunuku	5,863	6,160	6,820	297	660	5.1	10.7	0.5	1.0
Kolovai	4,031	4,037	4,096	6	59	0.1	1.5	0.0	0.1
Vava'u	**15,175**	**15,715**	**15,505**	**540**	**-210**	**3.6**	**-1.3**	**0.3**	**-0.1**
Neiafu	5,268	5,650	5,787	382	137	7.3	2.4	0.7	0.2
Pangaimotu	1,247	1,298	1,412	51	114	4.1	8.8	0.4	0.8
Hahake	2,299	2,291	2,422	-8	131	-0.3	5.7	0.0	0.6
Leimatu'a	2,884	2,753	2,742	-131	-11	-4.5	-0.4	-0.5	0.0
Hihifo	2,093	2,375	2,267	282	-108	13.5	-4.5	1.3	-0.5
Motu	1,384	1,348	875	-36	-473	-2.6	-35.1	-0.3	-4.3
Ha'apai	**8,919**	**8,138**	**7,570**	**-781**	**-568**	**-8.8**	**-7.0**	**-0.9**	**-0.7**
Pangai	2,850	2,966	2,967	116	1	4.1	0.0	0.4	0.0
Foa	1,410	1,434	1,479	24	45	1.7	3.1	0.2	0.3
Lulunga	1,584	1,282	1,075	-302	-207	-19.1	-16.1	-2.1	-1.8
Mu'omu'a	885	735	630	-150	-105	-16.9	-14.3	-1.9	-1.5
Ha'ano	891	773	619	-118	-154	-13.2	-19.9	-1.4	-2.2
'Uiha	1,299	948	800	-351	-148	-27.0	-15.6	-3.1	-1.7
'Eua	**4,393**	**4,934**	**5,206**	**541**	**272**	**12.3**	**5.5**	**1.2**	**0.5**
'Eua Motu'a	2,400	2,766	2,949	366	183	15.3	6.6	1.4	0.6
'Eua Fo'ou	1,993	2,168	2,257	175	89	8.8	4.1	0.8	0.4
Ongo Niua	**2,368**	**2,018**	**1,665**	**-350**	**-353**	**-14.8**	**-17.5**	**-1.6**	**-1.9**
Niua Toputapu	1,605	1,283	1,019	-322	-264	-20.1	-20.6	-2.2	-2.3
Niua Fo'ou	763	735	646	-28	-89	-3.7	-12.1	-0.4	-1.3

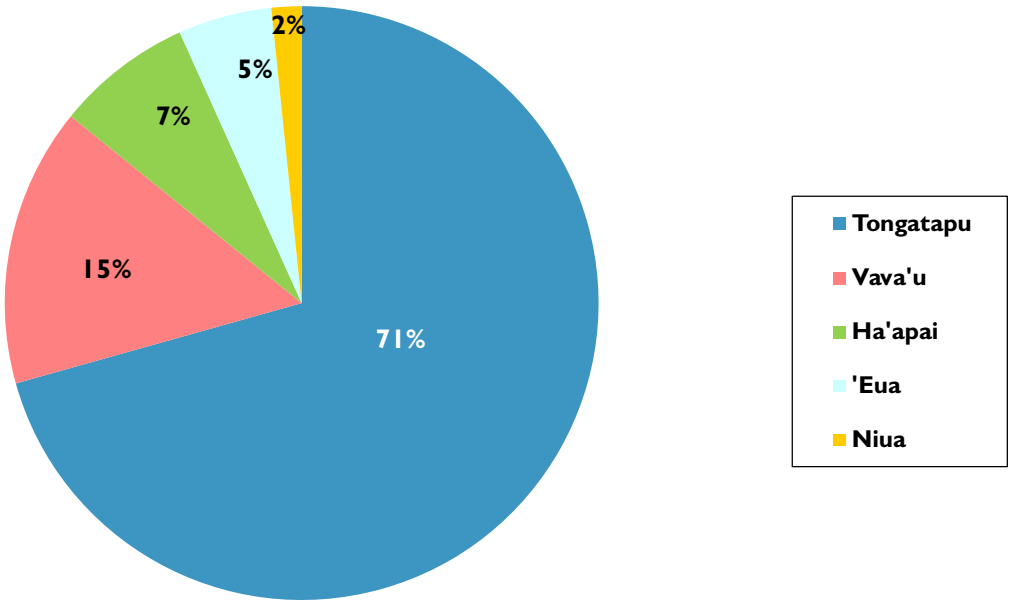
2.2 Population distribution

In 2006, 71% of Tonga's population lived in Tongatapu, which represents a steady increase from 1986 when only 67% lived there, and from 1996 when 68% lived there. The proportion of Tonga's population that lived in Vava'u was 15%, Ha'apai 7%, 'Eua 5%, and Ongo Niua only 2% (Fig. 4).

Urban–rural

Slightly over 23% of Tonga's population lived in the three urban villages of Kolofo'ou, Ma'ufanga, and Kolomotu'a, which together form the township of Nuku'alofa. The urban population has increased slightly since 1996 when just under 23% (22,400 people) lived in the urban area.

Figure 4: Population distribution by division (%), Tonga: 2006



2.3 Population density

According to the 2006 census, Tonga's average population density was 157 people/km^2, an increase from 146 and 150 in 1986 and 1996, respectively (Table 2).

Population density varied widely by division. While there were 277 people/km^2 in Tongatapu, there were only 23 people/km^2 in Ongo Niua.

Table 2: Population density (number of people/km^2) by division, Tonga: 1986, 1996 and 2006

Division/district	Land area (km^2)	Population density		
		1986	1996	2006
TONGA	**650**	146	150	157
Tongatapu	260	245	257	277
Vava'u	121	125	130	128
Ha'apai	109	82	74	69
Eua	87	50	56	60
Niuas	72	33	28	23

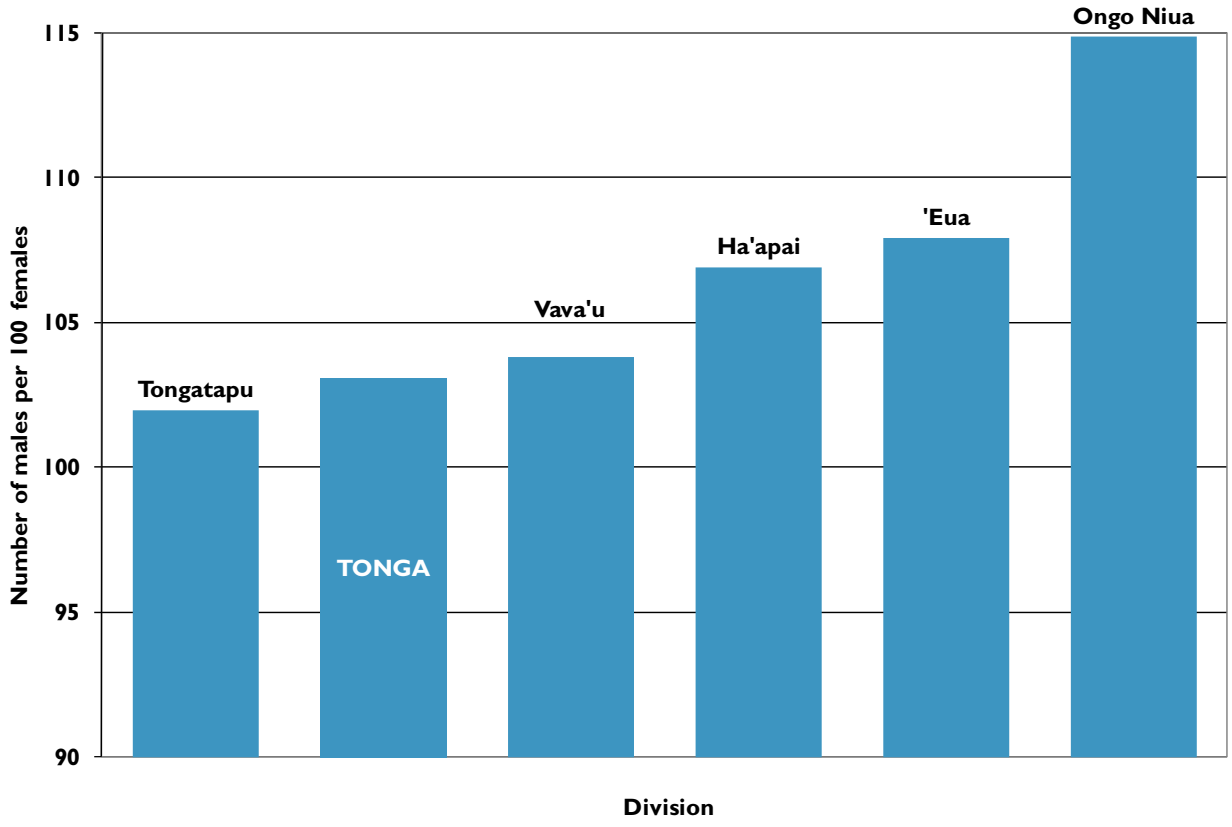
2.4 Population structure

The enumerated 2006 population consisted of 51,772 males and 50,219 females. Males out-numbered females by 1,553, resulting in a sex ratio of 103, which means that there were 103 males per 100 females. However, sex ratios varied widely by division (Fig. 5).

A sex ratio of 100 means that there were equal numbers of males and females. A sex ratio lower than 100 means there more females than males, and a sex ratio higher than 100 means there were more males than females.

Figure 5 shows there were significantly more males than females in Ongo Niua.

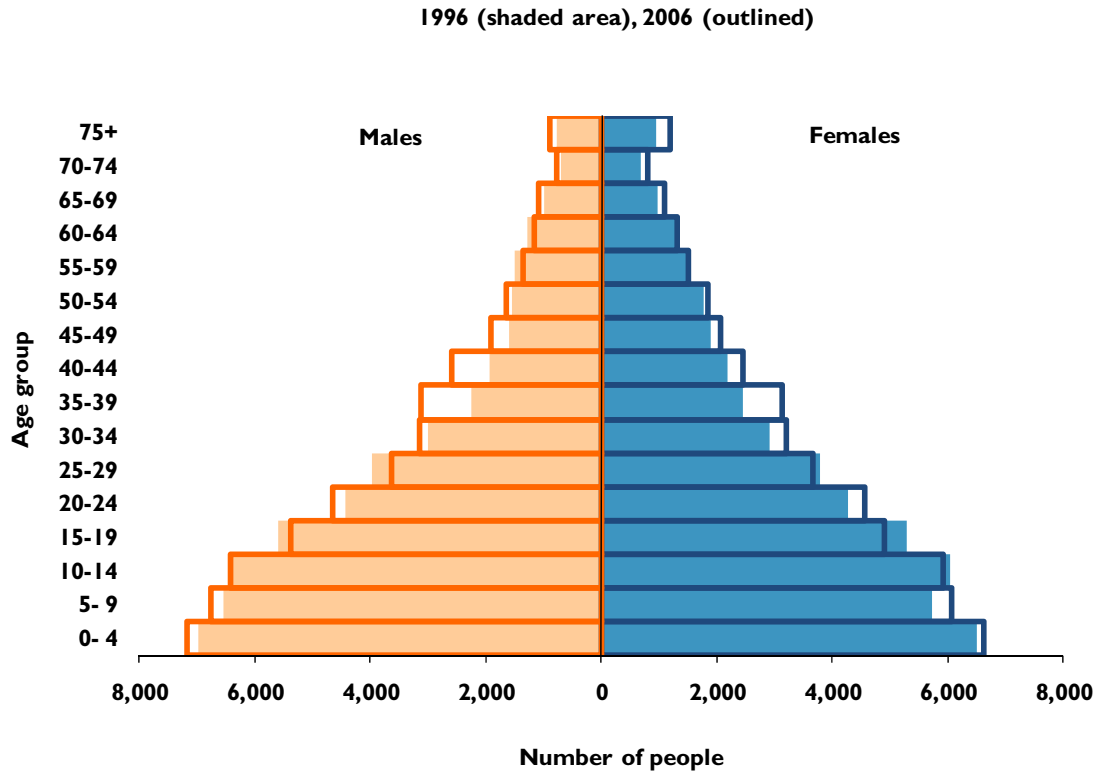
Figure 5: Sex ratio by division, Tonga: 2006



A population pyramid (Figs. 6–11) shows the number of males and females in five-year age groups, starting with the youngest age group at the bottom, and increasing with age towards the top of the pyramid. The number of males is depicted to the left and the number of females to the right of the pyramid's center.

The shaded area shows the population count of the 1996 census, while the thickly outlined area shows the population count of the 2006 census. Note that the people counted in the 2006 census were 10 years older than in the 1996 census, if they were present in Tonga, and so were enumerated during both censuses.

Figure 6: Population pyramid, Tonga: 1996 and 2006



Tonga's population pyramid has the distinct features of a classical pyramid: it has a wide base, meaning that a large percentage of people are in the younger age groups, while increasingly narrow bars represent increasing age groups. Such a pyramid is also associated with relatively high fertility rates (i.e. high number of births per woman).

While Tongatapu's population pyramid (Fig. 7) looks similar to that of Tonga's total population pyramid, the pyramids of Vava'u, Ha'apai, 'Eua and Ongo Niua (Figs. 8–11) are characterised by a distinctly smaller proportion of people aged 20–34. This may be the result of young people migrating from the outer islands (rural areas) to Nuku'alofa and/or to overseas destinations.

The narrowing of the 0–4 year-old population bars for Ha'apai (Fig. 9) and especially Ongo Niua (Fig.11) is probably the result of a recent fertility decline (i.e. a reduction in the number of annual births).

The general population decline in Vava'u, Ha'apai and Ongo Niua is illustrated by smaller thickly outlined bars, representing the size of the different age groups in 2006 compared with the shaded areas that represent the size of the age groups in 1996.

Figure 7: Population pyramid, Tongatapu: 1996 and 2006

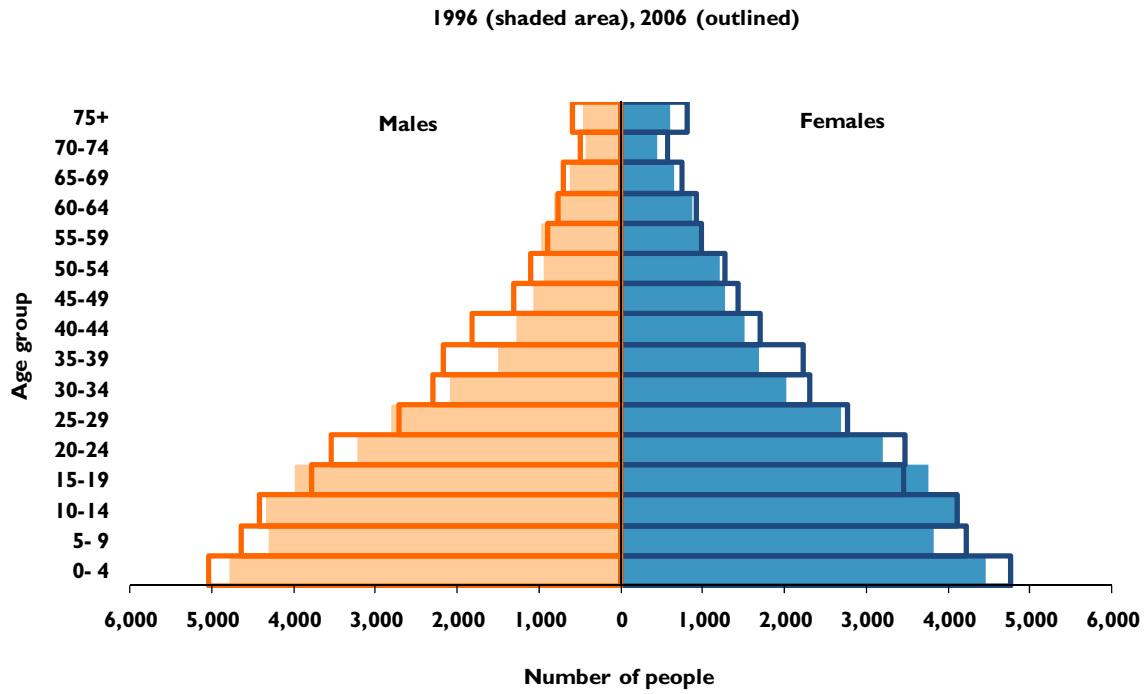


Figure 8: Population pyramid, Vava'u: 1996 and 2006

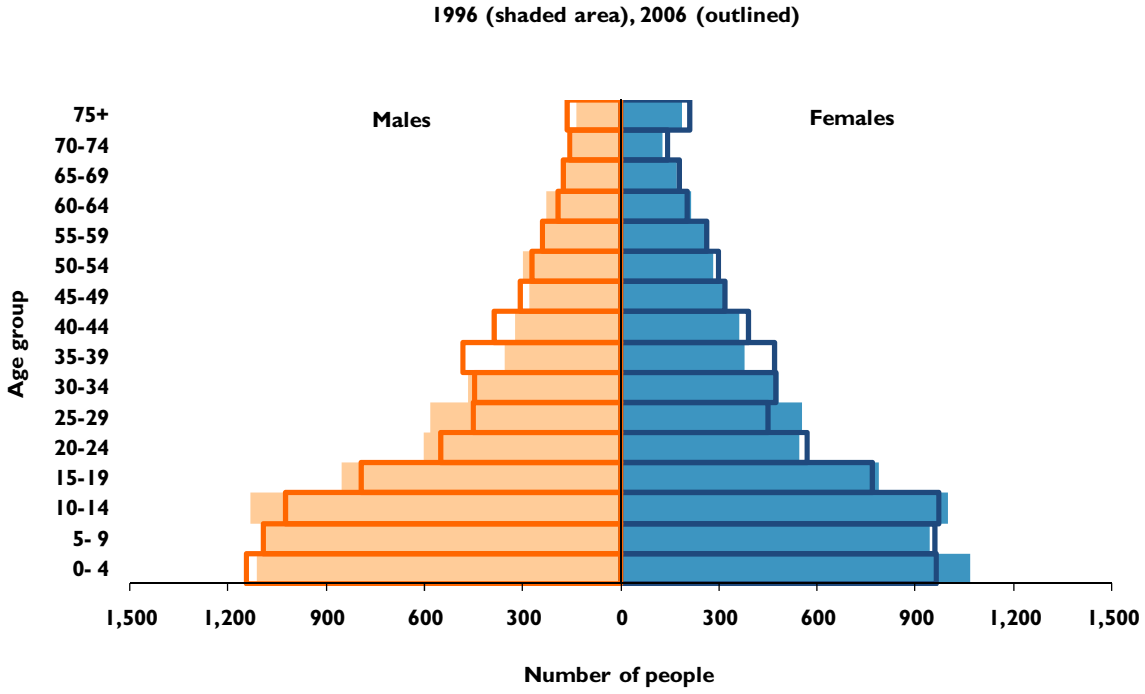


Figure 9: Population pyramid, Ha'apai: 1996 and 2006

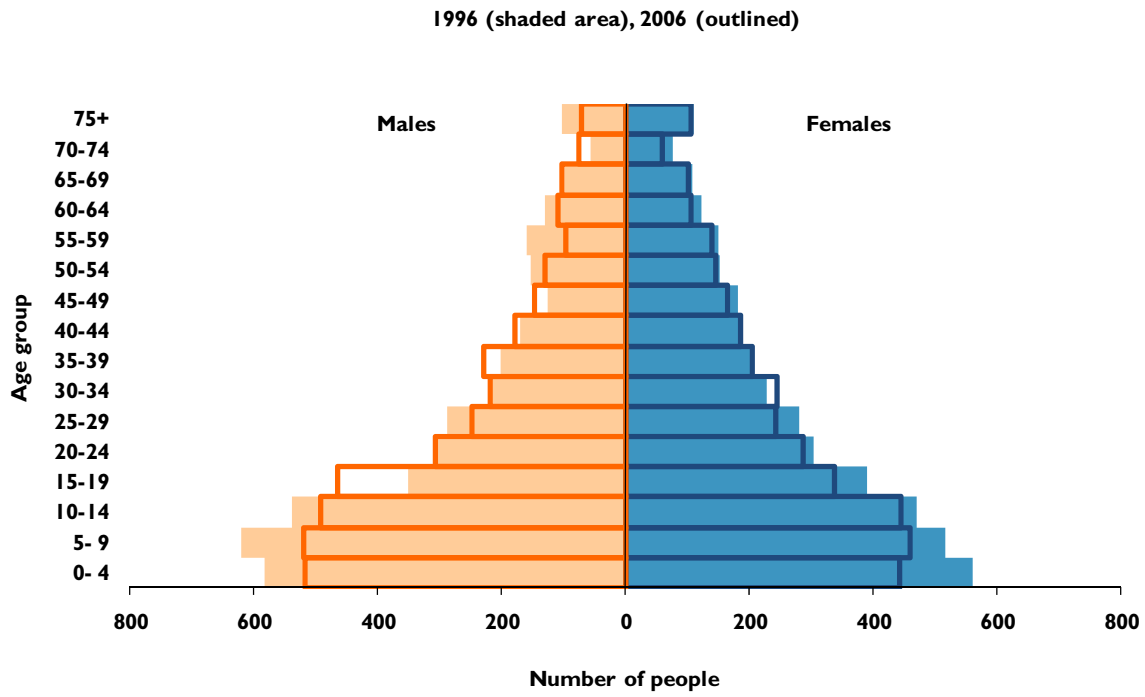


Figure 10: Population pyramid, 'Eua: 1996 and 2006

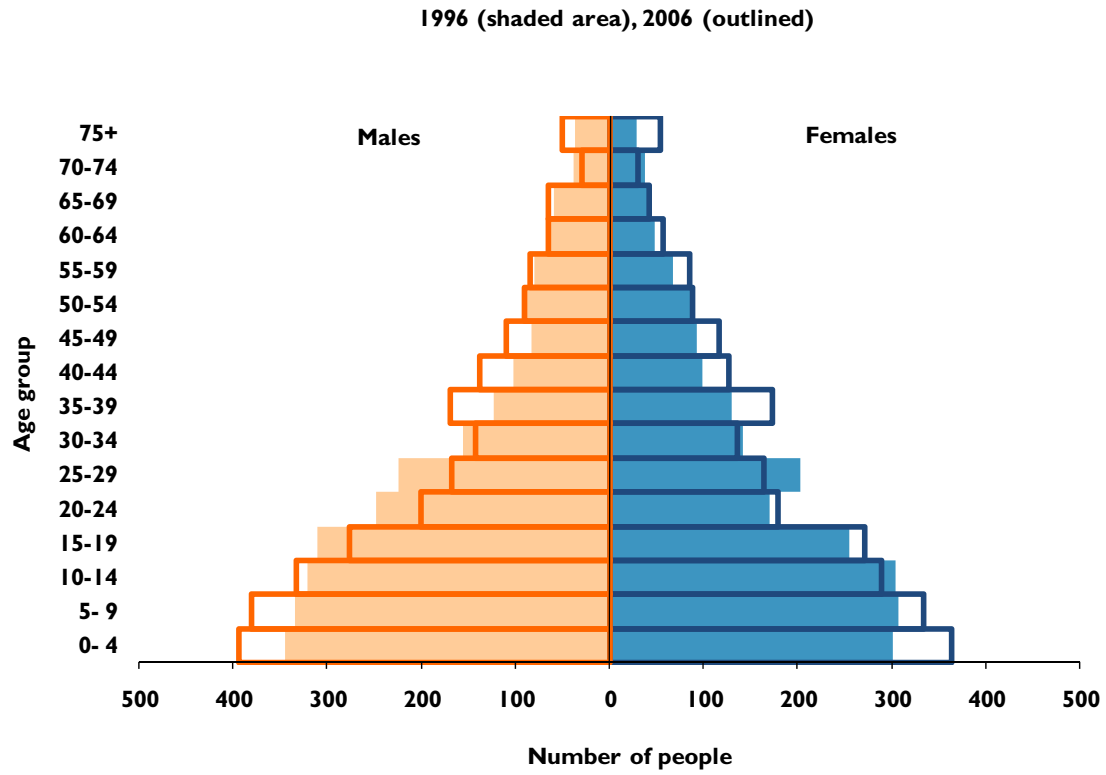
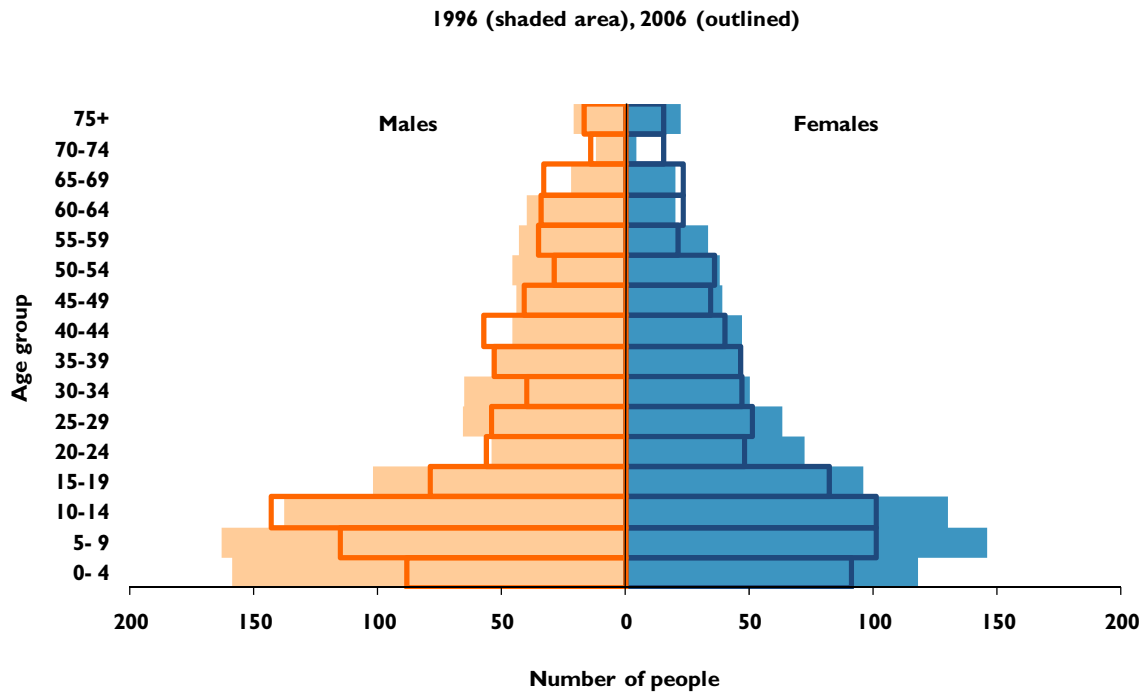


Figure 11: Population pyramid, Ongo Niua: 1996 and 2006

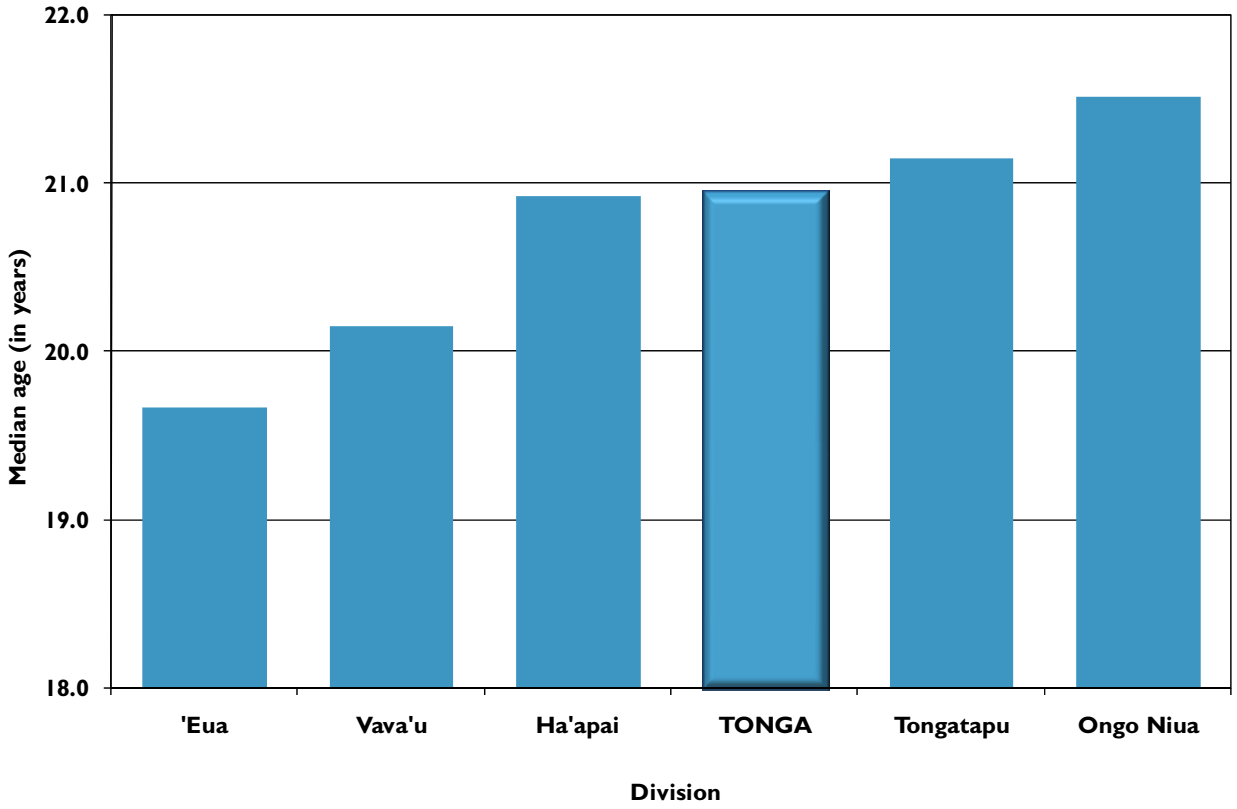


Tonga's population has a young age structure, with 38% of the population younger than 15 years of age, and only 8% older than 60 years (Table 3). This is also illustrated by the median age, which was 21 years (Table 3 and Fig. 12). This means that half of Tonga's population was younger and the other half older than 21 years.

Table 3: Population distribution by broad age group, dependency ratio, median age, and sex ratio, Tonga: 1996 and 2006

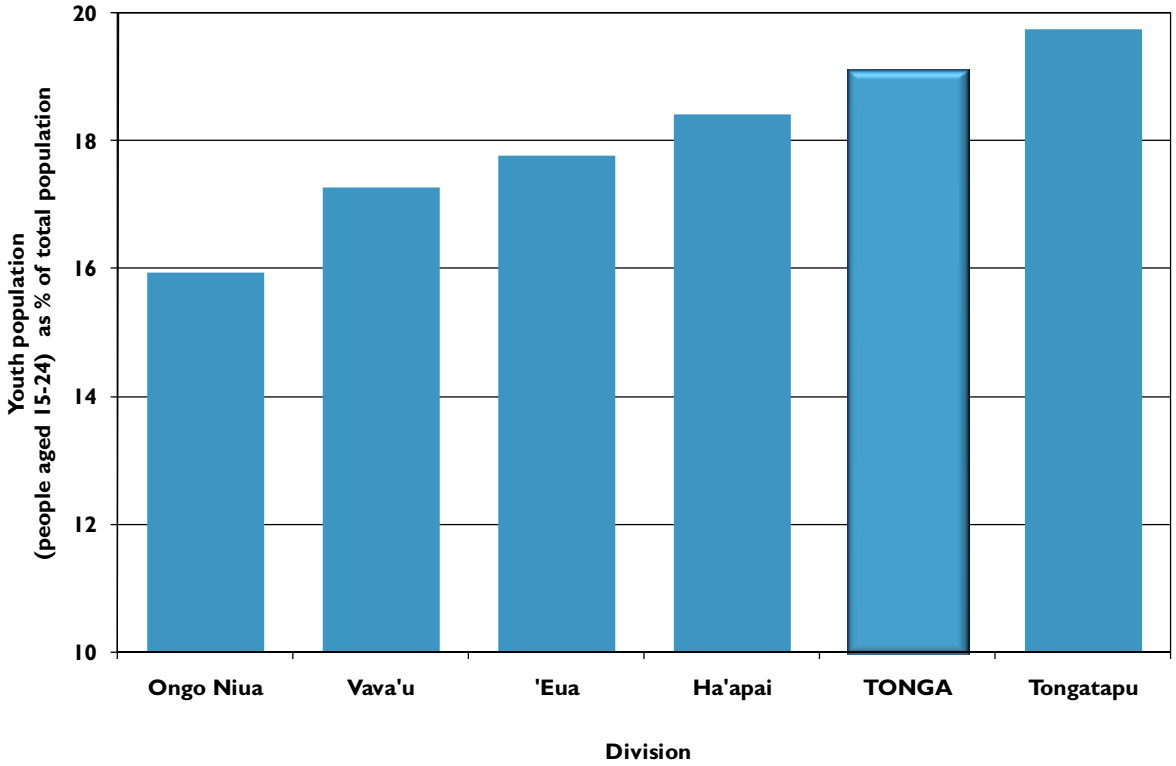
Division	Year	Proportion of population by broad age group (in %)				Age dependency ratio (15–59)	Median age (years)	Sex ratio (males per 100 females)
		0–14	15–24	25–59	60+			
Tonga	1996	39	20	33	8	88	19.9	103
	2006	**38**	**19**	**35**	**8**	**86**	**21.0**	**103**
Tongatapu	1996	39	21	33	7	85	19.9	102
	2006	38	20	35	8	83	21.2	102
Vava'u	1996	40	18	33	9	97	19.6	105
	2006	40	17	34	9	96	20.2	104
Ha'apai	1996	40	17	33	10	101	20.3	102
	2006	38	18	34	10	91	20.9	107
Eua	1996	39	20	34	7	85	19.9	114
	2006	40	18	34	8	91	19.7	108
Ongo Niua	1996	42	16	34	8	101	18.9	100
	2006	38	16	35	10	96	21.5	101

Figure 12: Median age by division, Tonga: 2006



In Tonga, 19% of the population was between the ages of 15–24 (the youth population) (Fig. 13). The highest proportion of youth was found on Tongatapu with almost 20% of the total population; the lowest proportion of youth was in Ongo Niua. Two districts had more than 20% of its population in the 15–24 age group: Kolofo'ou (20.4%), and Foa (21.0%).

Figure 13: Total population by proportion of youth aged 15–24, Tonga: 2006



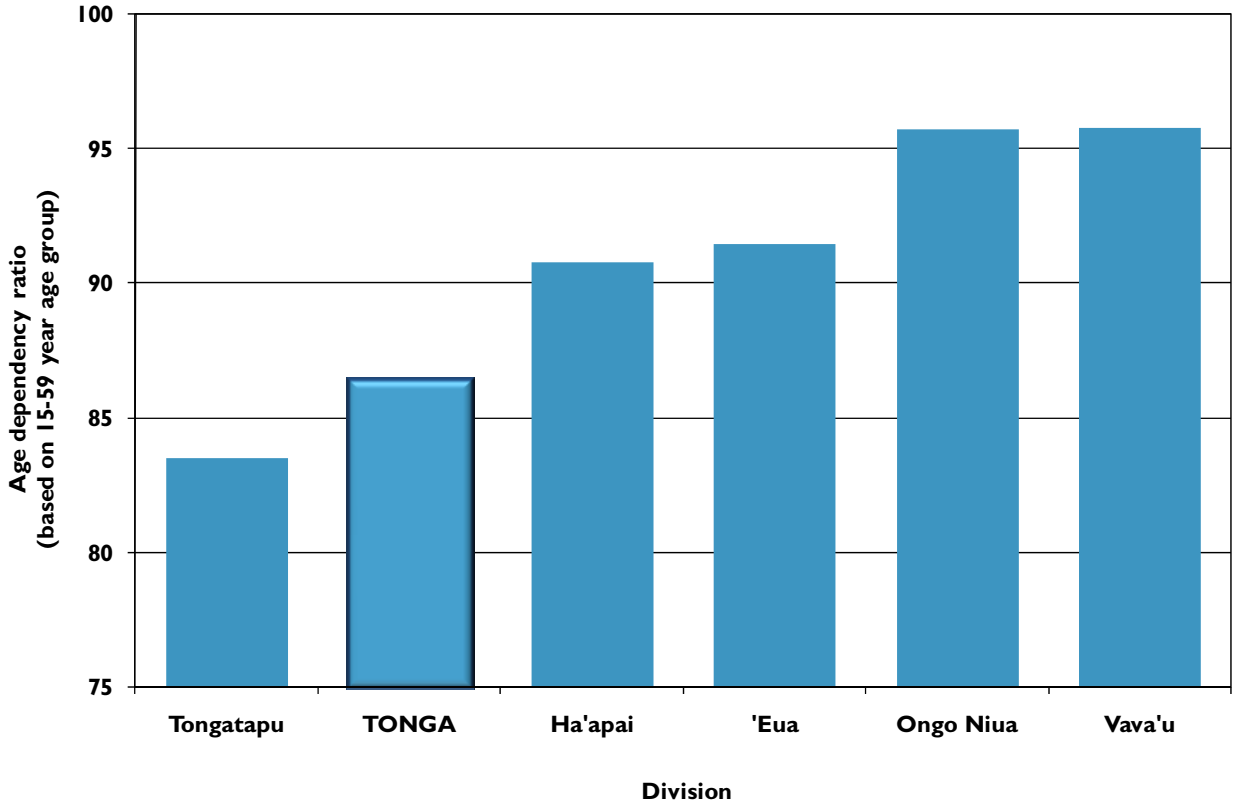
There is a direct link between the size and proportion of young people, and the median age.

Compared with the 1996 census, when the median age was only 19.9 years (Table 3), the 2006 population has aged slightly. This was the result of a decreasing proportion of people aged 0–14 between 1996 and 2006, and to an increase in the proportion of people aged 25–59 from 33% in 1996 to 35% in 2006.

The age structure of the different divisions varied: Vava'u and especially 'Eua had a median age of less than the country average. In contrast, Tongatapu and Ongo Niua had a median age above Tonga's average.

A common way to describe a population's age structure is via the age dependency ratio, which compares the economically dependent component of a country's population with its productive component. This is conventionally expressed as the ratio of young people (0–14 years) plus the old (60^{+} years), to the working age population (15–59 years).

Figure 14: Age dependency ratio by division, Tonga: 2006



Tonga's dependency ratio in 2006 was 86, meaning that for every 100 people of working age, 86 people were in the age dependent category (Table 3 and Fig. 14). The higher the dependency ratio, the higher the number of people that need to be cared for by the working age population, and of this group, only those who actually work and earn a living. The dependency ratio has decreased since the 1996 census when it was 88. Based on the population structure of the different division/district populations, the age dependency ratios of the different divisions/districts vary accordingly.

The most favorable dependency ratio can be found in Tongatapu with only 83 dependent people per 100 people of working age. Dependency ratios were generally higher in rural areas. Ongo Niua and Vava'u both had very high age dependency ratios of 96, meaning that there were almost as many young (0–14 years) and old people (60 years and older), as people aged 15–59.

3. DEMOGRAPHIC COMPONENTS

3.1 Fertility

In order to determine the level and pattern of fertility in Tonga, women over 15 years of age were asked the following questions:

- How many children they had born alive
- When was their last child born.

The total number of children born alive to 31,609 women aged 15 and older was 86,741 (Table 4). The average number of children born alive to all women (average parity) was 2.7 children per woman.

Table 4: Female population aged 15 and older by number of children ever born alive, Tonga: 2006

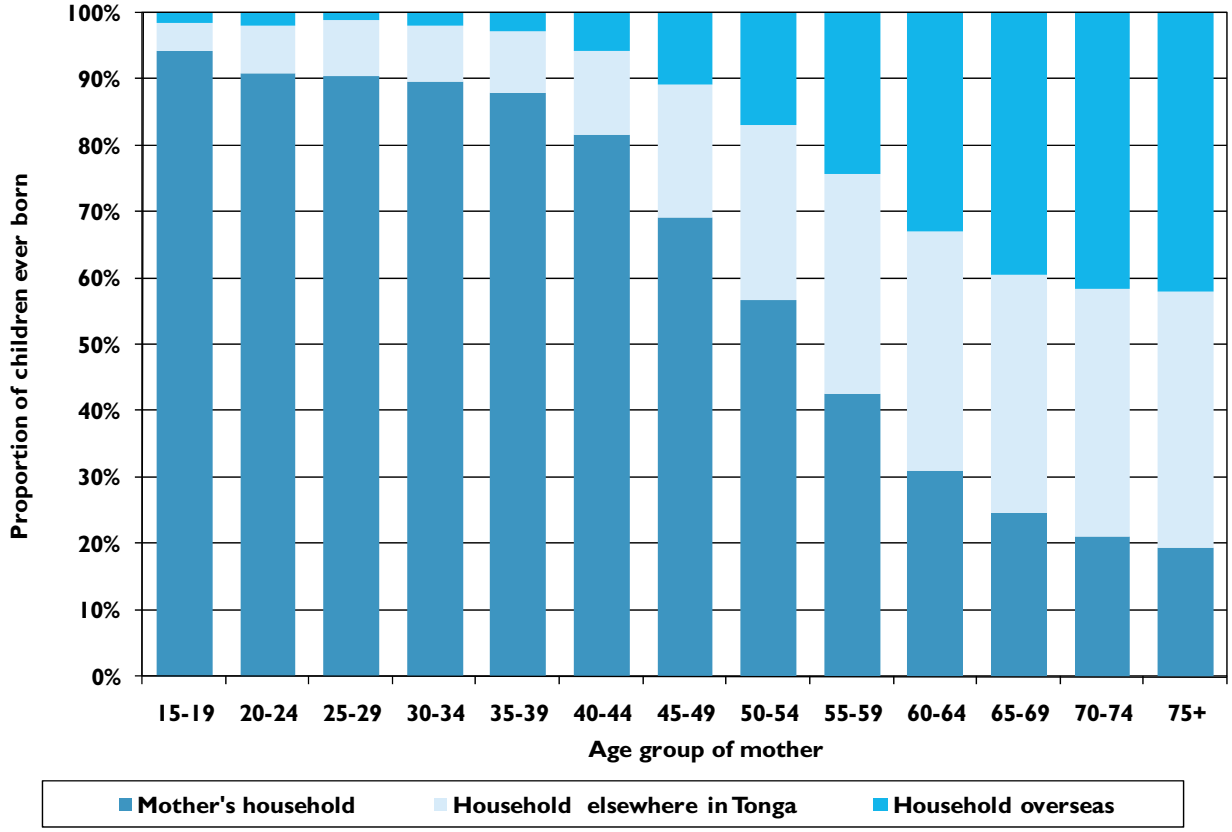
Age of women	Number of women	Number of children ever born			Average number of children ever born		
		Males	Females	Total	Males	Females	Total
15–19	4,897	73	72	145	0	0	0
20–24	4,543	1,051	925	1976	0.2	0.2	0.4
25–29	3,665	2,657	2,539	5196	0.7	0.7	1.4
30–34	3,191	4,359	3,928	8287	1.4	1.2	2.6
35–39	3,117	5,892	5,454	11346	1.9	1.7	3.6
40–44	2,436	5,382	4,917	10299	2.2	2	4.2
45–49	2,059	4,870	4,257	9127	2.4	2.1	4.4
50–54	1,831	4,720	4,328	9048	2.6	2.4	4.9
55–59	1,490	3,958	3,616	7574	2.7	2.4	5.1
60–64	1301	3,411	3,184	6595	2.6	2.4	5.1
65–69	1082	2,951	2,747	5698	2.7	2.5	5.3
70–74	809	2,430	2,254	4684	3	2.8	5.8
75+	1188	3,535	3,231	6766	3	2.7	5.7
Total	**31,609**	**45,289**	**41,452**	**86,741**	**1.4**	**1.3**	**2.7**

Note: This table excludes 35 women (and their children) who did not state their age

Average parity increases with the age of women. While women aged 15–19 had only very few children, women aged 45–49 had 4.4 children, and women older than 70 had on average almost 6 children. The average parities of women over 49 years of age is also called the *completed fertility rate*, a cohort measure demonstrating how many children a certain cohort of women who have completed their childbearing actually produced during those years.

The census also included questions on whether a mother's children lived in her household or elsewhere, which was further specified by whether they lived in households in Tonga or overseas (Fig. 15). The proportion of children living in their mother's household decreased with the age of the mother, because as children grow older they leave their parents' home and form their own household. More than one-third of children of mother's 60 years and older lived overseas.

Figure 15: Proportion of children ever born by age of their mother and whether living in the same household as their mother, Tonga: 2006



From the question on date of birth of the last born child, the number of births per year or period can be calculated (Table 5).

Table 5: Reported number of births during the one-year period before the census (1 December 2005–30 November 2006) by age group of women, Tonga: 2006

Age group of women	Number of women	Number of children			ASFR*
		Males	Females	Total	
15–19	4,897	36	42	78	0.0159
20–24	4,543	286	275	561	0.1235
25–29	3,665	379	310	689	0.1880
30–34	3,191	350	280	630	0.1974
35–39	3,117	251	229	480	0.1540
40–44	2,436	77	57	134	0.0550
45–49	2,059	15	14	29	0.0141
50–54	1,831	4	4	8	0.0044
Total	25,739	1,398	1,211	**2,609**	**TFR = 3.8**

ASFR = Age-Specific Fertility Rate
TFR = Total Fertility Rate

Responses from women during the 2006 census indicated that 2,609 children were born during the one-year period prior to the census, between December 2005 and November 2006 (Table 5). However, this count compares with 2,745 children younger than one year of age enumerated during the census. This mismatch of counts suggests that a sizeable number of women did not report the birth of their child during the year prior to the census, or did not accurately report the exact date of birth of their children. Unfortunately, the number of registered deaths (from Tonga's vital registration system) is not available, and a comparison of census data is not possible.

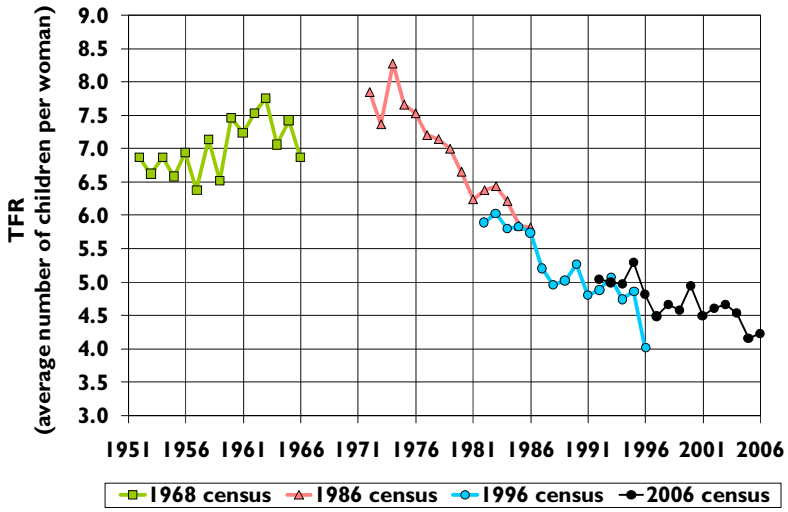
In order to estimate Tonga's fertility level, this analysis relies on indirect estimation techniques, based on census data on the number of children ever born by age of women, and the number of children born during the year prior to the census by age of women as reported in the census. The demographic indicator most commonly used to describe a country's fertility situation is called the total fertility rate (TFR). This measure is an indication of the average number of children a woman gives birth to during her reproductive life (from ages 15–49 years). It is calculated from the number of live births by age of women in a given year — the age-specific fertility rates (ASFRs).

Fertility estimates are based on 1996 and 2006 census data, to which the Arriaga[1] method — which measures fertility based on data in two points in time — was applied. The software PAS (from the US Census Bureau), procedure ARFE-2, and MORTPAK 4.1, procedure FERTPF (from the United Nations) were used (Apps. 1 and 2).

Tonga's TFR was estimated at 4.2 in 2006, which is a very minimal decline compared to 1996 when the average number of children born per woman was about 4.3. The calculated fertility level for 2006 by age group of mother (as presented in Table 6) is based on an average of the adjustment factors for women aged 20–34 (the lightly shaded bold numbers at the right bottom of App. 1).

Both of the above mentioned methods for estimating fertility rates produce virtually identical results, which are also consistent with estimates derived by Michael Levin of the Harvard University Center for Population and Development Studies, using the own-children method (Fig. 16).

Figure 16: Estimates of TFR based on "own-children method", Tonga: 1952–2006



Source: unpublished data, Michael Levin, Harvard University Center for Population and Development Studies

[1] Many censuses and surveys include questions related specifically to fertility, for example, the number of children women have had, and whether they had a birth in the year preceding the inquiry.

The method seeks to adjust the level of observed age-specific fertility rates, which are assumed to represent the true age pattern of fertility, to agree with the level of fertility indicated by the average parities (average number of children ever born) of women in age groups under 30 or 35, which are assumed to be accurate. During successful application of this method, the age pattern of the period fertility rates is combined with the level implied by the average parities of younger women to derive a set of fertility rates that is generally more reliable than either of its constituent parts.

Responses to such questions can be used to estimate fertility indirectly. Some techniques for doing this include the parity/fertility (P/F) ratio method developed by Brass, based on the average number of children ever born to women in five-year age groups, and women's age pattern of fertility derived from births in the year preceding the census or survey; and the Arriaga technique, which is similar to the P/F ratio method but links data for more than one date. While the Brass P/F ratio method assumes constant fertility in the past, the Arriaga method does not.

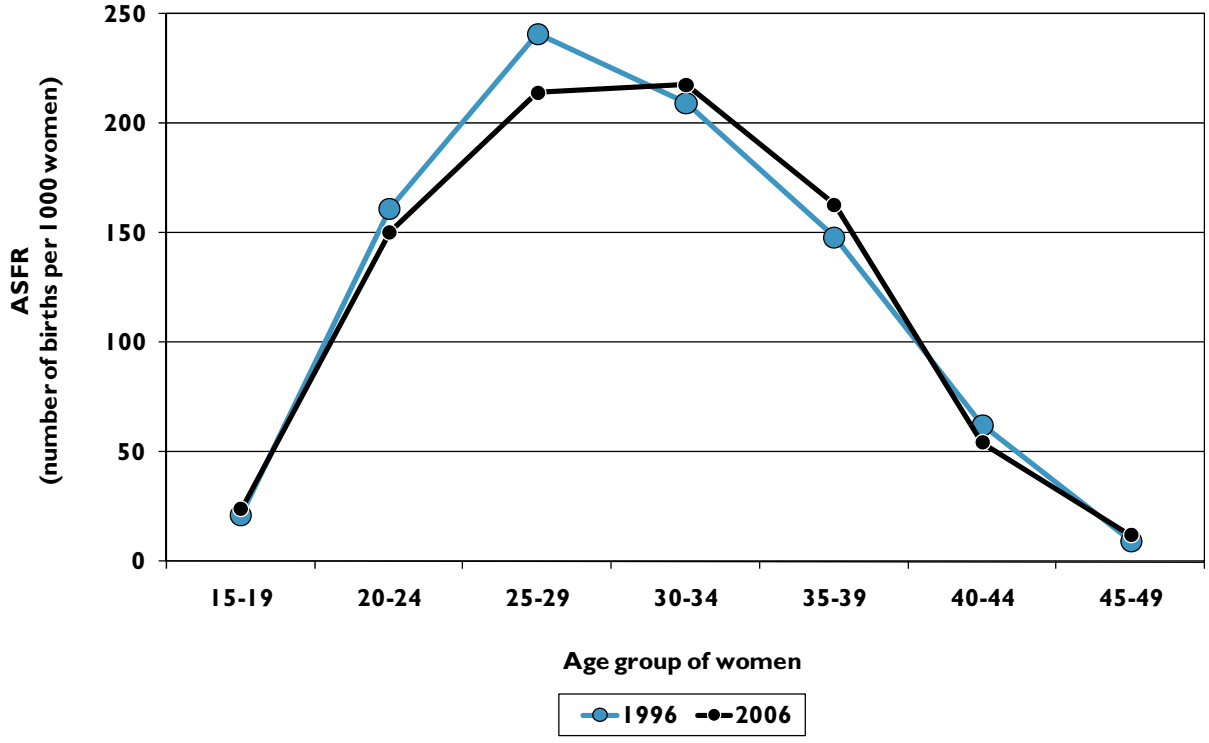
The own-children method is a procedure for deriving ASFRs for a 10- or 15-year period from a special census tabulation of children classified by age, and age of mother, both ages being given in single years at the time of the census. Age of mother can be determined only for those children who are enumerated in the same household as their mother (i.e. who are "own children" of a woman present in some enumerated household, hence the name of the method).

Fertility estimates derived from the 1966, 1986, 1996 and 2006 censuses show a relatively consistent trend. TFR seems to have declined from about eight children per woman during the early 1970s to five in the late 1980s. It has declined very slowly since then to nearly four children per woman in 2006.

During the 10-year period, 1996–2006 there has been a slight shift in the fertility pattern by age group of women. The ASFRs can be depicted (Fig. 17) showing the estimated and adjusted number of births per 1,000 women by age group (based on adjustment procedure described above; see Arriaga method). While the fertility level declined for women in the 20–29 age group, it increased slightly for women aged 30–39. While the most fertile age group for women was 25–29 in 1996, it was 30–34 in 2006.

Fertility levels of women aged 45–49 were very low, followed by women aged 15–19 years. Teenage women aged 15–19 gave birth to an estimated 117 children during the one-year period prior to the 2006 census (Table 6), which translates into a teenage fertility rate of 24 (i.e. 24 births per 1,000 women aged 15–19).

Figure 17: Estimated and adjusted age-specific fertility rates (ASFRs), Tonga: 1996 and 2006



ASFR = number of births per 1,000 women by age group

The number of births by age of women, and therefore the total number of births during the one-year period prior to the 2006 census can be calculated by multiplying the adjusted ASFR by the enumerated number of women by age group in the census, and summing the number of births by the age group of women (Table 6).

Table 6: Estimated/adjusted age-specific fertility rate (ASFR), total fertility rate (TFR), and mean age at childbearing (MAC), Tonga: 2006

Age group of women	Number of women	Estimated ASFR	Estimated number of births
15-19	4,897	0.0239	117
20-24	4,543	0.1506	684
25-29	3,665	0.2141	785
30-34	3,191	0.2178	695
35-39	3,117	0.1630	508
40-44	2,436	0.0541	132
45-49	2,059	0.0120	25
Total	**23,908**		**2,945**
TFR		**4.2** children per woman	
MAC		**30.8** years	

Adjusted ASFRs are based on estimates derived using Arriaga method (App. 1)

CBR can then be calculated by dividing the estimated number of births (2,945) by the total 2006 census population (101,991), multiplied by 1,000.

CBR = 2,945/101,991 X 1,000 = **28.9** (there were 28.9 births/1,000 population)

3.2 Mortality

The questions relating to mortality in the 2006 census were:

- How many live births a woman has ever had, and how many of those born were still alive and/or had died;
- Whether a respondent's marital status was "widowed" (widowhood);
- Whether any residents of the household died during the last 12 months prior to the census.

From all children that were ever born to women aged 15 and older (86,741), 96.1% (83,327) were still alive, and 3,414 children had died (Table 7).

The proportion of surviving females was higher than that of males (Table 8). While 96.7% of all female children ever born were still alive, only 95.5% of all male children had survived.

The proportion of surviving children decreases with the age of mothers (Table 8 and Fig. 18). While 98.2% of all children that were ever born to women now aged 20–24 were still alive, only 97.4% of children born to women now aged 45–49 were still alive, and only 88% of children born to women now aged 75 and older remained alive.

This general trend is explained by the fact that as the age of mothers increases, so does the age of their children; the proportion of birth cohorts that have died rises with an increase in the age of mothers.

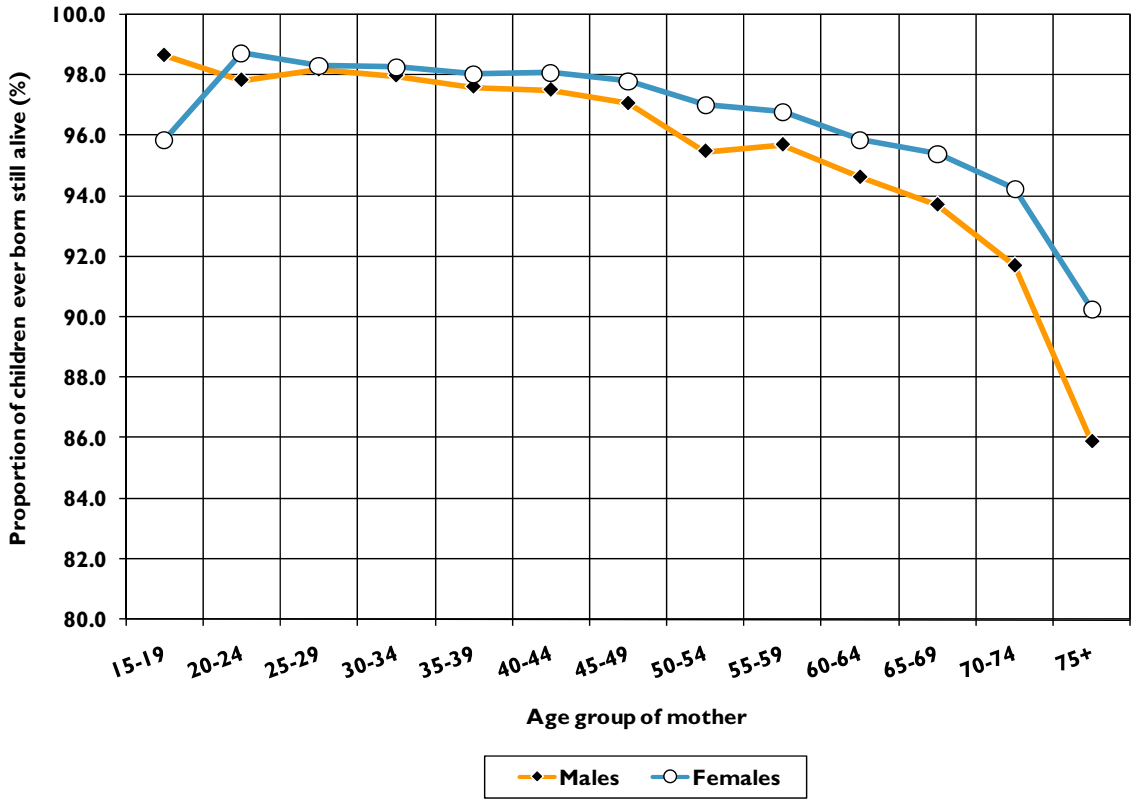
Table 7: Female population aged 15 and older by number of children ever born, number of children still alive, and number of children dead, Tonga: 2006

Age of women	Number of women	Number of children ever born			Number of children			Number of children dead		
		Males	Females	Total	Males	Females	Total	Males	Females	Total
15-19	4,897	73	72	145	72	69	141	1	3	4
20-24	4,543	1,051	925	1,976	1,028	913	1,941	23	12	35
25-29	3,665	2,657	2,539	5,196	2,608	2,496	5,104	49	43	92
30-34	3,191	4,359	3,928	8,287	4,270	3,859	8,129	89	69	158
35-39	3,117	5,892	5,454	11,346	5,750	5,346	11,096	142	108	250
40-44	2,436	5,382	4,917	10,299	5,247	4,822	10,069	135	95	230
45-49	2,059	4,870	4,257	9,127	4,726	4,163	8,889	144	94	238
50-54	1,831	4,720	4,328	9,048	4,506	4,198	8,704	214	130	344
55-59	1,490	3,958	3,616	7,574	3,787	3,499	7,286	171	117	288
60-64	1,301	3,411	3,184	6,595	3,227	3,052	6,279	184	132	316
65-69	1,082	2,951	2,747	5,698	2,765	2,620	5,385	186	127	313
70-74	809	2,430	2,254	4,684	2,228	2,124	4,352	202	130	332
75+	1,188	3,535	3,231	6,766	3,036	2,916	5,952	499	315	814
Total	**31,609**	**45,289**	**41,452**	**86,741**	**43,250**	**40,077**	**83,327**	**2,039**	**1,375**	**3,414**

Table 8: Female population aged 15 and older by proportion of children ever born and still alive, and proportion now dead, Tonga: 2006

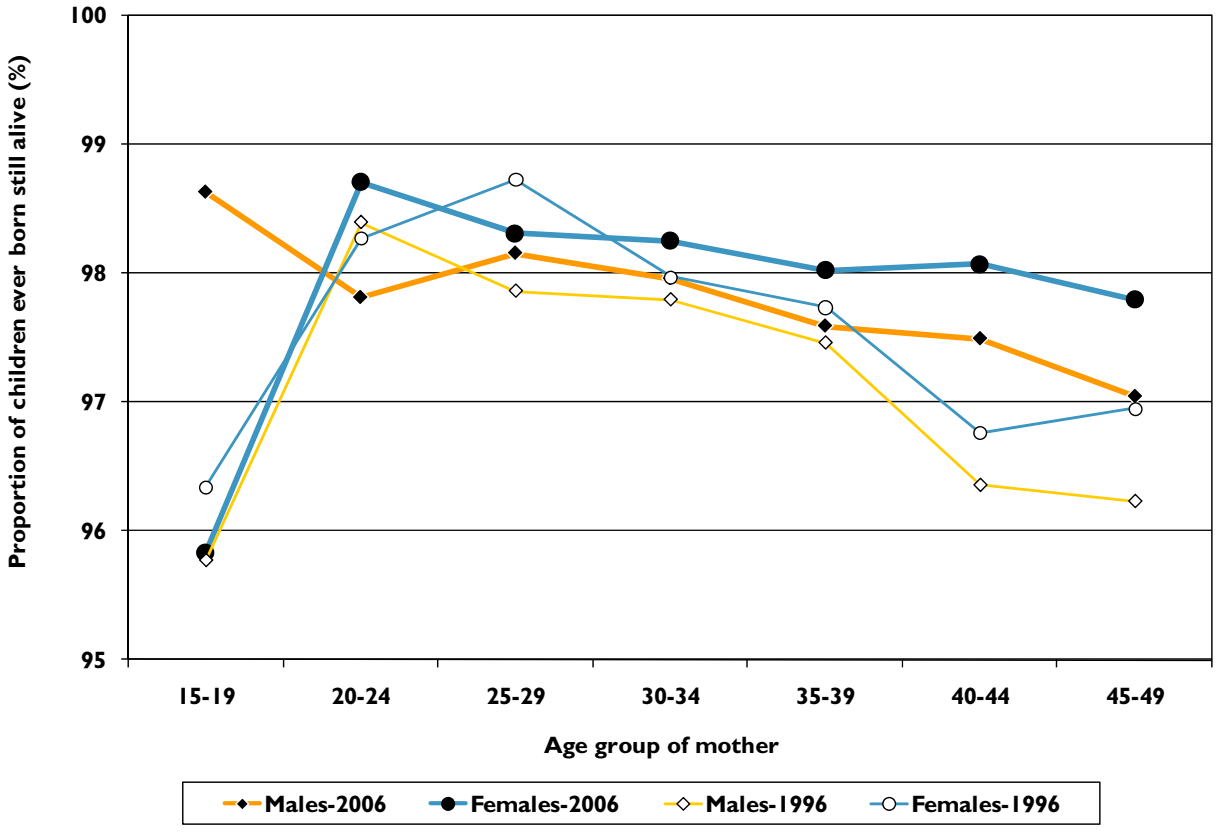
Age of women	Number of women	Proportion of children ever born still			Proportion of children ever born now		
		Males	Females	Total	Males	Females	Total
15-19	4,897	98.6	95.8	97.2	1.4	4.2	2.8
20-24	4,543	97.8	98.7	98.2	2.2	1.3	1.8
25-29	3,665	98.2	98.3	98.2	1.8	1.7	1.8
30-34	3,191	98.0	98.2	98.1	2.0	1.8	1.9
35-39	3,117	97.6	98.0	97.8	2.4	2.0	2.2
40-44	2,436	97.5	98.1	97.8	2.5	1.9	2.2
45-49	2,059	97.0	97.8	97.4	3.0	2.2	2.6
50-54	1,831	95.5	97.0	96.2	4.5	3.0	3.8
55-59	1,490	95.7	96.8	96.2	4.3	3.2	3.8
60-64	1,301	94.6	95.9	95.2	5.4	4.1	4.8
65-69	1,082	93.7	95.4	94.5	6.3	4.6	5.5
70-74	809	91.7	94.2	92.9	8.3	5.8	7.1
75+	1,188	85.9	90.3	88.0	14.1	9.7	12.0
Total	**31,609**	**95.5**	**96.7**	**96.1**	**4.5**	**3.3**	**3.9**

Figure 18: Proportion of children ever born and still alive by age of mother, Tonga: 2006



A comparison of data on children ever born and still alive from 1996 and 2006 census data (see Fig. 19) shows improvements in the survival of children born to women aged 30 and older.

Figure 19: Proportion of children ever born and still alive by age of mother, Tonga: 1996 and 2006



Using the above census data on children ever born and children still living (by age group of mother), the following mortality indices have been obtained using the United Nations software package MORTPAK4.1, procedures CEBCS (Table 9 and Apps. 3 and 4).

Table 9: Child mortality indicators, Tonga: 2006

Indicator	Total	Males	Females
Infant mortality rate (IMR)	19	22	16
Child mortality rate (4q1*)	3	4	2
Under 5 mortality rate (q5+)	22	26	18

* = the probability of dying between age 1 and age 5
+ = the probability of dying between birth and age 5

IMR was estimated at 22 and 16 for males and females, respectively, which is about the same level as in 1996. IMR measures the number of deaths of children under one year of age per 1,000 live births.

Child mortality, the probability of dying between age 1 and age 5, was estimated at 4 male deaths and 2 female deaths per 1,000 people of that age.

Under 5 mortality, the probability of dying between birth and age 5, was estimated at 26 and 18 for males and females, respectively per 1,000 people.

Based on the registered[2] number of deaths by age and sex during the period 2003–2005, and the reported number of deaths by age and sex derived from the census household question on number of deaths of residents of households that died during the last 12 months before the census (App. 5), the average annual number of deaths by age and sex during the period 2003–2006 were calculated. Average age-specific death rates — expressed as (m(x) — were derived by dividing the average annual number of deaths during the period 2003–2006 by the estimated mid-period total population (1 January 2005).

Subsequently, the derived age-specific death rates were adjusted by the estimated child mortality rates that were derived using census information on children ever born and still alive (see above). Based on these data, a life table was constructed for males and females (Table 11 and 12) using MORTPAK4.1, procedures LIFTB. According to the assumptions made, and the procedures and methods used, life expectancy at birth was calculated at 67.3 and 73.0 years for males and females, respectively (Table 10). This compares with estimates of 67.6 and 70.5 years for males and females in 1996.

The derived mortality pattern (age-specific death rates) was compared with the different Coale-Demeny and United Nations model life tables using MORTPAK4.1, procedure COMPAR. The assumption was made that possible under-registration of deaths is not age specific and therefore does not affect the overall pattern of mortality. It was found that the *Far East Asian* pattern of the UN model life tables resembles most closely the empirical mortality pattern of Tongan males, while the Coale-Demeny West model better resembles the pattern for females.

The total number of deaths in 2006 can be estimated by multiplying the estimated age-specific death rates [m(x,n)-values] of the derived male and female life table (Tables 11 and 12) with the 2006 census male and female population specified by age (App. 6). Subsequently, the crude death rate (CDR) can be calculated as follows:

CDR = 709/101,991 X 1,000 = **7.0** (7 deaths per 1,000 population in 2006)

[2] Data provided by Ministry of Health and Ministry of Justice

Table 10: General mortality indicators, Tonga: 2006

Indicator	Total	Males	Females
Life expectancy at birth, E(0)	70.2	67.3	73.0
Crude Death Rate (CDR)	7.0	7.8	6.1

The above mortality indicators clearly show more positive mortality indicators for females than for males, with females living longer, on average almost six years longer, than males. The findings are supported by the following data:

- more male than female deaths have been reported/registered (App. 5)
- more females than males survive to older ages (Fig. 6)
- the proportion of widowed females was considerably higher than that for widowed males (Fig. 21 and 24), indicating earlier death of male spouses.

Table 11: Abridged life table for Tongan males: 2006

Age	m(x,n)	q(x,n)	l(x)	d(x,n)	L(x,n)	S(x,n)	T(x)	e(x)
0	0.0224	**0.0220**	100,000	2,200	98,033	0.9766	6,732,413	**67.3**
1	0.0010	**0.0040**	97,800	391	390,256	0.9955	6,634,381	67.8
5	0.0008	0.0040	97,409	389	486,072	0.9965	6,244,125	64.1
10	0.0006	0.0030	97,020	291	484,373	0.9951	5,758,053	59.3
15	0.0015	0.0075	96,729	723	482,018	0.9909	5,273,680	54.5
20	0.0020	0.0100	96,006	955	477,639	0.9914	4,791,662	49.9
25	0.0015	0.0075	95,051	710	473,527	0.9895	4,314,022	45.4
30	0.0028	0.0139	94,341	1,312	468,533	0.9873	3,840,496	40.7
35	0.0023	0.0114	93,029	1,064	462,564	0.9851	3,371,962	36.2
40	0.0041	0.0203	91,965	1,868	455,686	0.9673	2,909,399	31.6
45	0.0094	0.0460	90,097	4,143	440,778	0.9531	2,453,713	27.2
50	0.0096	0.0469	85,953	4,033	420,087	0.9389	2,012,935	23.4
55	0.0167	0.0804	81,920	6,587	394,405	0.8920	1,592,848	19.4
60	0.0286	0.1336	75,334	10,062	351,819	0.8729	1,198,443	15.9
65	0.0257	0.1209	65,272	7,893	307,104	0.8386	846,625	13.0
70	0.0494	0.2217	57,379	12,722	257,539	0.6895	539,520	9.4
75	0.1061	0.4219	44,657	18,841	177,582	0.3702	281,981	6.3
80	0.2473	...	25,815	25,815	104,399	...	104,399	4.0

e(0) = life expectancy at birth
q(0) = an approximation of the infant mortality rate as calculated in Apps. 3 and 4 and Table 9
4q1 = an approximation of the probability of dying between age 1 and age 5 (Apps. 3 and 4, Table 9)

Table 12: Abridged life table for Tongan females: 2006

Age	m(x,n)	q(x,n)	l(x)	d(x,n)	L(x,n)	S(x,n)	T(x)	e(x)
0	0.0162	**0.0160**	100,000	1,600	98,557	0.9833	7,300,687	**73.0**
1	0.0005	**0.0020**	98,400	197	393,108	0.9969	7,202,130	73.2
5	0.0007	0.0035	98,203	343	490,158	0.9968	6,809,023	69.3
10	0.0006	0.0030	97,860	293	488,568	0.9967	6,318,864	64.6
15	0.0007	0.0035	97,567	341	486,953	0.9973	5,830,297	59.8
20	0.0004	0.0020	97,226	194	485,631	0.9979	5,343,344	55.0
25	0.0005	0.0025	97,032	242	484,604	0.9962	4,857,713	50.1
30	0.0011	0.0055	96,790	531	482,754	0.9931	4,373,108	45.2
35	0.0017	0.0085	96,258	815	479,439	0.9880	3,890,354	40.4
40	0.0033	0.0164	95,443	1,563	473,681	0.9783	3,410,916	35.7
45	0.0055	0.0271	93,880	2,549	463,415	0.9687	2,937,235	31.3
50	0.0072	0.0354	91,332	3,232	448,918	0.9590	2,473,820	27.1
55	0.0098	0.0479	88,099	4,219	430,525	0.9398	2,024,902	23.0
60	0.0153	0.0738	83,880	6,191	404,621	0.9179	1,594,377	19.0
65	0.0196	0.0937	77,689	7,279	371,387	0.8686	1,189,756	15.3
70	0.0394	0.1805	70,410	12,710	322,578	0.7677	818,370	11.6
75	0.0693	0.2974	57,701	17,161	247,638	0.5005	495,792	8.6
80	0.1634	...	40,539	40,539	248,154	...	248,154	6.1

e(0) = life expectancy at birth
q(0) = an approximation of the infant mortality rate as calculated in Apps. 3 and 4 and Table 9
4q1 = an approximation of the probability of dying between age 1 and age 5 (Apps. 3 and 4, Table 9)

Brief explanation of a life table (Tables 11 and 12)

A life table is used to simulate the lifetime mortality experience of a population. It does so by taking that population's age-specific death rates and applying them to a hypothetical population of 100,000 people born at the same time. For each year on the life table, death inevitably thins the hypothetical population's ranks until, in the bottom row of statistics, even the oldest people die.

Column "m(x,n)" shows the proportion of each age group dying in each age interval. These data are based on the observed mortality experience of a population. Column "l(x)" shows the number of people alive at the beginning of each age interval, starting with 100,000 at birth. Column "d(x,n)" shows the number who would die within each age interval. Column "L(x,n)" shows the total number of person-years that would be lived within each age interval. Column "T(x)" shows the total number of years of life to be shared by the population in the age interval and in all subsequent intervals. This measure takes into account the frequency of deaths that will occur in this and all subsequent intervals. As age increases and the population shrinks, the total person-years that the survivors have to live necessarily diminish.

Life expectancy is shown in Column "e(x)" — the average number of years remaining for a person at a given age interval.

The first value in column "**e(x)**" represents **life expectancy at birth**.
The first value in column "**q(x,n)**" is an approximation of the **infant mortality rate (IMR)**.
The second value in column "**q(x,n)**" is an approximation of the **child mortality rate**.

m(x,n) = age-specific death rate
q(x,n) = the probability of dying between two exact ages
l(x) = the number of survivors at exact age x
d(x,n) = the number of deaths between two exact ages, x and x+n
L(x,n) = the number of person-years that would be lived within the indicated age interval (x and x+n) by the cohort of 100,000 births assumed.
S(x,n) = probability of surviving between two exact ages, x and x+n
T(x) = total number of person-years that would be lived after the beginning of the indicated age interval by the cohort of 100,000 births assumed.
e(x) = expectation of life from age x

3.3 Migration

3.3.1 Internal migration

Internal migration — the movement of people from one island or region of Tonga to another — can be estimated by comparing:

- place of residence one year prior to the census with the place of residence during the census enumeration, and/or
- place of residence five years prior to the census with the place of residence during the census enumeration, and/or
- place of birth with the place of residence during the census enumeration.

3.3.1.1 Residence one year prior to the census

Based on the question regarding place of residence in 2005 (one year prior to the census), 93% of the total population aged 1 year and older answered that they had not moved from their current (November 2006) place of residence, 4% (3,661 people) said that they lived elsewhere in Tonga, and 2,847 people (3%) said that they were overseas (Table 13).

Table 13: Population by place of enumeration and usual residence one year ago (in 2005), Tonga: 2006

Place of enumeration at time of census		Usual residential address 1 year ago							
Division	**Total**	**Tongatap**	**Vava'u**	**Ha'apai**	**Eua**	**Ongo Niua**	**Overseas**	**Not born***	**NS**
Tongatapu	72,045	65,728	701	565	290	188	2,362	1,989	222
Vava'u	15,505	521	14,181	60	4	48	267	407	17
Ha'apai	7,570	597	62	6,580	28	9	102	175	17
Eua	5,206	346	27	28	4,553	3	104	143	2
Ongo Niua	1,665	124	35	9	16	1,438	12	31	0
Tonga	**101,991**	**67,316**	**15,006**	**7,242**	**4,891**	**1,686**	**2,847**	**2,745**	**258**

 = non-movers (i.e. those people who did not change their residence during the reference period

* people aged 1 and younger could not state their residence one year prior to the census, because they were not yet born then

Tongatapu had a net gain of 180 people (701 minus 521) from Vava'u, a net loss to Ha'apai of 32 people (565 minus 597), and net loss to 'Eua of 56 people (290 minus 346), and a net gain from Ongo Niua of 64 people (188 minus 124).

Table 14: Interregional migration during the one-year period prior to the 2006 census, Tonga 2006

Division	In-Migrants	Out-Migrants	Net Migrants
Tongatapu	1,744	1,588	156
Vava'u	633	825	-192
Ha'apai	696	662	34
Eua	404	338	66
Ongo Niua	184	248	-64
Tonga	**3,661**	**3,661**	**0**

Overall, Tongatapu gained 156 people from all other divisions during the one-year period prior to the census (Table 14). Vava'u on the other hand had a net loss of 192 people to all other divisions, Ha'apai a net gain of 34 people, 'Eua a net gain of 66 people, and Ongo Niua a net loss of 64 people.

3.3.1.2 Residence five years prior to the census

Based on the question regarding place of residence in 2001 (five years prior to the census), 89% of the total population aged 1 and older answered that they had not moved from their current (November 2006) place of residence, 7% (5,875 people) said that they lived elsewhere in Tonga, and 4,057 people (5%) said that they were overseas (Table 15).

Table 15: Population by place of enumeration and usual residence five years ago (in 2001), Tonga: 2006

Place of enumeration at time of census		Usual residential address 5 years ago							
Division	**Total**	**Tongatapu**	**Vava'u**	**Ha'apai**	**Eua**	**Ongo Niua**	**Overseas**	**Not born***	**NS**
Tongatapu	72,045	55,311	1,341	1,013	524	385	3,372	9,783	316
Vava'u	15,505	705	12,096	102	32	39	404	2106	21
Ha'apai	7,570	705	100	5,601	30	19	133	957	25
Eua	5,206	484	60	54	3,705	9	135	757	2
Ongo Niua	1,665	176	51	26	20	1,200	13	179	0
Tonga	**101,991**	**57,381**	**13,648**	**6,796**	**4,311**	**1,652**	**4,057**	**13,782**	**364**

 = non-movers (i.e. those people who did not change their residence during the reference period

* people aged 5 and younger could not state their residence five years prior to the census, because they were not yet born then

Tongatapu had a net gain of 636 people from Vava'u (1,341 minus 705), a net gain of 308 people (1,013 minus 705) from Ha'apai, a net gain of 40 people (524 minus 484) from 'Eua, and a net gain of 209 people (385 minus 176) from Ongo Niua. Overall, Tongatapu gained 1,193 people from all other divisions during the five-year period prior to the census (Table 16). Vava'u on the other hand had a net loss of 674 people to all other divisions, Ha'apai a net loss of 341 people, 'Eua a net gain of 1 person, and Ongo Niua a net loss of 179 people.

Table 16: Interregional migration during the five-year period prior to the 2006 census, Tonga 2006

Division	In-Migrants	Out-Migrants	Net Migrants
Tongatapu	3,263	2,070	1,193
Vava'u	878	1,552	-674
Ha'apai	854	1,195	-341
Eua	607	606	1
Ongo Niua	273	452	-179
Tonga	**5,875**	**5,875**	**0**

3.3.1.3 Place of birth (lifetime migration)

Data on lifetime migration (number of people by place of residence and place of birth) indicate that the direction of internal migration flows was mainly towards Tongatapu.

Seventy-six per cent of Tonga's population was living at the same place where they were born, 19% (19,347 people) were born in Tonga but not at their current (November 2006) place of residence, and 4.4% (4,437 people) of the population was born overseas (Table 17).

Table 17: Population by place of residence in 2006 and place of birth (lifetime migration), Tonga: 2006

Place of enumeration at time of census		Place of birth						
Division	**Total**	**Tongatapu**	**Vava'u**	**Ha'apai**	**Eua**	**Ongo Niua**	**Overseas**	**NS**
Tongatapu	72,045	54,211	5,376	5,356	1,251	1,343	3,749	759
Vava'u	15,505	1,440	12,883	491	59	142	439	51
Ha'apai	7,570	1,078	355	5,877	72	56	108	24
Eua	5,206	1,219	263	269	3,168	163	119	5
Ongo Niua	1,665	247	105	31	31	1,229	22	0
Tonga	**101,991**	**58,195**	**18,982**	**12,024**	**4,581**	**2,933**	**4,437**	**839**

□ = non-movers (i.e. those people who did not change their residence during the reference period

Just over half (58,195) of the population was born on Tongatapu, 19% in Vava'u (18,982), 12% (12,024) in Ha'apai, and 4% and 3% in 'Eua and Ongo Niua.

Overall, only three-quarters (75%) of Tongatapu's residents were born on Tongatapu, while more than 83% of Vava'u's residents were also born there. Only 61% of the 2006 residents of 'Eua were also born in 'Eua.

Tongatapu had the highest proportion of residents born overseas, with just over 5% of its 2006 residents.

Based on the above data, it can be seen that Tongatapu had a net gain of 9,342 people, mainly from Ha'apai. The only other division that had a net gain of people was 'Eua with 501 people, mainly from Tongatapu (Table 18).

Table 18: Interregional lifetime migration, Tonga: 2006

Division	In-Migrants	Out-Migrants	Net Migrants
Tongatapu	13,326	3,984	9,342
Vava'u	2,132	6,099	-3,967
Ha'apai	1,561	6,147	-4,586
Eua	1,914	1,413	501
Niuas	414	1,704	-1,290
Tonga	**19,347**	**19,347**	**0**

3.3.2 International migration

International migration refers to people who cross national boundaries to move to another country. In addition to this spatial consideration, time also plays a major role in the analysis of migration. People are usually regarded as migrants only after spending a minimum period of time in their country of destination. Usually the minimum time required to qualify as a migrant is half a year in-country, and sometimes even a full year. Someone coming for a short visit is not considered to be a migrant — he or she is considered to be a visitor or tourist.

Intent is also of crucial importance, as migration usually involves a change of a person's permanent residential address in pursuit of employment or educational opportunities.

The need to consider time and intent highlights one of the key problems concerning migration. Whether or not a particular person qualifies as a migrant can only be established after a certain period of time,

usually at least six months, in order to determine whether the arriving and departing person qualifies as a visitor or migrant.

The net impact of migration flows (net migration) is measured as the difference between the number of arrivals (immigrants) and departures (emigrants) during a certain time period.

Net migration = **Arrivals (immigrants)** minus **Departures (emigrants)**

Therefore, if **net migration** was positive it means that the number of arrivals (immigrants) was higher than the number of departures (emigrants); if net migration was negative, the number of departures (emigrants) was higher than the number of arrivals.

Unfortunately, data on arrivals and departures provided by the Ministry of Foreign Affairs and Immigration, are incomplete. Departure cards are not collected, and so it is currently impossible to obtain an accurate picture of the magnitude of migration flows to and from Tonga based on immigration statistics.

However, the 2006 census included three questions that provide an indication of the level of immigration. Questions were asked about a respondent's:

- residence one and five years prior to the census, and
- place of birth.

Regarding residential address one year prior to the census, 2,847 people (or 3% of the population) one year and older answered that they lived overseas (Table 13). Regarding residential address five years ago, 4,057 people (or 5% of the population) five years and older answered that they lived overseas (Table 15). Regarding place of birth, 4,437 people (or 4.4% of the population) answered that they were born overseas (Table 17).

However, these questions only give an indication of long-term immigration, and includes all visitors and short-term residents that were present at the time of the census, and whose usual place of residence is overseas.

The only reliable method for deriving a crude indication of Tonga's net migration level is to apply the balancing equation to the intercensal 1996–2006 population growth rate.

Balancing equation

Population growth = ***CBR*** *minus* ***CDR*** *plus* ***Net migration rate***

Net migration rate *can be estimated as*

Net migration rate = ***Population growth*** *minus* ***CBR*** *plus* ***CDR***

CBR = crude birth rate
CDR = crude death rate

Between 1996 and 2006 Tonga's population increased from 97,784 to 101,991 people, which equates to an annual average growth rate of 0.4%.

In section 3.1 and 3.2, CBR and CDR were estimated at 29 and 7, respectively. According to the balancing equation, net migration rate can be calculated as follows:

Net migration rate = [Population growth] minus [CBR] plus [CDR]

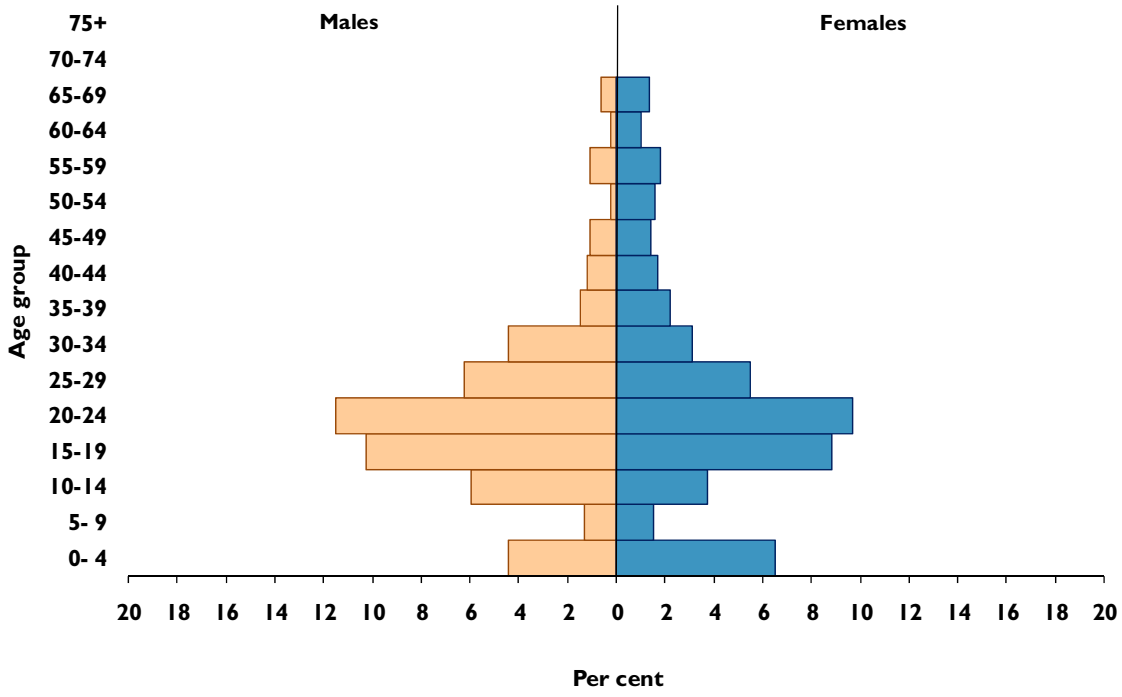
Net migration rate = [4(‰)] minus [29(‰)] plus [7(‰)] = **–18 ‰**

With an average population of 99,888 people during the intercensal period 1996 (97,784 people) to 2006 (101,991 people), a net migration rate of -18/1000 accounts for -1,800 people per year, or -150 people per month.

The estimated net migration greatly rate offsets Tonga's natural growth rate of about 2.2% (CBR minus CDR), which results in a very low overall population growth rate of 0.4% annually.

A comparison of the 1996 and 2006 census populations by five-year cohorts — which takes into account the estimated birth and death rates, — shows that the 15–24-year-old population accounted for the largest number of people leaving Tonga (Fig. 20). For purposes of comparison, a population projection was prepared with the 1996 census population, by age and sex as the base. The estimated intercensal fertility, mortality and migration rates by age and sex were used to match the 2006 census population. The age structure of net migrants during the intercensal period 1996–2006 (by age and sex) is shown in Figure 20.

Figure 20: Estimated age distribution of net migrants (in % of total number of migrants) of the intercensal period 1996–2006, Tonga: 2006



About 60% of all migrants were between 15 and 34 years of age, and almost one-quarter were children aged 0–14. The 15–19 age-group had finished their education and were looking for further education or employment opportunities overseas. People aged 20 and older included many parents moving with their young children (aged 0–14), highlighting the significance of family migration. There were nearly equal numbers of male and female migrants.

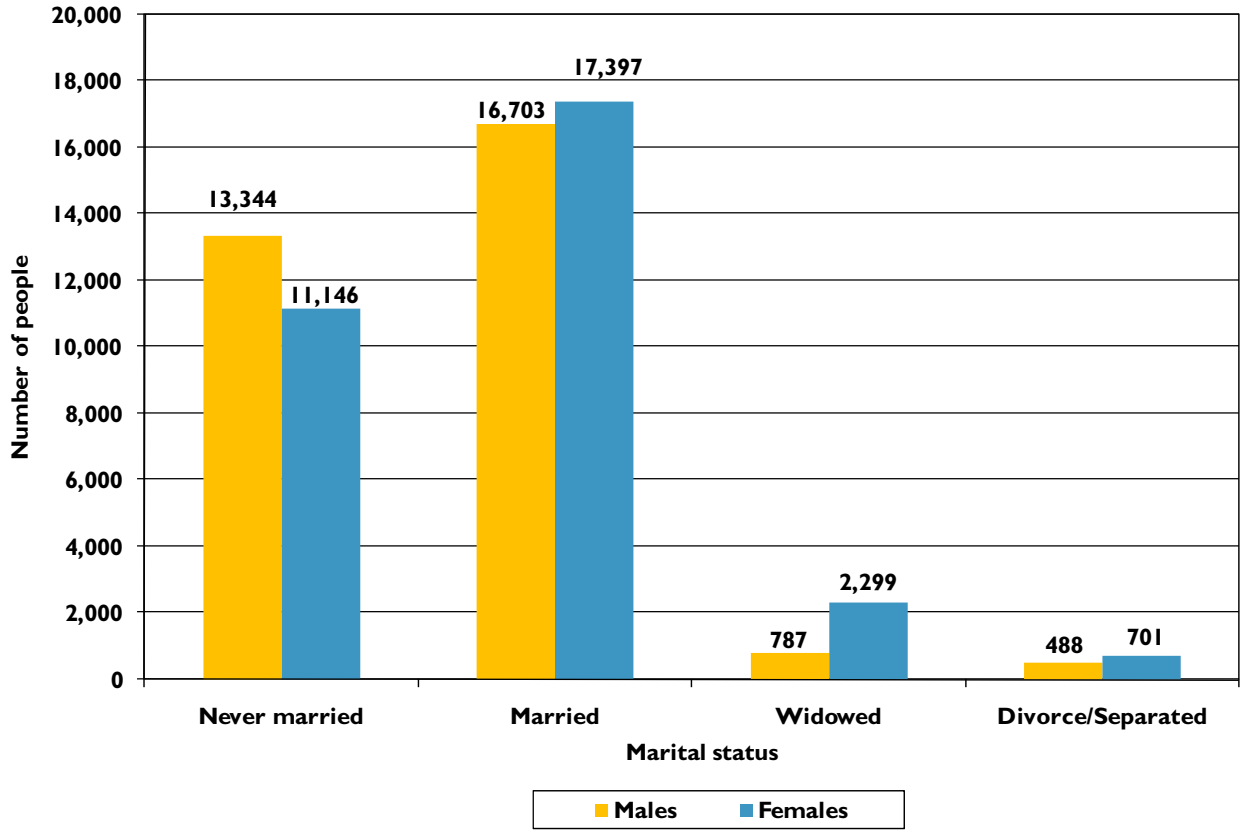
4. SOCIAL CHARACTERISTICS

4.1 Marital status

During the 2006 census, 53% of males (16,703) and 55% of females (17,397) aged 15 and older were married, another 42% of males (13,344) and 35% of females (11,146) were never married (single), and 3% of males (787) and 7% of females (2,299) were widowed (Fig. 21).

The higher number of married females is explained by the fact that some male spouses were overseas at the time of the census enumeration.

Figure 21: Population aged 15 and older by marital status, Tonga: 2006



In general, women marry at a younger age than men. The average age at marriage was 28.0 and 25.6 years for males and females, respectively, and was calculated based on the proportion of those never married/single by age. (The singulate mean age at marriage, SMAM[3]). The higher proportion of young married women compared with men of the same age further indicates that women generally marry at younger ages than men (Fig. 22).

Only 17% of males were married at ages 20–24, compared with 31% of females, and only 48% of males were married at ages 25–29 years, compared with 60% of females. At ages 35–49, slightly over 80% of males and females were married. The proportion of married females declined after age 44 because an increasingly higher proportion of females became widowed (Fig. 24).

[3] 1983. United Nations. Manual X, indirect techniques for demographic estimation. New York: United Nations. 304 p.

Figure 22: Population aged 15 and older by sex and proportion married, Tonga: 2006

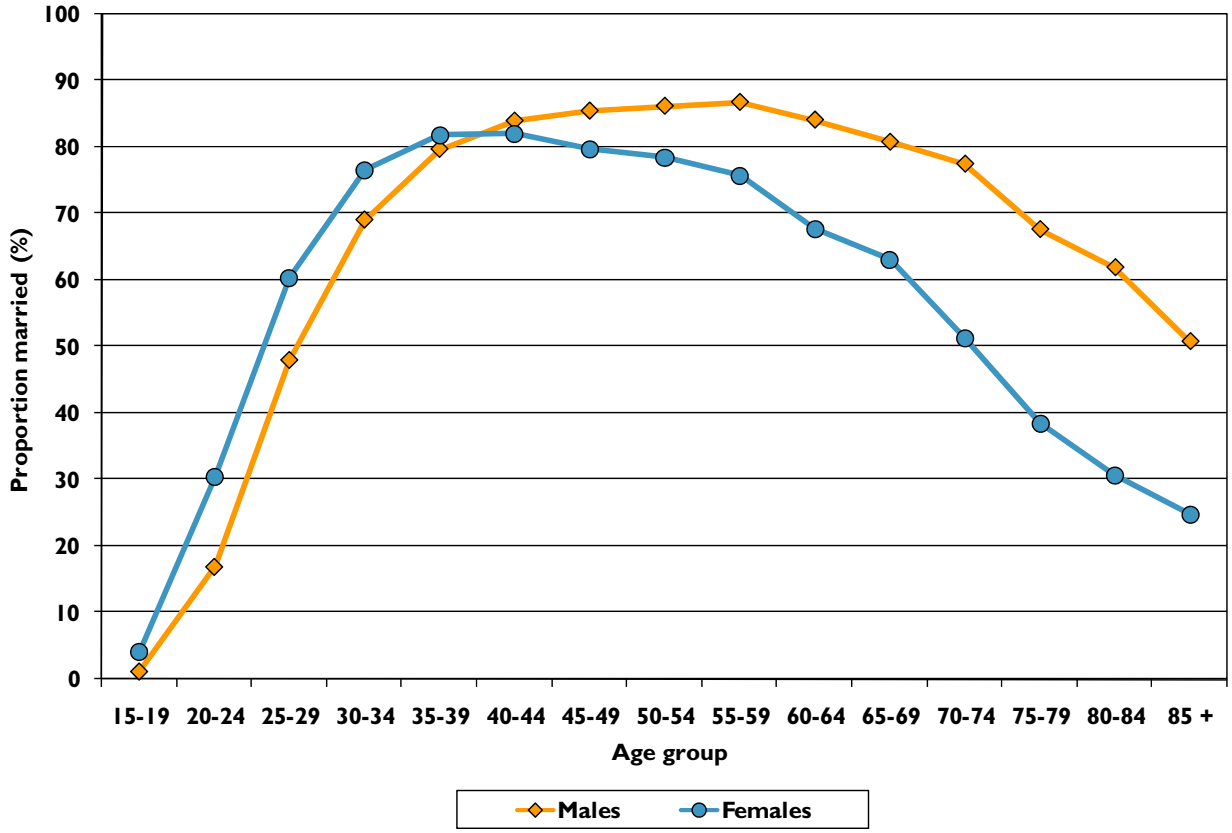
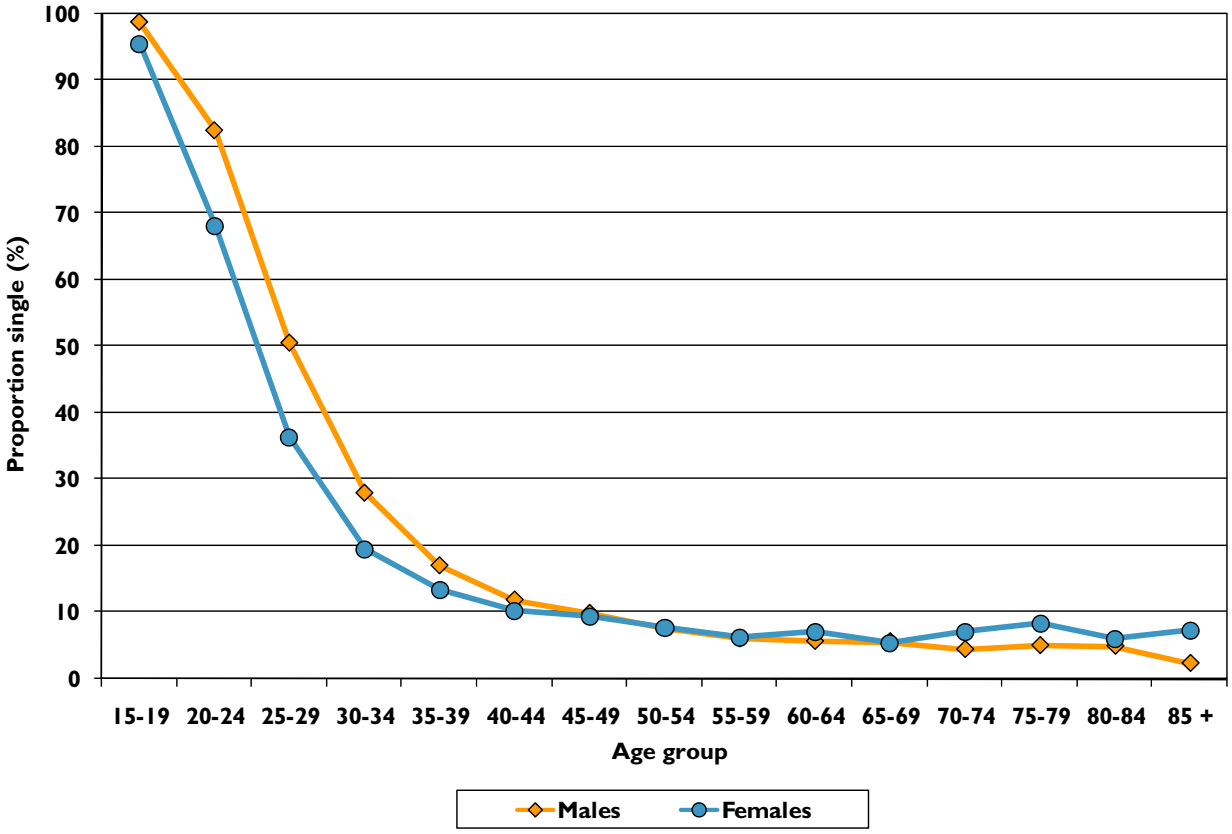


Figure 23: Population aged 15 and older by sex and proportion never married (single), Tonga: 2006



The same pattern can be seen by looking at the population of never married (single) (Fig. 23). A higher proportion of males were never married (single) at almost all age groups, but especially at ages 20–29.

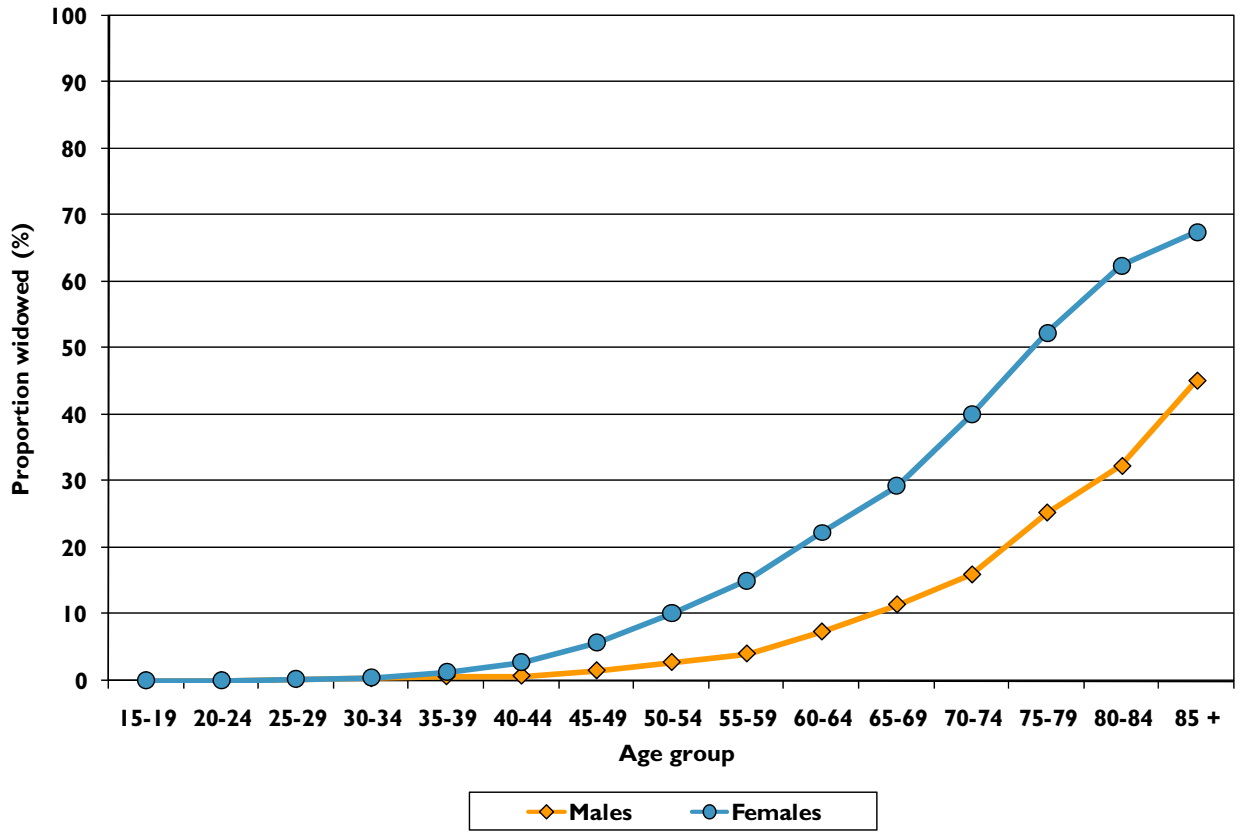
The discrepancy between the proportion of widowed males and widowed females, at ages 40 and older, increased continuously (Fig. 24). Between ages 55–59, only 4% of males were widowed, compared with 15% of females. At age 75 and older, only 30% of males were widowed, compared with 58% of females.

The higher proportion of widowed females is explained by:

- lower female mortality rates, and therefore longer life expectancies of female spouses,
- older age at marriage of males compared with their female partners.

Therefore, male spouses usually die before their female partners.

Figure 24: Population aged 15 and older by sex and proportion widowed, Tonga: 2006



4.2 Religion

Methodism is the predominant religion in Tonga, and 37% of the population (38,052 members) is affiliated with the Free Wesleyan Church. The Church of Latter Day Saints is the second largest, with 17,109 members (17% of the population) followed by the Roman Catholic Church with 15,922 members (16%), the Free Church of Tonga 11,599 (11%), and the Church of Tonga 7,295 (7%) (Table 19 and Fig. 25).

All other religions had less than 3% of the population as members.

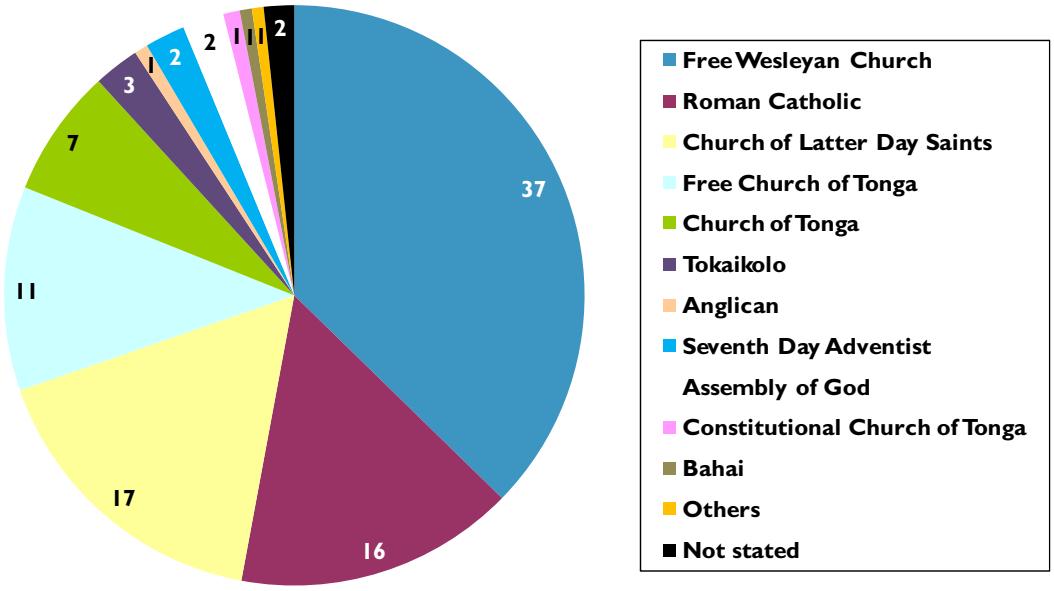
More than 1,509 people refused to answer the question on their religious affiliation.

Table 19: Population by religious affiliation, Tonga: 1986, 1996 and 2006

Religion	1986	1996	2006
Free Wesleyan Church	40,371	39,703	38,052
Roman Catholic	14,921	15,309	15,922
Church of Latter Day Saints	11,270	13,225	17,109
Free Church of Tonga	10,413	11,226	11,599
Church of Tonga	6,882	7,016	7,295
Tokaikolo	3,047	2,919	2,597
Anglican	563	720	765
Seventh Day Adventist	2,143	2,381	2,282
Assembly of God	565	1,082	2,350
Constitutional Church of Tonga			941
Gospel			243
Bahai			686
Hindu			104
Islam			47
Buddahist			71
Other	2,874	2,368	202
No religious affiliation		61	28
Refuse to answer		10	1,509
Not stated			189
Total	**93,049**	**96,020**	**101,991**

Note: 1986 and 1996 data refer to only the Tongan and part-Tongan population

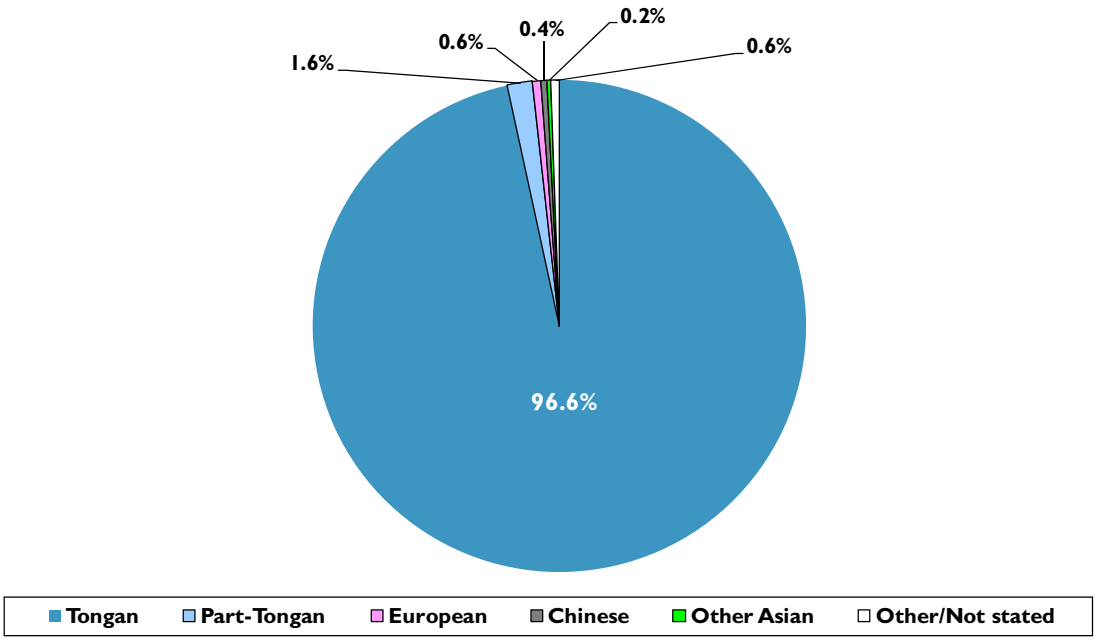
Figure 25: Population by religious affiliation (as percent of total population), Tonga: 2006



4.3 Ethnic origin

Based on information on the number of people by ethnic origin, Tonga has a very homogenous population with almost 97% of the population being of Tongan origin, and another 1.6% of part-Tongan origin (Fig. 26 and Table 20).

Figure 26: Total population by ethnic origin (in % of total population), Tonga: 2006



Less than 2% of the population is of an ethnic origin other than Tongan or part-Tongan. The proportion of other ethnic origins is slightly higher in Tonga's urban area, where 4% are not Tongan or part-Tongan; 1.1% is of Chinese origin, 0.8% of European origin, and another 0.7% of some other Asian origin.

Table 20: Total population by ethnic origin, Tonga: 2006

Ethnic origin	Total	Urban	Rural
Tongan	98,516	22,165	76,351
Part-Tongan	1,681	576	1,105
European	569	193	376
Fijian Islanders	310	193	117
Other Pacific Island	216	92	124
Chinese	395	259	136
Other Asian	251	157	94
Other	25	17	8
Not stated	28	6	22
Total	**101,991**	**23,658**	**78,333**

4.4 Health

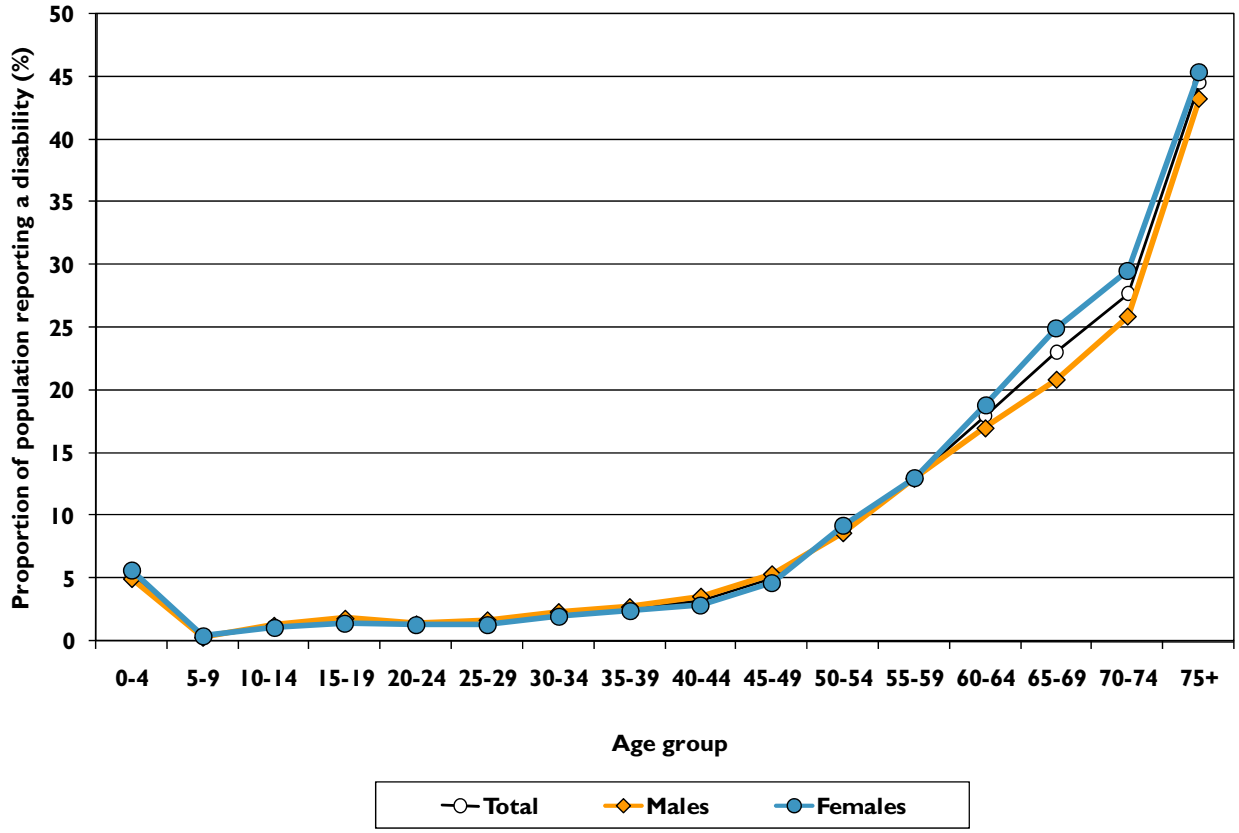
4.4.1 Disability

Following requests from the Ministry of Health, the 2006 census questionnaire included several questions on disabilities. A disability includes any difficulties that affect vision, hearing, walking, remembering or concentrating properly.

Overall, 5% of the total population reported a disability. As can be expected, the proportion of the population with a disability increased with age (Fig. 27), and overall there was very little difference in the proportion of males and females with a disability.

While about 5% of children younger than 5 years of age had a disability, it was below this level for all age groups between 5 and 49 years. From age 50 and onwards, the proportion of the population with a disability increased continuously until it reached about 45% of the people aged 75 and older.

Figure 27: Proportion of the total population with a disability, Tonga: 2006



The disability that was most commonly mentioned was vision, with 2,326 people reporting this as a problem. This was followed by difficulties with walking reported by 2,083 people (Table 21), difficulties with hearing (1,932 people), and problems remembering and/or concentrating (930 people).

Table 21: Total population reporting a disability regardless of the severity of the disability, Tonga: 2006

Disability	Total	Male	Female
Vision	2,326	1,043	1,283
Hearing	1,932	916	1,016
Walking	2,083	1,006	1,077
Remembering or concentrating	930	460	470

Nearly 200 people reported that they could not walk at all, and the same number of people reported that they were not able to remember or concentrate (Table 22). Forty-four people were blind, and 39 were deaf.

Table 22: Total population reporting a severe disability, Tonga: 2006

Disability	Total	Males	Females
Blindness	44	17	27
Deafness	39	25	14
Lameness	194	91	103
Senile and/or amnesic	193	104	89

4.4.2 Illness, injury or other health complaint

One of the census questions was whether a person suffered an illness, injury or any health complaint during the two-week period prior to the interview. During this time, 5,116 people (2,422 males, 2,694 females), reported a "health complaint" (illness or injury), which equates to about 5% of the total population.

The proportion of people with a health complaint increases with age, just as it does with a disability. The proportion of males aged 25 and older with a health complaint was slightly higher than for females (Fig 28).

Based on the question of whether and where a person with a health complaint sought care, 69% said that they went to the hospital, 11% self-treated the complaint with modern medicine, 8% went to a private doctor, and another 8% self-treated themselves with traditional medicine (Fig. 29). Three percent (130 people) of all people with a health complaint did not seek any care.

Figure 28: Proportion of the total population with an illness, injury or health complaint, Tonga: 2006

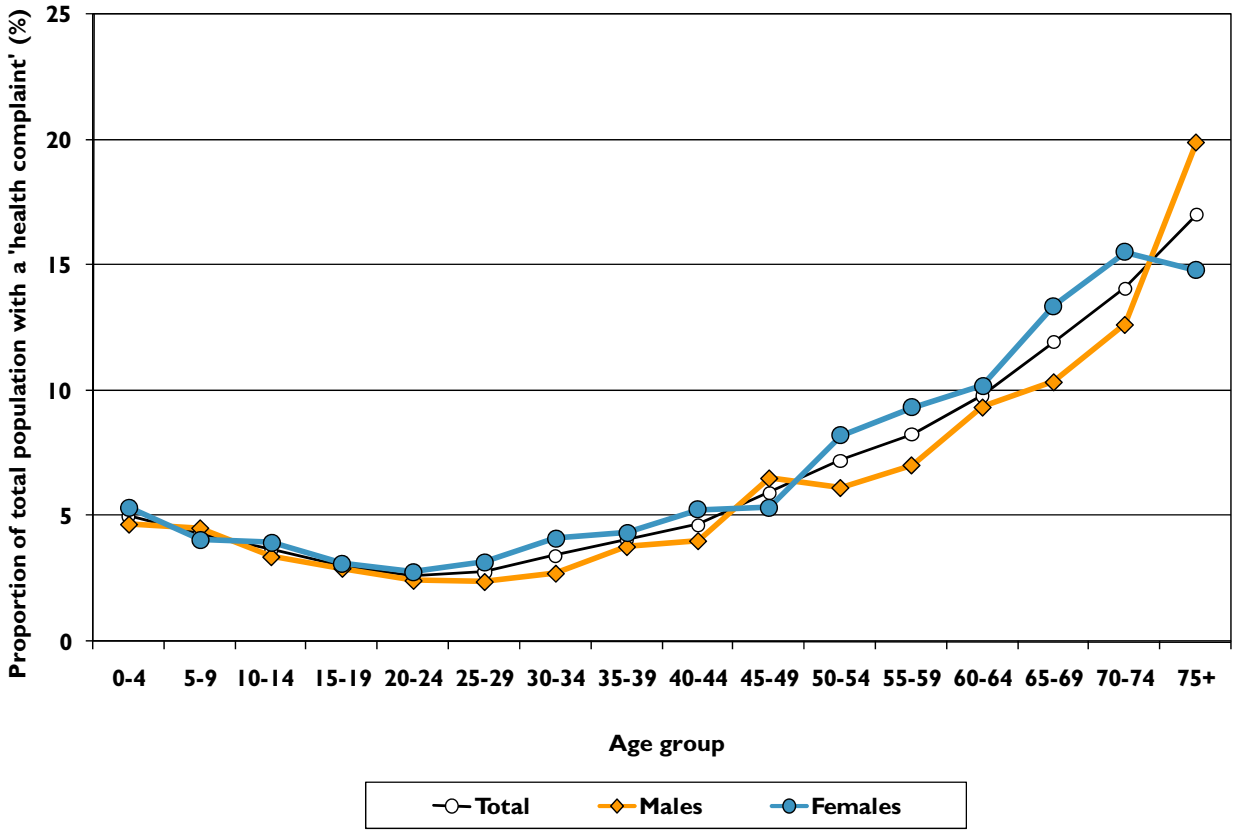
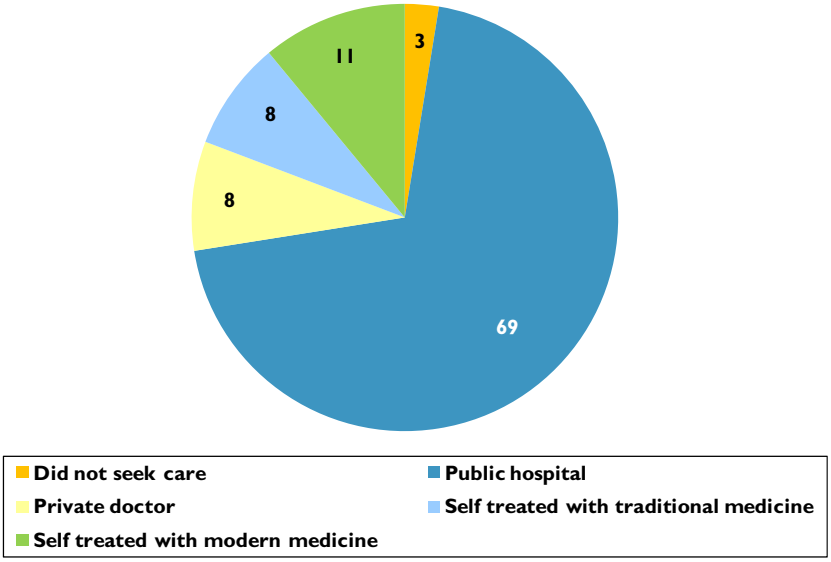


Figure 29: Proportion of population with a health complaint and whether and where they sought care, Tonga: 2006



Subsequently all people that did not seek any care (130) were asked why they did not do so.

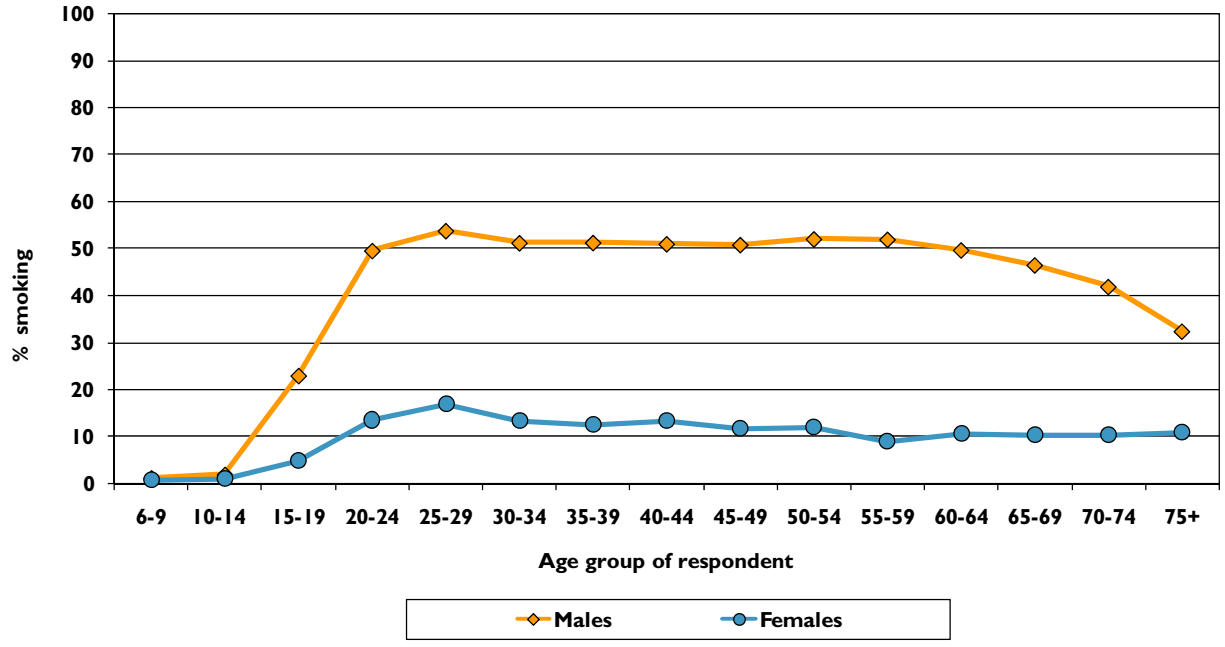
Seventy-one percent believed that they were not ill enough, 13% said that it was too far to travel for treatment, and 3% replied that they could not afford the treatment.

4.4.3 Smoking habits

During the 2006 census, every person aged 6 and older was asked whether they smoked tobacco or cigarettes on a daily basis. About 21% of the population smoked on a daily basis, of this amount, 33% were males and 9% were females.

The age group that smoked the most is the 25–29 year olds (Fig. 30). In general, about half of all males aged 20–65 smoked, while about 10–15% of all females aged 20 and older smoked.

Figure 30: Population aged 6 and older that smokes on a daily basis, Tonga: 2006



4.5 Educational characteristics

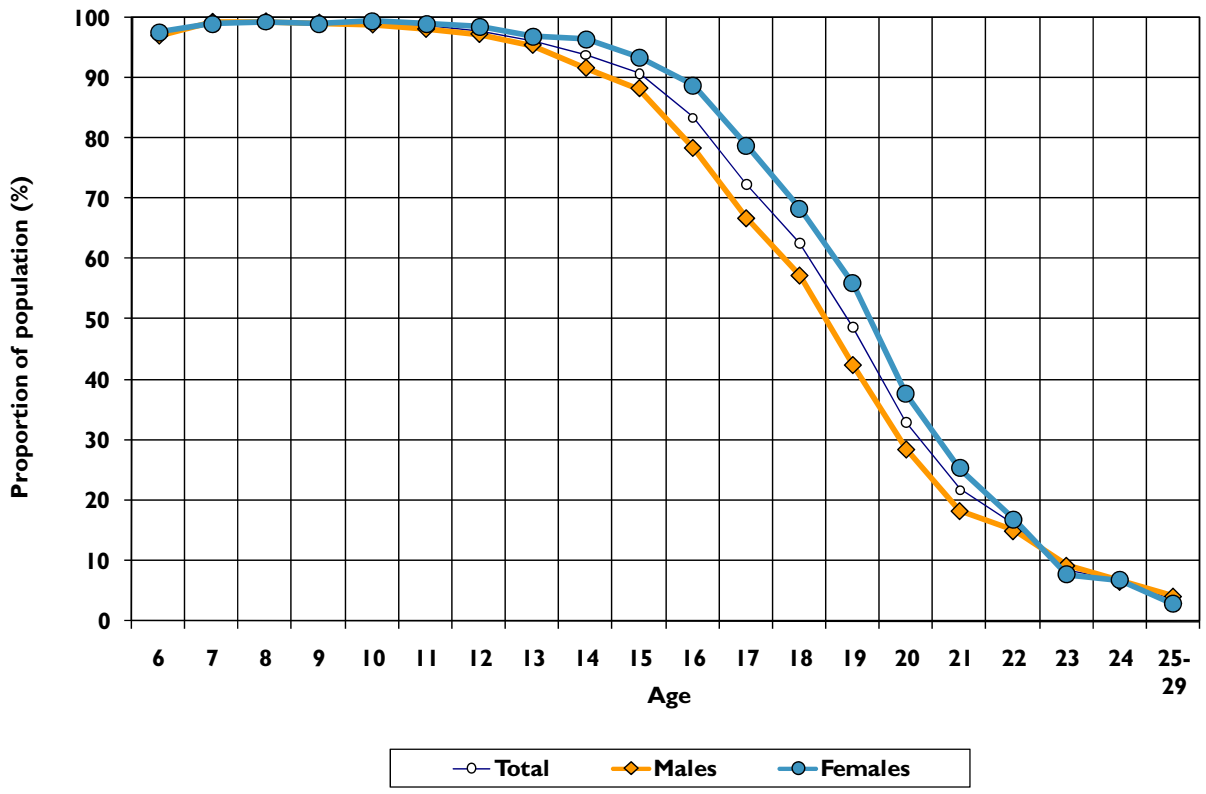
4.5.1 School enrollment

Education in Tonga is compulsory from ages 6–14. This has ensured access to primary and secondary levels of education for all.

As of the 2006 census, 31,683 people aged 6 and older were enrolled in school: 16,211 males and 15,472 females – of which 2% attend only part time.

Ninety-eight per cent of 6–14 year-olds attended school (Fig. 31). However, enrollment rates began declining drastically from age 15, when more and more students dropped out of school.

Figure 31: Population aged 6 and older (by sex) attending school, Tonga: 2006



In general, school enrollment rates of females were higher than that of males, and there was no difference in enrollment rates between urban and rural areas.

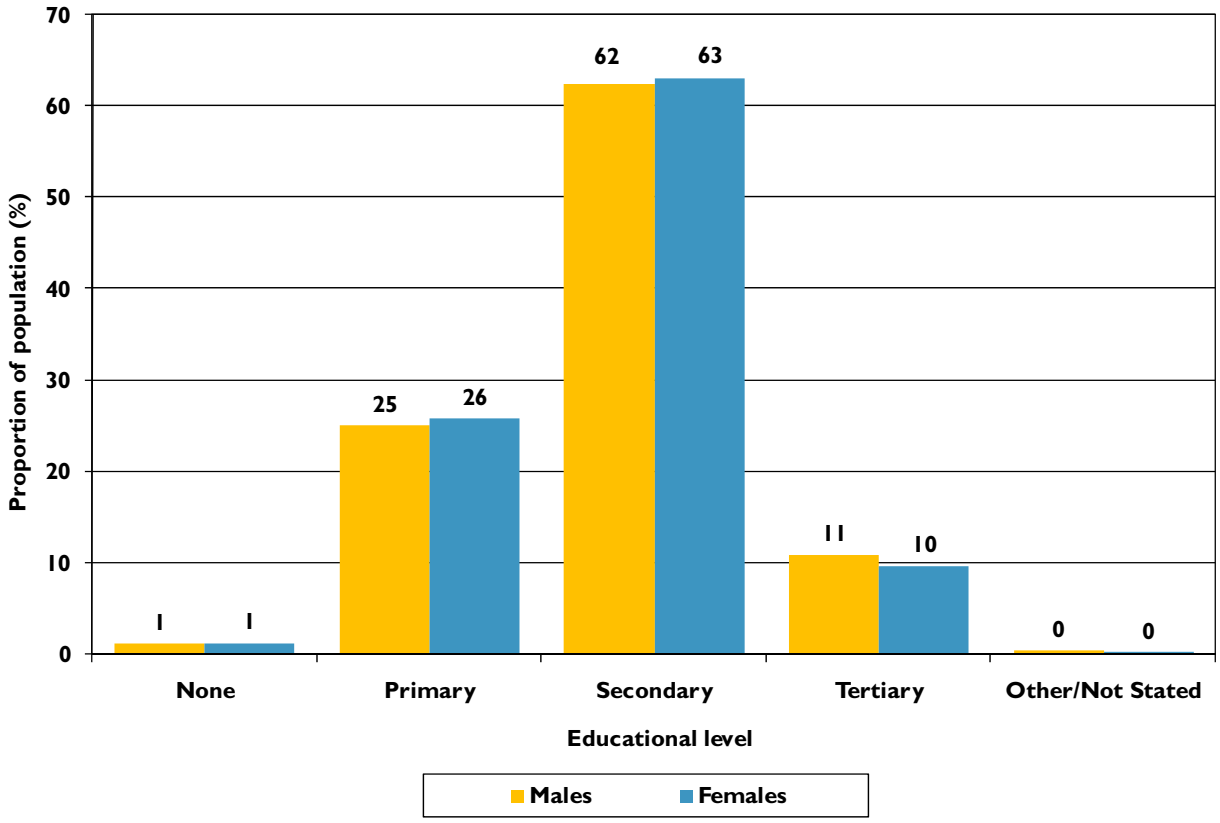
4.5.2 Educational attainment

Although there was little difference between the proportion of males and females that have attended and/or completed the different educational levels, educational attainment numbers were slightly higher for males than for females at the tertiary level (Fig. 32).

While the proportion of the population with no schooling was very low (1%), about one-quarter of the population had only a primary education.

In 2006, more than 60% of the population aged 15 and older had a secondary education, and about 10% had tertiary education.

Figure 32: Population aged 15 and older by sex and educational attainment (in %), Tonga: 2006



Educational levels are higher for urban than rural populations (Table 23). While 66.5% had a secondary education and 16.9% a tertiary education in the urban area, this was only 61.5% and 8.2% for rural areas, where 28.6% of the population had only a primary education.

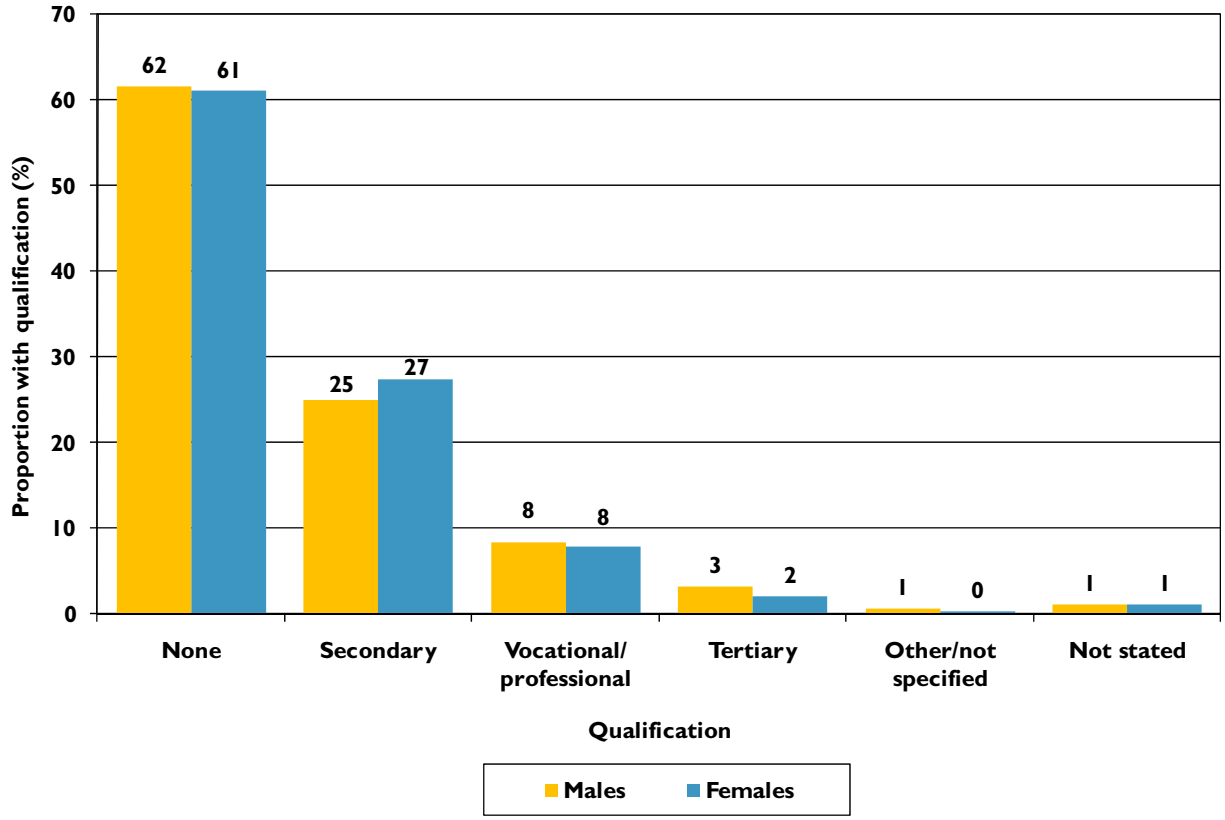
Table 23: Population aged 15 and older by urban-rural residence and educational attainment (in %), Tonga: 2006

Place of residence	Educational level			
	None	Primary	Secondary	Tertiary
Total	1.2	25.4	62.7	10.3
Urban	0.7	15.5	66.5	16.9
Rural	1.4	28.6	61.5	8.2

4.5.3 Educational qualification

The proportion of the population aged 15 and older with a secondary qualification was 27% females and 25% males (Fig. 33). While only 2–3 % had a tertiary qualification, more than 60% had no qualification at all. About 8% had a vocational/professional qualification such as a teacher's or nurse's certificate.

Figure 33: Population aged 15 and older by sex and educational qualification (in %), Tonga: 2006



It should be mentioned that many, if not most, people that were currently pursuing a tertiary education were absent at the time of the census to attend tertiary schooling overseas, and therefore, were not included in the census data.

The levels of educational qualifications were higher for urban populations than for rural populations (Table 24). While 35.6% of the population in the urban area had a secondary qualification and 5.4% a tertiary qualification, this was only 23.3% and 1.8% for rural areas, where two out of three people had no educational qualification.

Table 24: Population aged 15 and older by urban–rural residence and educational qualification (in %), Tonga: 2006

Place of residence	Educational qualification			
	None	Secondary	Vocational/ professional	Tertiary
Total	61.3	26.2	8.1	2.7
Urban	44.7	35.6	12.2	5.4
Rural	66.6	23.3	6.8	1.8

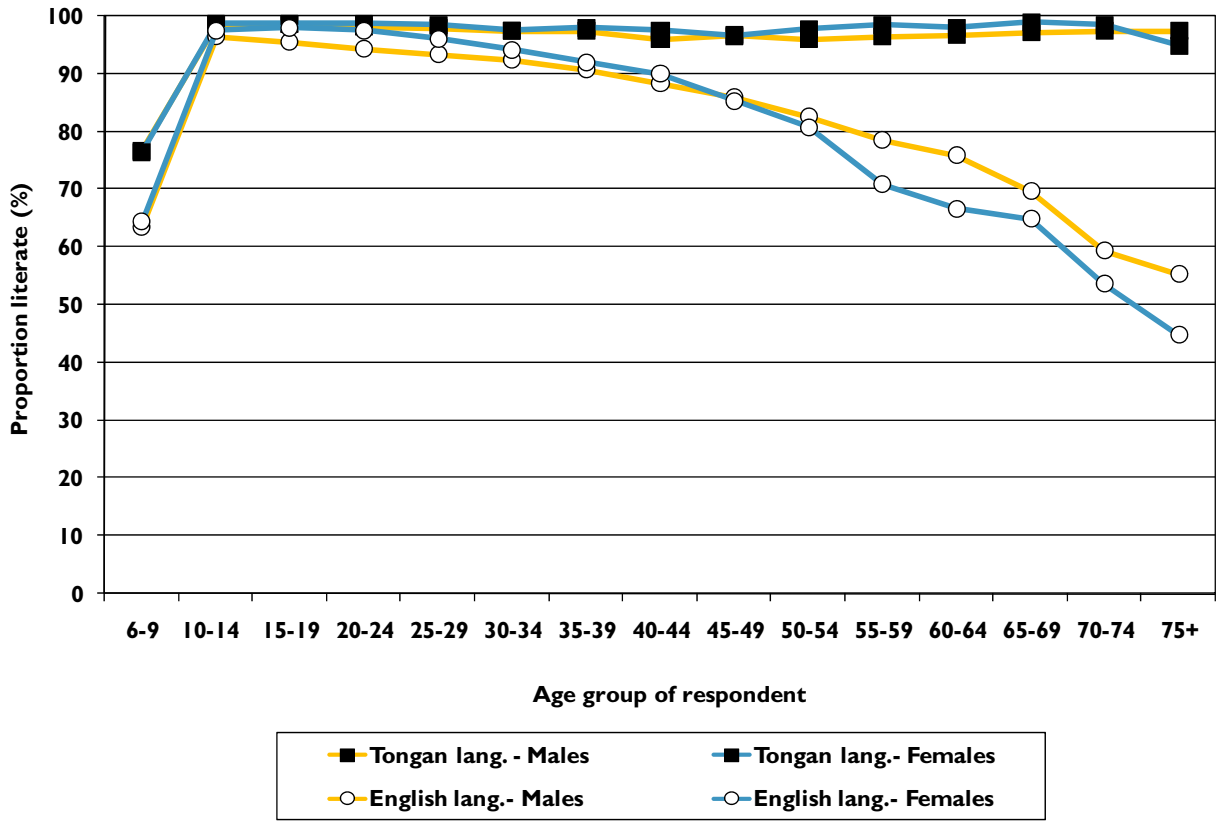
4.5.4 Literacy

Literacy was measured by a respondent's ability to read and write a simple sentence in Tongan or English. Almost everyone older than 10 years of age was literate in Tongan (Fig. 34).

The literacy rate of 15–24 year-olds was 98.4% and 98.8% for males and females, respectively.

English literacy was almost as high as Tongan literacy for youth aged 10–14 years. However, literacy gradually declined thereafter, and was below 90% of the population aged 40–44, further decreasing with age. At ages 10–39, female literacy in English was slightly higher than for males, while a higher proportion of males were literate thereafter.

Figure 34: Population aged 6 and older by sex and whether literate in Tongan or English (in %), Tonga: 2006



Data indicates there is very little difference in literacy rates between males and females, by place of residence by division, and by urban and rural areas.

4.6 Labour market activity

4.6.1 Introduction

In Tonga, the 2006 census included a question on labour market activity. Enumerators were instructed to ask each respondent aged 15 and over whether they worked during the last week. Work was defined as any activity concerned with providing the necessities of life. It did not matter whether or not the person had a job or was paid for what they did. Based on these criteria, respondents were coded on the questionnaire into the three mutually exclusive categories of

- Work for pay;
- Work to support the household by producing goods mainly for sale;
- Work to support the household by producing goods mainly for own consumption;
- Other.

A person who "works for pay" is someone who worked for wages, salary, commission, or had a contract, or was operating a business.

A person that did "work to support the household by producing goods mainly for sale" performed a variety of tasks such as farming, gardening, fishing or producing handicrafts mainly for sale.

A person that did "work to support the household by producing goods mainly for own consumption", performed a variety of tasks such as farming, gardening, fishing or producing handicrafts for their own consumption and are subsequently described as subsistence workers.

The UN publication "Principles and Recommendations for Population and Housing Censuses, Revision 2", recommends that "persons engaged in economic activities in the form of own-account production of goods for own final use within the same household should be considered to be self-employed." Certainly, those selling their products should also be classified as employed. According to this definition, all people classified as subsistence workers are considered to be employed. However, the following analysis of Tonga's unemployment level also provides an alternative approach to include subsistence workers as part of the unemployed on the grounds that these people would look for work if they believed cash work was available in their labour market community. Those indicating that they had a job but were not at work during the reference week were also classified as employed.

The "no work" category applies to those people who did nothing in the reference week (i.e. the week prior to the census) to provide for themselves or their families or household. This includes people engaged in family responsibilities, who were retired, disabled, students, the unemployed and those who did "not want to work" or were "not interested in finding work".

People classified as unemployed:

- did not work in the week prior to the census (other than those who had a job but were not at work during the reference week), but
- spent some time looking for work, and
- were available to work if a job was offered to them.

If the person did not work and did not spend some time looking, or looked for work but was not available for work, they were then classified as economically inactive (not in the labor force).

Based on the above, data collected from the Tonga census have been assigned to the three categories of:

- **employed** (those that "work for pay" or "work to support the household by producing goods mainly for sale" or "work to support the household by producing goods mainly for own consumption");
- **unemployed** (see definition above);
- **not in the labour force** (those not employed or unemployed).

Optional definitions of unemployment are also provided below.

4.6.2 Employed: paid workers and subsistence workers

As indicated in the introduction above, those people who are defined as being employed (35,290) included 23,438 (66%) paid workers, and 11,497 (32%) subsistence workers, and 355 workers whose employment status was unspecified (Apps. 7A and 7B).

The total number of employed people consisted of 19,956 (57%) males and 15,334 (43%) females. It included 7,804 (22%) people in the urban area, and 27,486 (78%) in rural areas (Figs. 35 and 36).

The total number of people employed, by age group, was 6,164 people in the 15–24 year-old age group, 25,130 in the 25–59 year-old age group, and 3,936 in the 60 years and over age group (Fig. 37). In addition there were 60 unstated cases.

The total number of paid workers was 23,438, of which, 14,273 (or 61%) were males and 9,165 (or 39%) were females. From an urban–rural perspective, 6,222 (27%) of the paid workers were in the urban area, and 17,216 (73%) held paying jobs in rural areas.

The total number of subsistence workers included 5,998 females than and 5,499 males. In the case of subsistence workers, however, only 1,449 (13%) were in the urban area, with 10,048 (87%) in rural areas.

Figure 35: Population aged 15 and older by sex and labour market activity, Tonga: 2006

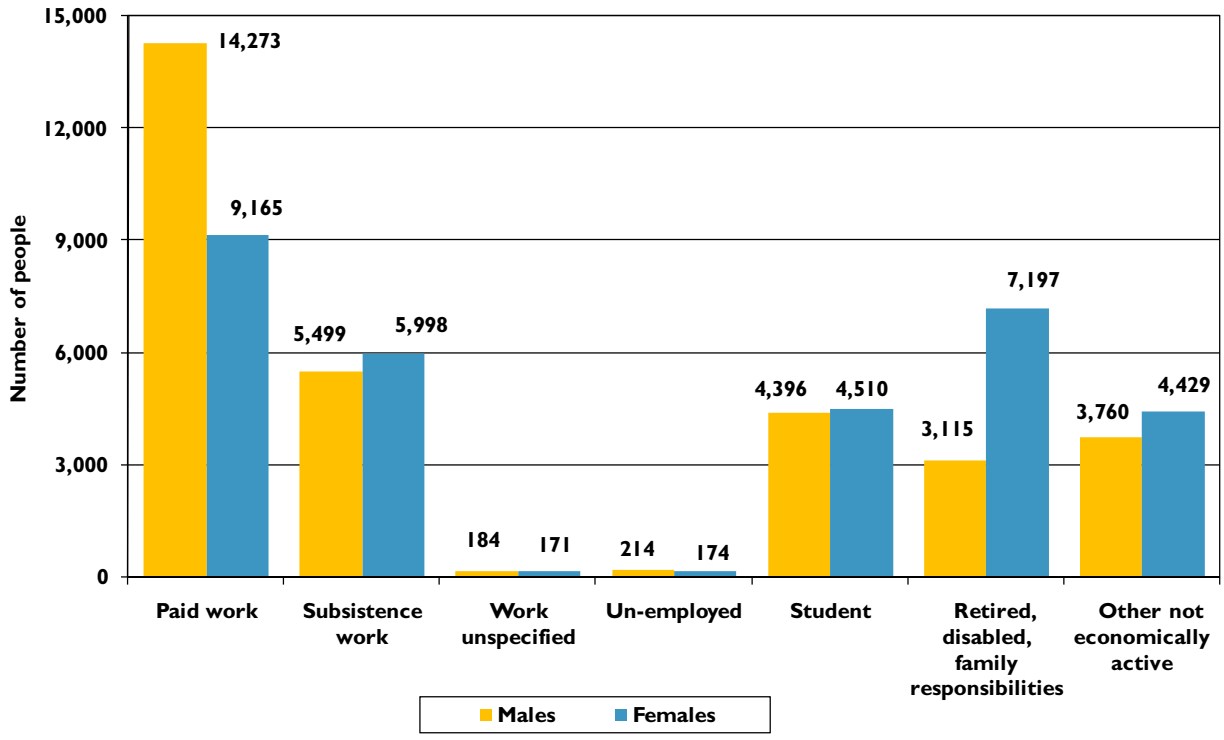


Figure 36: Population aged 15 and older by urban–rural residence and labour market activity, Tonga: 2006

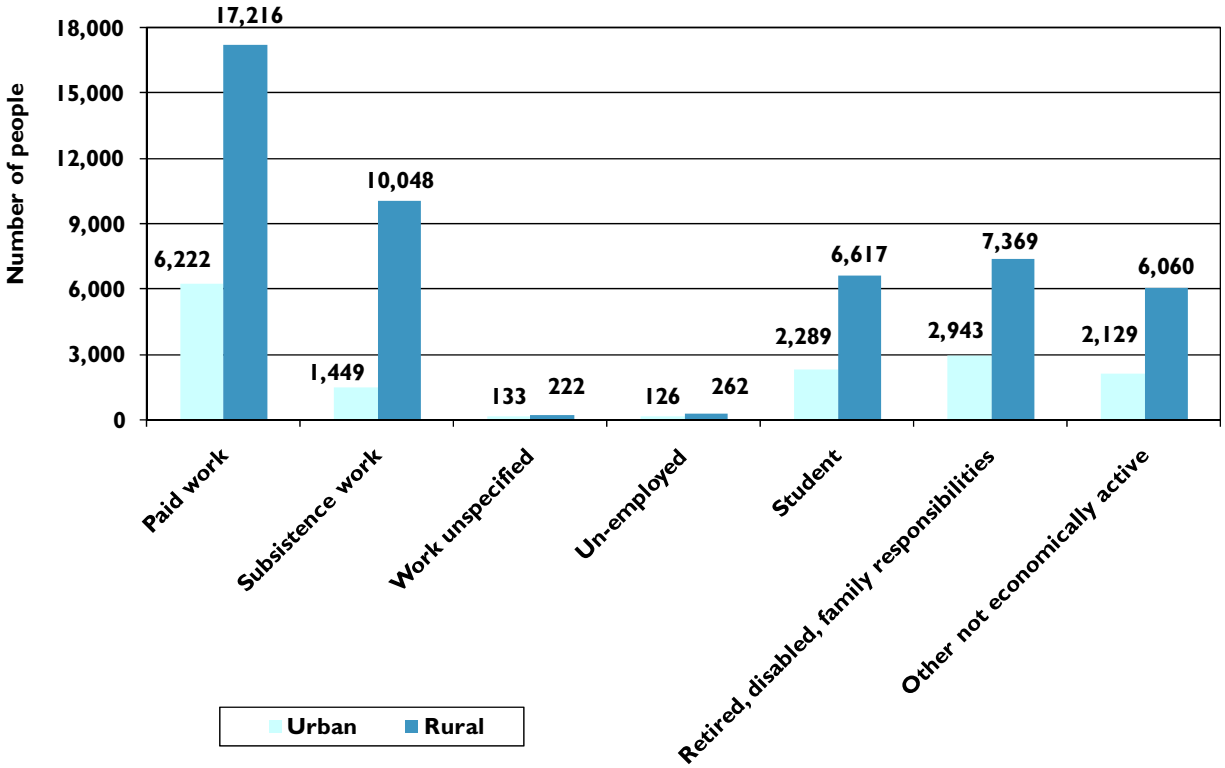
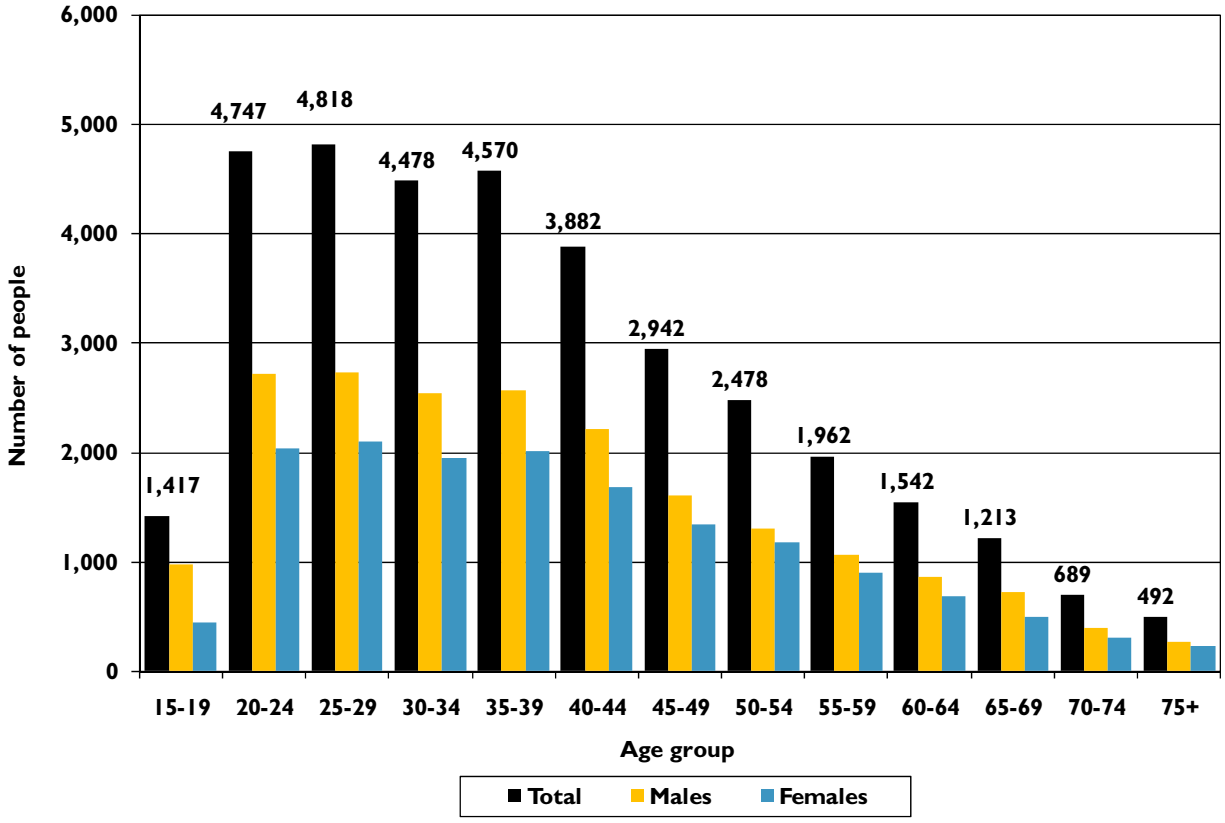


Figure 37: Employed population aged 15 and older by age and sex, Tonga: 2006



4.6.3 Labour force participation rate and employment–population ratio

The labour force participation rate is the number of people in the labour force by a given age and sex and/or place of rural–urban residence, divided by the corresponding total population with the same characteristics, multiplied by 100.

The employment–population ratio is the number of people employed in cash work by a given age and sex and/or place of rural–urban residence, divided by the corresponding total population with the same characteristics, multiplied by 100.

Figure 38 provides an overview of the labour force participation rate and the employment–population ratio for the total population aged 15 and older by sex, and Table 25 distributes the same indicators by urban and rural areas.

Labour force participation rates were higher for males than for females, and also higher for rural than urban populations. In contrast, the employment–population ratio was higher for the urban population than for rural populations.

Figure 38: Population aged 15 and older by labour force participation rate and employment–population ratio by sex: Tonga: 2006

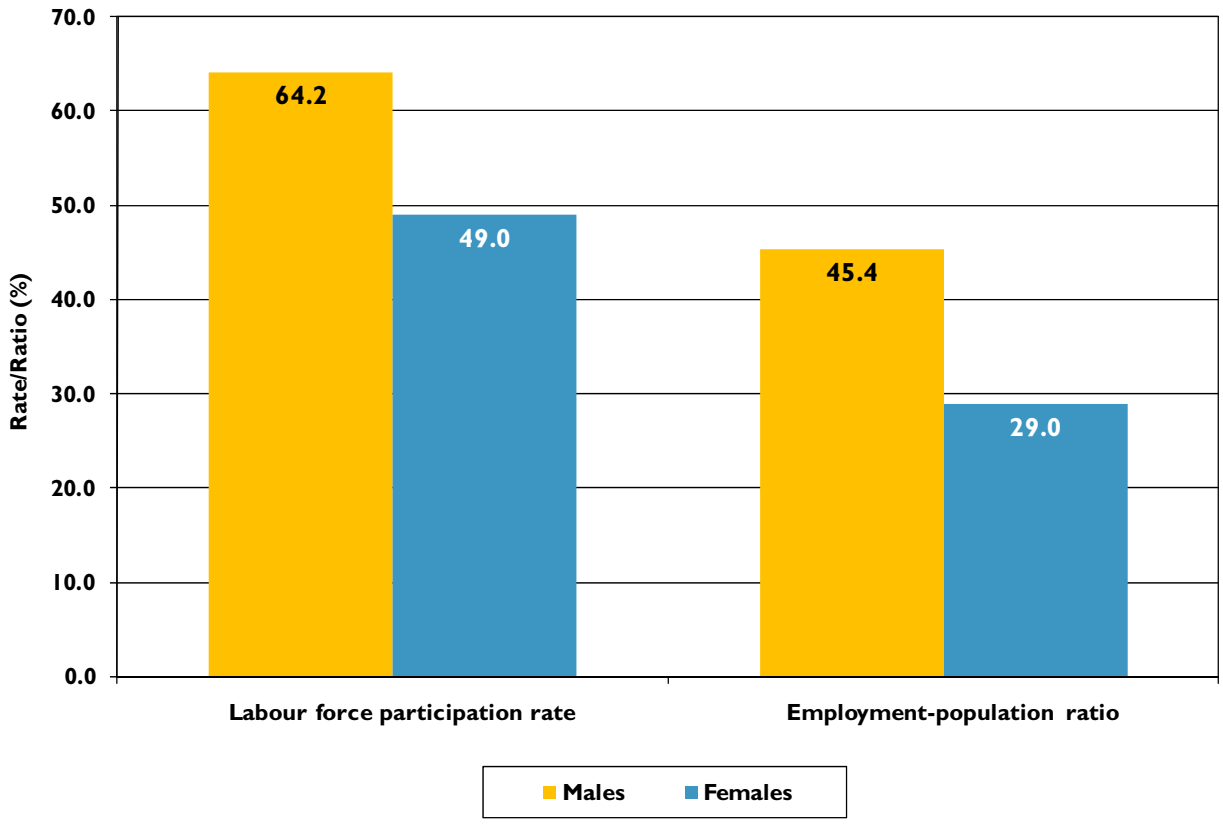


Table 25: Population aged 15 and older by sex, urban–rural residence, labour force participation rate, and employment–population ratio, Tonga: 2006

	Labour force participation rate	Employment-population ratio
Tonga	**56.6**	**37.2**
Males	64.2	45.4
Females	49.0	29.0
Urban	51.9	40.7
Males	60.3	50.3
Females	43.6	31.4
Rural	58.1	36.0
Males	65.4	43.9
Females	50.8	28.2

The labour force participation rate and the employment–population ratio were higher for males than for females at all ages (Figs. 39 and 40).

The labour force participation rate for females did not exceed 70% at any age, while that of males was 86% at ages 40–44.

Figure 39: Population aged 15 and older by age, sex and labour force participation rate, Tonga: 2006

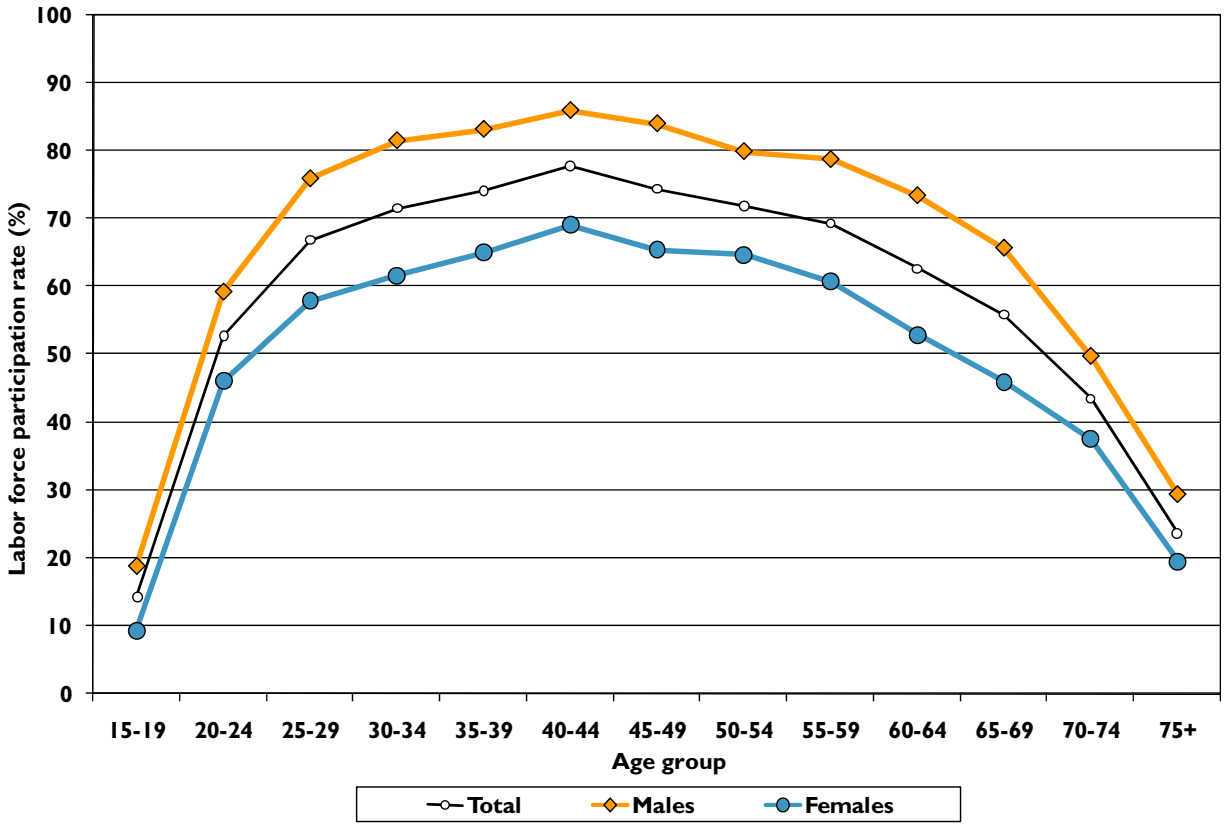
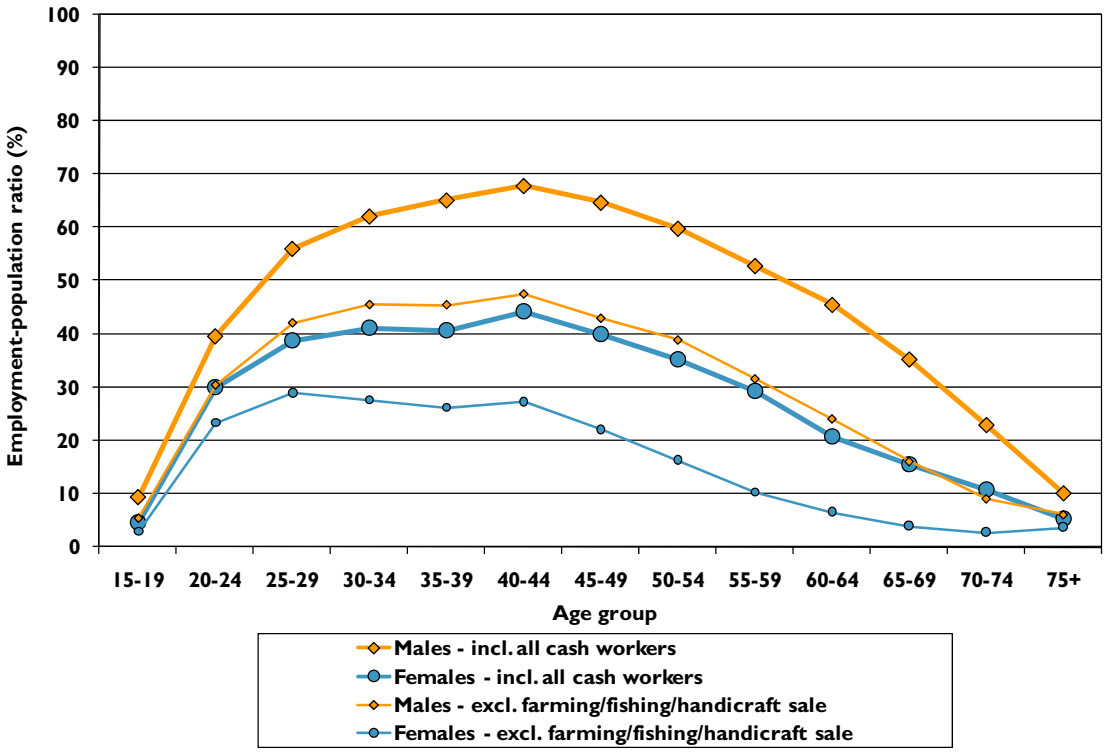


Figure 40: Population aged 15 and older by age, sex and employment–population ratio, Tonga: 2006



In terms of the employment–population ratio, almost 70% of all males aged 40–44 were employed as paid workers. This was less than half of all females at the same age. The highest percentage of female paid workers was 44% in the 40–44 age category.

There were very low participation rates in the 15–19 age category, and the relatively high participation rates in the 60 years and older age groups, indicating that many older people keep providing economically for themselves and their household/families.

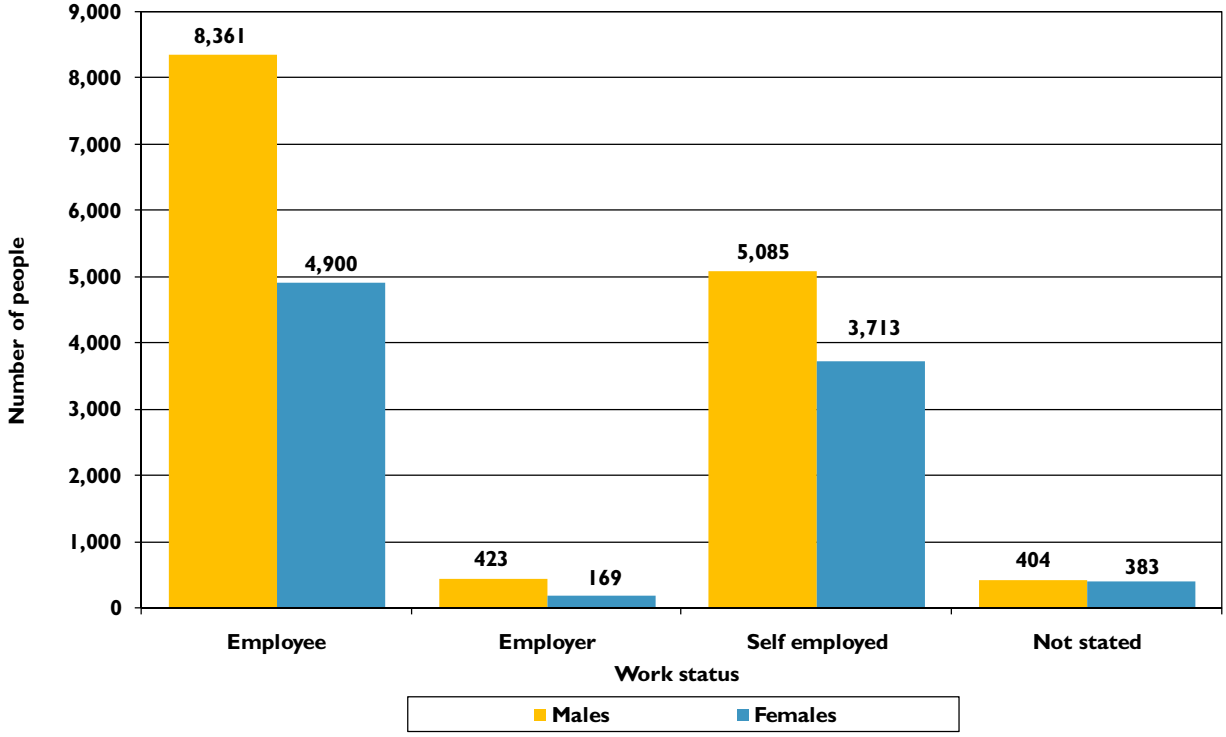
Employment-population ratios are distributed into two categories (Fig. 40): one that includes all people that worked for cash (whether they were a contract worker or self employed), and another category that included only paid workers, people who worked for wages, salary, contract, or commission, or were operating a business (thereby excluding self employed people who farm, fish or produce handicrafts for sale).

Participation rates were less than 50% for males at any age, and less than 30% for females at any age. The highest participation rates for males were in the 40–44 year age group (48%), and for females in the 25–29 year age group (29%).

4.6.4 Paid workers by work status

About 57% of all paid workers (8,361 males, 4,900 females) were employees (Fig. 41).

Figure 41: Paid workers by work status and sex, Tonga: 2006



In Tonga, only 592 people were employers, which is 3% of all paid workers. Another 8,798 people(38%) were self employed (5,085 males, 3,713 females).

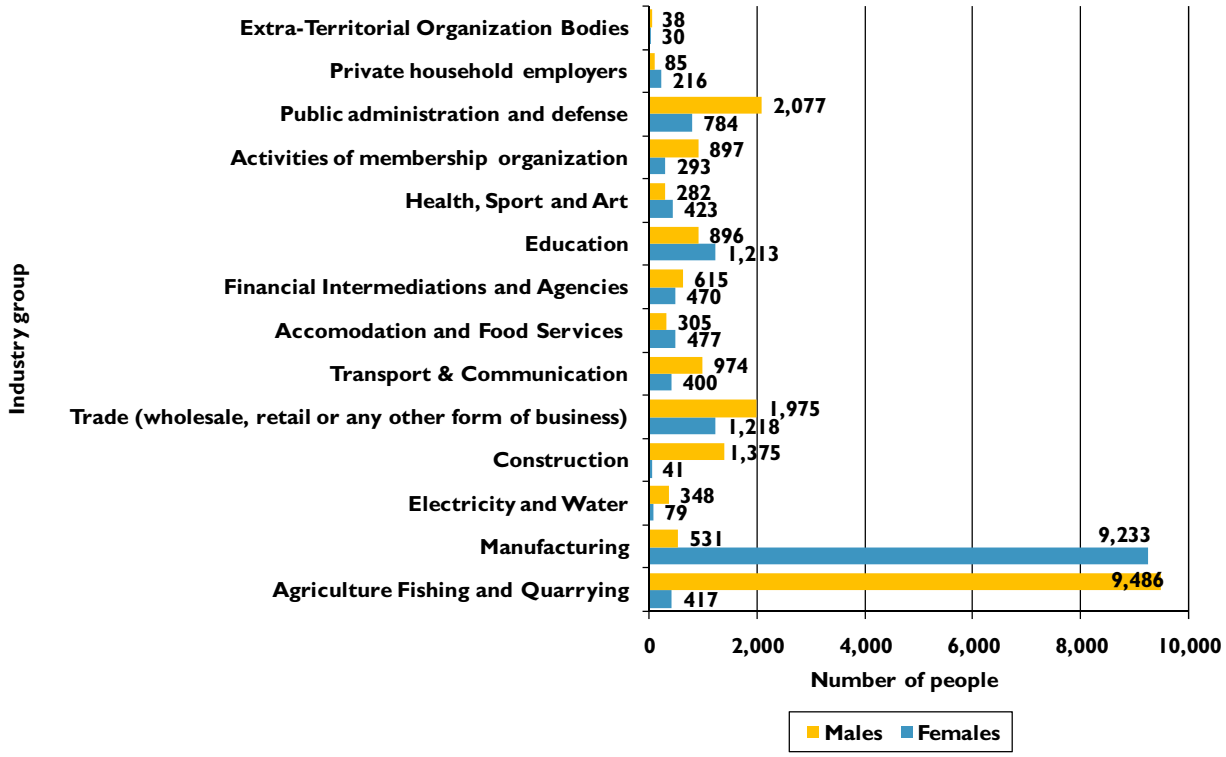
In 2006, there were considerably more male employed workers than female in all work status categories.

4.6.5 Employed workers by industry group

By far the majority of employed workers in Tonga were employed in agriculture fishing and quarrying (9,903 people), or in manufacturing (9,764 people). When combined, these industries accounted for 56% of all employed workers (Fig. 42). While manufacturing was dominated by females, mostly men were employed in agriculture fishing and quarrying.

The other industry groups with a significant proportion of employed people included trade (wholesale, retail or any other form of business), which employed 3,193 people (9% of all employed workers); public administration and defense, which employed 2,861 people (8% of all employed workers); and education, which employed 2,109 people (6% of all employed workers). Employment levels in the remaining industry groups all represented less than 4% of the total.

Figure 42: Employed workers by industry, Tonga: 2006

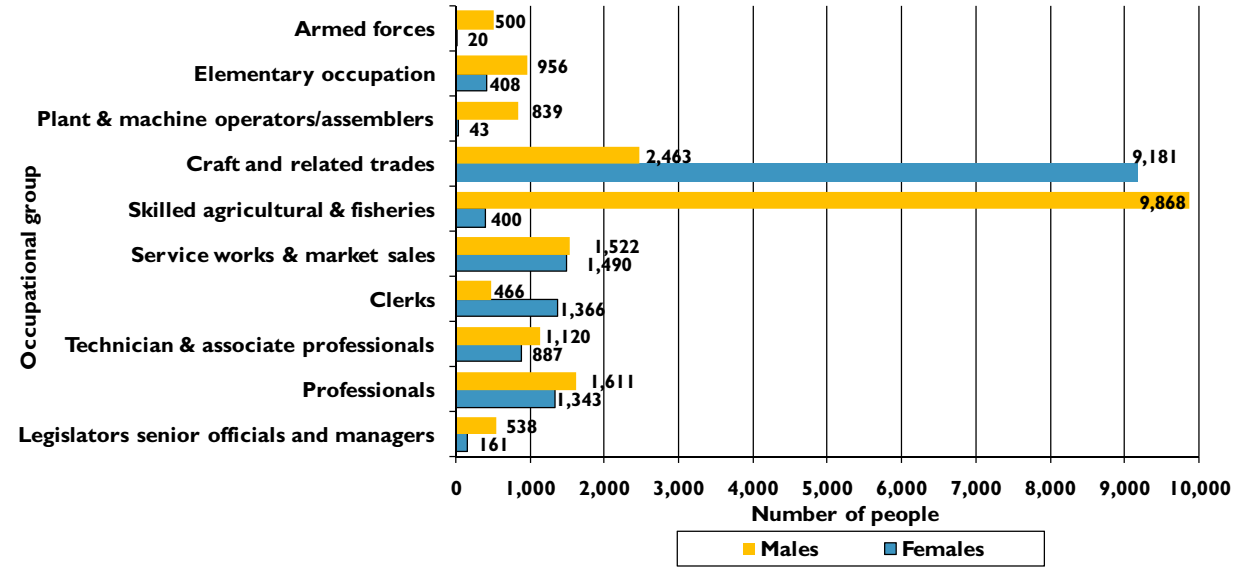


4.6.6 Employed workers by occupational group

The largest number of employed workers were in the craft and related trades category — 11,644 people (33% of all employed workers), followed closely by skilled agricultural and fishery category — 10,268 people (29% of all employed workers) (Fig. 43). While the craft and related trades category was dominated by females (79%), the skilled agricultural and fishery category was dominated by males (96%).

The next most prominent occupational groups were with service works and market sales (8.5% of all employed workers), professionals (8.4%), and technicians and associate professionals (5.7% of all employed workers). All other groups had less than 2,000 workers.

Figure 43: Employed workers by occupation, Tonga: 2006



4.6.7 Unemployed

The number of people aged 15 and older who did no work, but spent time looking for work and were available and willing to start work if a job was offered to them, was only 388 people (214 males, 174 females). This unemployment level represents 1.1% of the total labour force (Table 26, App. 7A).

There were 195 people who did not look for work because of poor weather conditions (159 people), or because they could not afford transportation costs to work (36 people). In addition, a group of 1,241 people did not work, and did not look for work, because they believed that no work was available. If all these people (1,436) were included in the unemployed category (thereby increasing the total labour force and decreasing the non-labour force by this number), the number of unemployed would increase to 1,824 people, and the unemployment rate would be 4.9% (Table 26, App. 7B).

Some census users have indicated that subsistence workers should be included in the unemployed category, on the grounds that these people would look for work if they believed cash work was available in their labour market community. Using this analysis, the total number of unemployed, including subsistence workers, was 13,321 people, which equates to an unemployment rate of 35.9%. Broken down by urban and rural areas, this amounts to 1,894 people (23%) in the urban area, and 11,427 people (40%) in rural areas (Table 26, App. 7B).

While this assumption would not apply to all individuals in this group, it would likely apply to a proportion of them. Depending on the assumptions a user may wish to use, the resulting unemployment rate would fall somewhere between 4.9% and 36%.

Regardless of the unemployment concept used, unemployment levels were higher for females than for males.

Table 26: Population aged 15 and older by unemployment status according to various unemployment concepts, Tonga: 2006

Unemployment concept*	Number of unemployed			Unemployment rate		
	Males	Females	Total	Males	Females	Total
According to unadjusted definition						
Tonga	214	174	**388**	1.1	1.1	**1.1**
Urban	70	56	126	1.5	1.7	1.6
Rural	144	118	262	0.9	1.0	0.9
According to adjusted definition*						
Tonga	924	900	**1,824**	4.4	5.5	**4.9**
Urban	230	215	445	4.9	6.1	5.4
Rural	694	685	1,379	4.3	5.4	4.8
If "subsistence work" is classified as unemployed						
Tonga	6,423	6,898	**13,321**	30.8	42.5	**35.9**
Urban	854	1,040	1,894	18.1	29.4	23.0
Rural	5,569	5,858	11,427	34.4	46.1	39.6

* Unemployed include people that did not work, but did not look for work because they believed that no work was available, or because of poor weather conditions, or because they could not afford transportation costs

4.6.8 Not in labour force

The total number of people classified as not in the labour force in the 2006 Tonga census was 27,407 (Table 27, App. 7A, and Figs. 35 and 36).

The distribution of these individuals was as follows.

Table 27: Population aged 15 and older not in the labour force, Tonga: 2006

Non-labour force	Males	Females	Total
Students	4,396	4,510	8,906
Retired, disabled, family responsibilities	3,115	7,197	10,312
Other, including people who did not work because	3,760	4,429	8,189
they were not interested in finding work	2,633	3,363	5,996
they were not willing and available to work	135	173	308
of poor weather conditions	88	71	159
they could not afford transportation cost	16	20	36
they did not look for work because they believed that no work was available	606	635	1,241
for reasons not specified	282	167	449
Total	**11,271**	**16,136**	**27,407**

Of the population aged 15 and older and not in the labour force, 59% were women (16,136), and 41% (11,271) were men.

There were more female students (4,510) than male students (4,396). About 70% of the people categorized as "retired, disabled, family responsibilities" were females (7,197).

However, as mentioned above in section 4.6.7, if some of the people that were included in the "other" non-labour force category were to be classified as unemployed, the total number of people in the non-labour force would decrease by the number of people that were reclassified as unemployed, and the number of people in the labour force would increase by the same number (App. 7B). These people could include those that:

- did not work because of poor weather condition (159 people),
- did not work because they could not afford transportation costs (36 people),
- did not work and did not look for work because they believed that no work was available (1,241 people), and
- were not interested in finding work (perhaps because they also didn't look for work because they believed that no work was available) (5,996 people).

5. HOUSEHOLD CHARACTERISTICS

5.1 Household size

The number of (private) households increased from 16,194 in 1996 to 17,462 in 2006, an overall increase of by 1,268 households (Table 28).

Table 28: Number of private households, number of occupants, and average household size by division/district, Tonga: 1996 and 2006

Division/district	Number of private households		Number of people in private households		Average household size (number of people per household)	
	1996	2006	1996	2006	1996	2006
TONGA	**16,194**	**17,462**	**97,784**	**101,144**	**6.0**	**5.8**
Tongatapu	10,796	11,971	66,979	71,340	6.2	6.0
Kolofo'ou	2,674	3,036	16,953	18,216	6.3	6.0
Kolomotu'a	2,400	2,689	14,451	15,753	6.0	5.9
Vaini	1,742	2,029	11,180	12,497	6.4	6.2
Tatakamotonga	1,155	1,190	6,828	6,775	5.9	5.7
Lapaha	1,172	1,220	7,370	7,255	6.3	5.9
Nukunuku	988	1,131	6,160	6,807	6.2	6.0
Kolovai	665	676	4,037	4,037	6.1	6.0
Vava'u	2,728	2,871	15,715	15,435	5.8	5.4
Neiafu	1016	1,060	5,650	5,738	5.6	5.4
Pangaimotu	212	243	1,298	1,406	6.1	5.8
Hahake	395	436	2,291	2,422	5.8	5.6
Leimatu'a	474	489	2,753	2,734	5.8	5.6
Hihifo	372	430	2,375	2,267	6.4	5.3
Motu	259	213	1,348	868	5.2	4.1
Ha'apai	1,469	1,372	8,138	7,541	5.5	5.5
Pangai	501	530	2,966	2,943	5.9	5.6
Foa	244	251	1,434	1,474	5.9	5.9
Lulunga	238	196	1,282	1,075	5.4	5.5
Mu'omu'a	150	127	735	630	4.9	5.0
Ha'ano	152	120	773	619	5.1	5.2
'Uiha	184	148	948	800	5.2	5.4
Eua	820	899	4,934	5,169	6.0	5.7
'Eua Motu'a	455	515	2,766	2,914	6.1	5.7
'Eua Fo'ou	365	384	2,168	2,255	5.9	5.9
Niuas	381	349	2,018	1,659	5.3	4.8
Niua Toputapu	242	210	1283	1,013	5.3	4.8
Niua Fo'ou	139	139	735	646	5.3	4.6

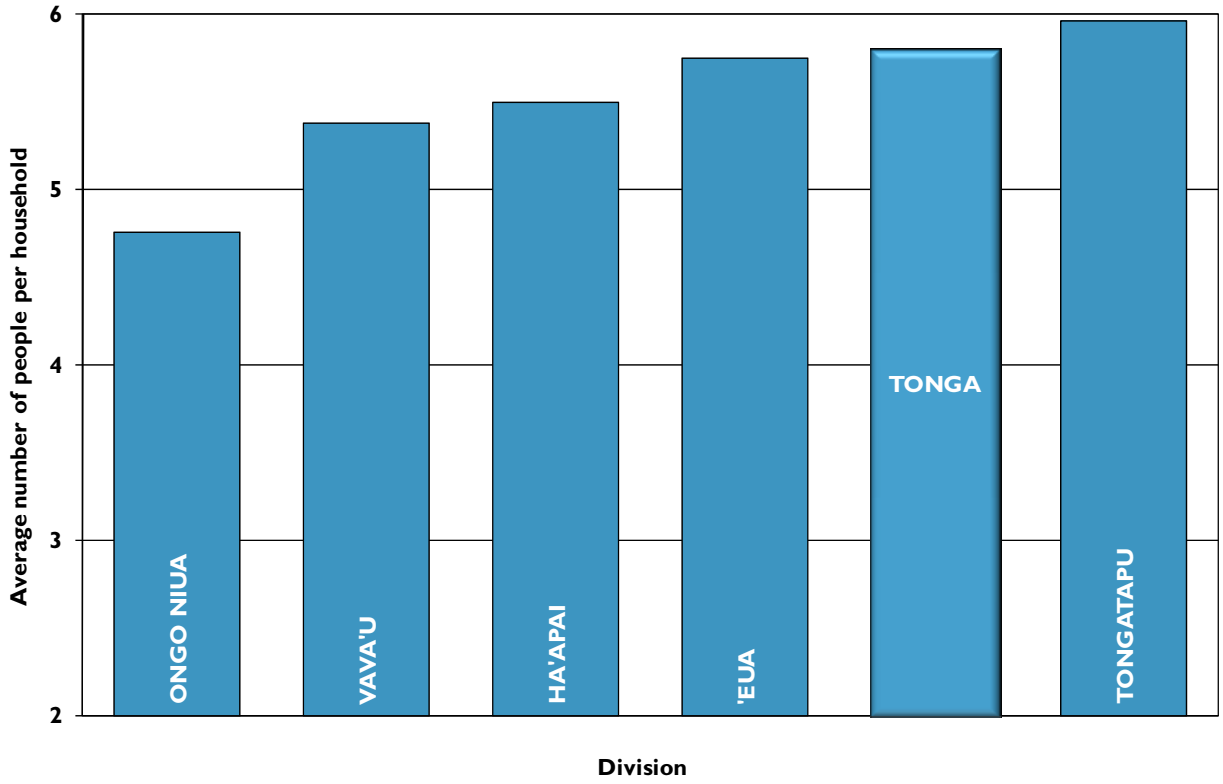
In addition, there were 67 additional non-private dwellings (institutions) in 2006, including military camps, prisons, and accommodations such as hotels and hostels for short-term visitors.

The number of households increased substantially in Tongatapu, especially in the districts of Vaini, Kolofo'ou, Kolomotu'a, and Nukunuku. In contrast, the total number of households decreased in Ha'apai and Ongo Niua.

The overall average household size decreased slightly from 6.0 to 5.8 people per household between 1996 and 2006.

In general, the average household size of 6.0 people in Tongatapu was higher than the average in all other divisions. The average household size in Ongo Niua was less than 5 people per household (Fig. 44).

Figure 44: Average household size (number of people per household) by division, Tonga: 2006



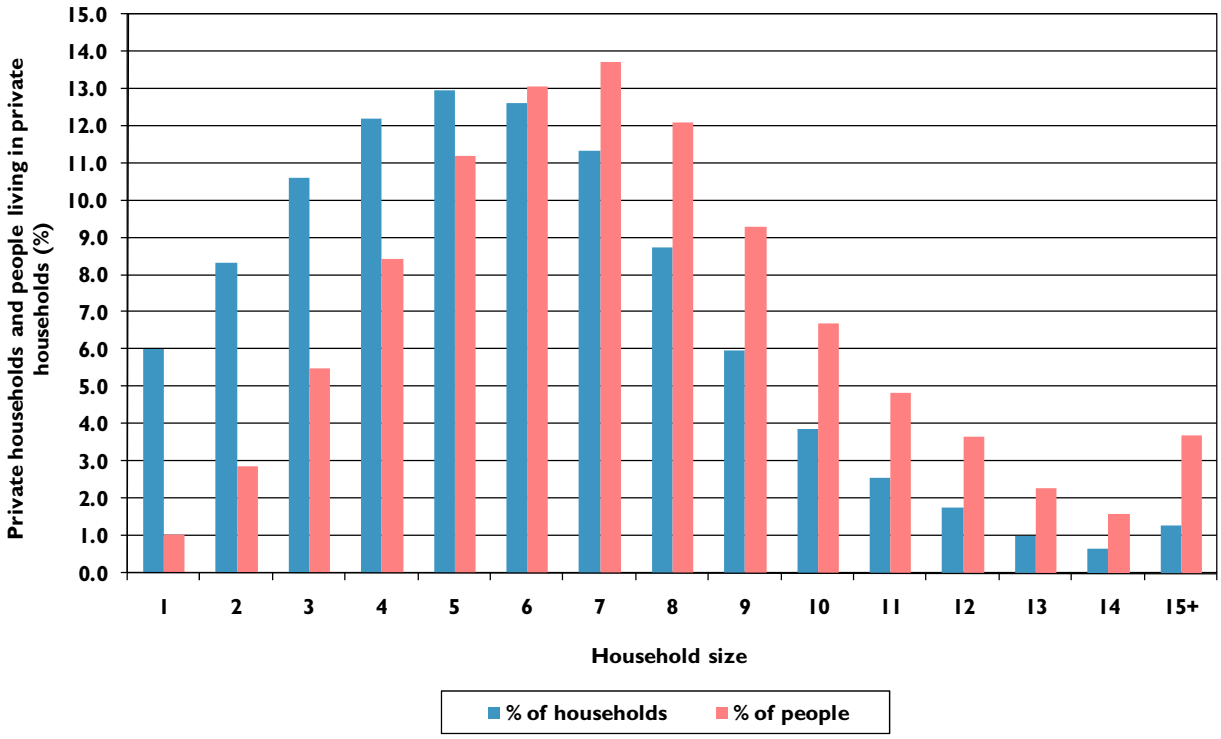
In 2006, the most common household size was 5, accounting for 13% of all households (Table 29 and Fig. 45). The highest proportion of people, however, lived in households with 7 people, which accounted for 13.7% of all household.

More than 20% of the population lived in households with 10 or more people, and almost 4% of the population lived in households with more than 15 people. Exactly 1% of the population lived in one-person households, which accounted for 6% of all households.

Table 29: Number of private households by household size and people per household, Tonga: 2006

Household size	Private households		People per household size	
	Number	%	Number	%
1	1,052	6.0	1,052	1.0
2	1,457	8.3	2,914	2.9
3	1,854	10.6	5,562	5.5
4	2,132	12.2	8,528	8.4
5	2,266	13.0	11,330	11.2
6	2,201	12.6	13,206	13.1
7	1,981	11.3	13,867	13.7
8	1,529	8.8	12,232	12.1
9	1,044	6.0	9,396	9.3
10	678	3.9	6,780	6.7
11	445	2.5	4,895	4.8
12	309	1.8	3,708	3.7
13	178	1.0	2,314	2.3
14	115	0.7	1,610	1.6
15+	221	1.3	3,750	3.7
Total	**17,462**	**100.0**	**101,144**	**100.0**

Figure 45: Distribution of households and people living in private households, by household size, Tonga: 2006



5.2 Household composition

Data on household composition were established by identifying a head of household who served as a reference person to whom all other people in the household, in terms of family membership, are related (Table 30).

The majority of all heads of households (79%) in Tonga were men (13,855) with 21% (3,607) of households headed by women.

Seventy per cent of all household members consisted of a husband and wife and their children (nuclear family).

About 14% of households consisted of other children such as adopted children, grandchildren, or children of in-laws of the household head. Another 11% of all household members were other relatives, such as uncles and aunts, nephews, etc.

Two per cent of all household members were a non-relative (no relation).

Table 30: Population by household composition (relationship to head of household), Tonga: 2006

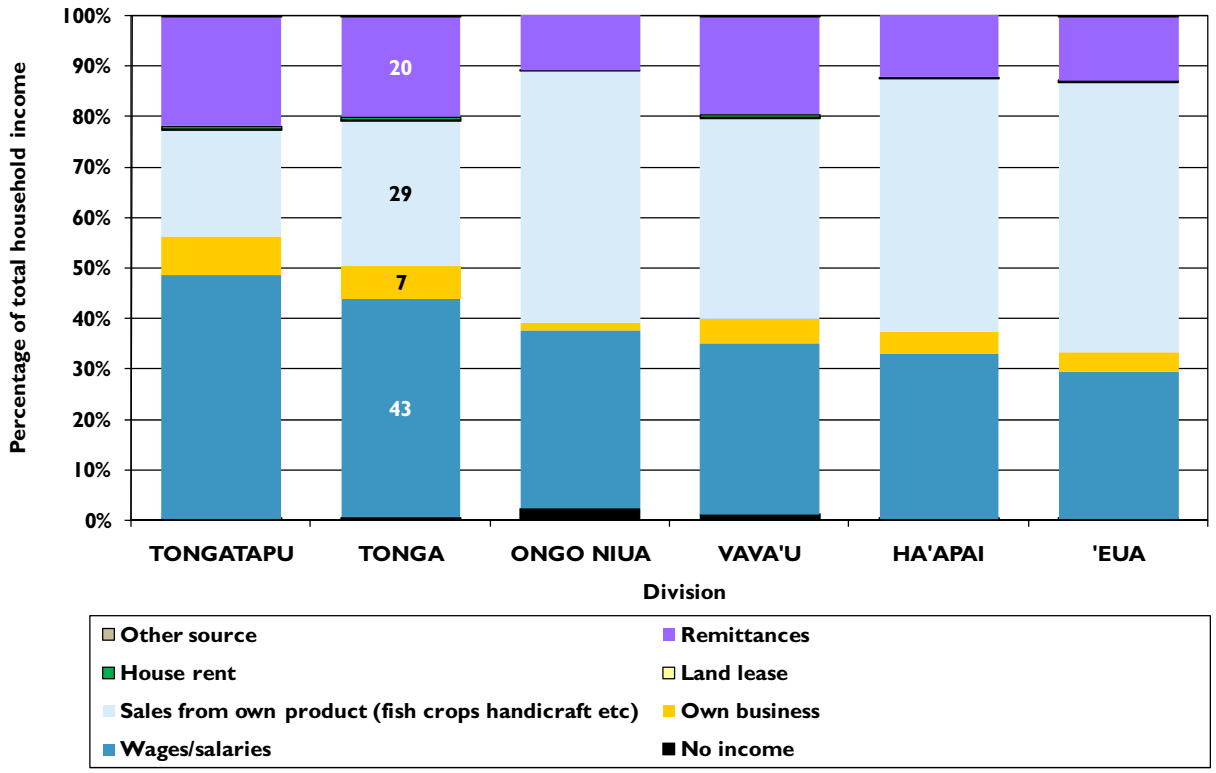
Relationship	Total	Males	Females	Total	Males	Females
	Total number			Percentage		
Head of household	17,462	13,855	3,607	17	27	7
Spouse	11,509	146	11,363	11	0	23
Biological child	41,984	21,765	20,219	42	43	40
Adopted child	1,771	940	831	2	2	2
Brother / Sister	1,854	922	932	2	2	2
Grandchild	11,764	6,097	5,667	12	12	11
Parent of head of household	584	127	457	1	0	1
Parent of spouse	451	104	347	0	0	1
Child of spouse (step child)	429	201	228	0	0	0
Other relatives	11,551	5,861	5,690	11	11	11
No relation	1,775	1,099	676	2	2	1
Not stated	10	5	5	0	0	0
Total	**101,144**	**51,122**	**50,022**	**100**	**100**	**100**

5.3 Household income

5.3.1 Main source of household income

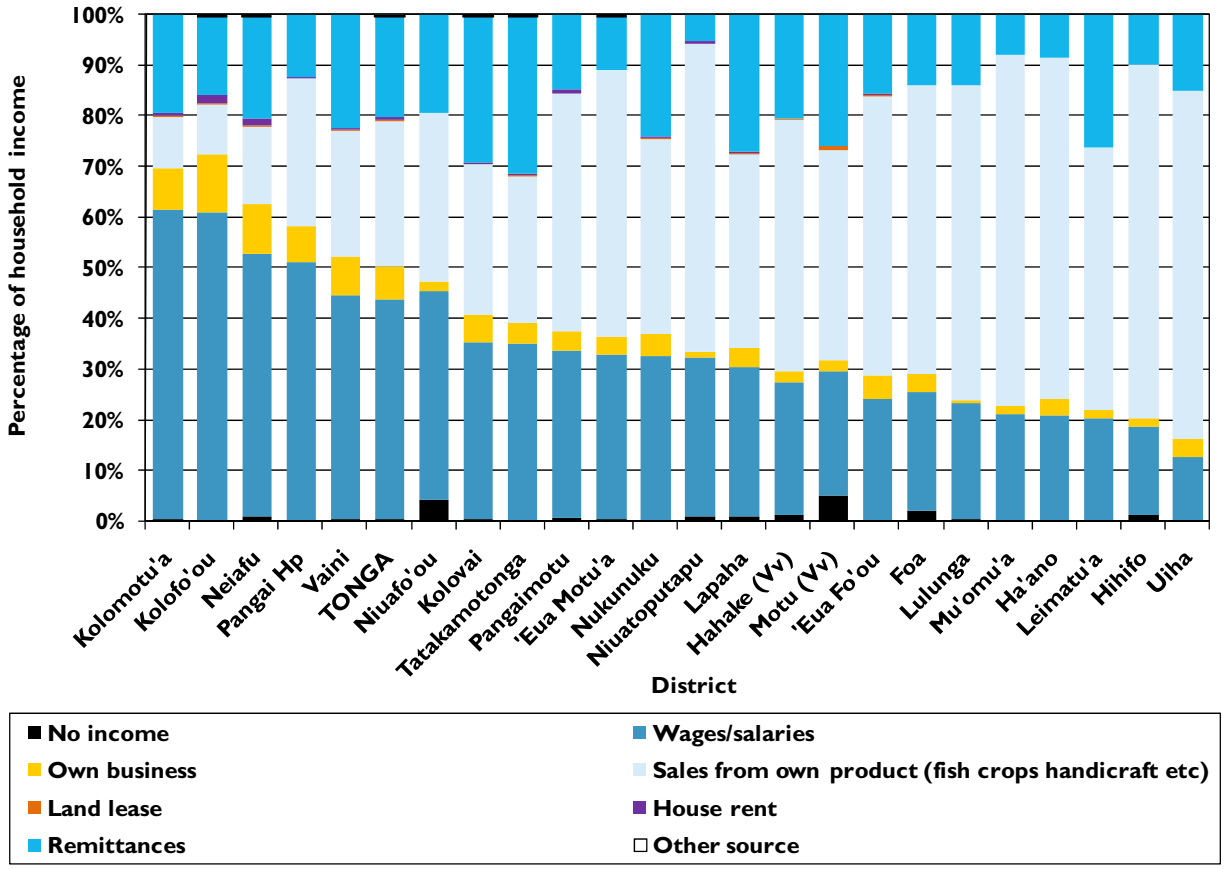
Wages and/or salaries were the main source (43%) of household incomes during the 12 months prior to the census (Fig. 46). The second most common source of income was selling products such as fish, crops or handicrafts (29%). Income from remittances was the main source of income for 20% of all households. A small proportion (7%) of households relied on income from their own business. About 99 households, mostly in Tongatapu, reported that they had no income at all.

Figure 46: Private households by division and main source of household income (in % of total household income), Tonga: 2006



However, there were large differences in the primary income source between divisions and districts. While 48% of all households in Tongatapu mainly relied on income from wages and salaries, this proportion was much lower in all other divisions, where income generated through the sale of products (e.g. fish, crops, handicrafts) was more important. In some districts such as Hihifo, Uiha, Ha'ano, and Mu'omu'a, almost 70% of all households mainly relied on income from the sale of own products (Fig. 47). On the other hand, about one-quarter of all households in several districts relied mainly on income from remittances such as Kolovai, Tatakamotonga, Nukunuku, Lapaha, Motu, and Leimatu'a.

Figure 47: Private households by district and main source of household income (in % of total household income), Tonga: 2006



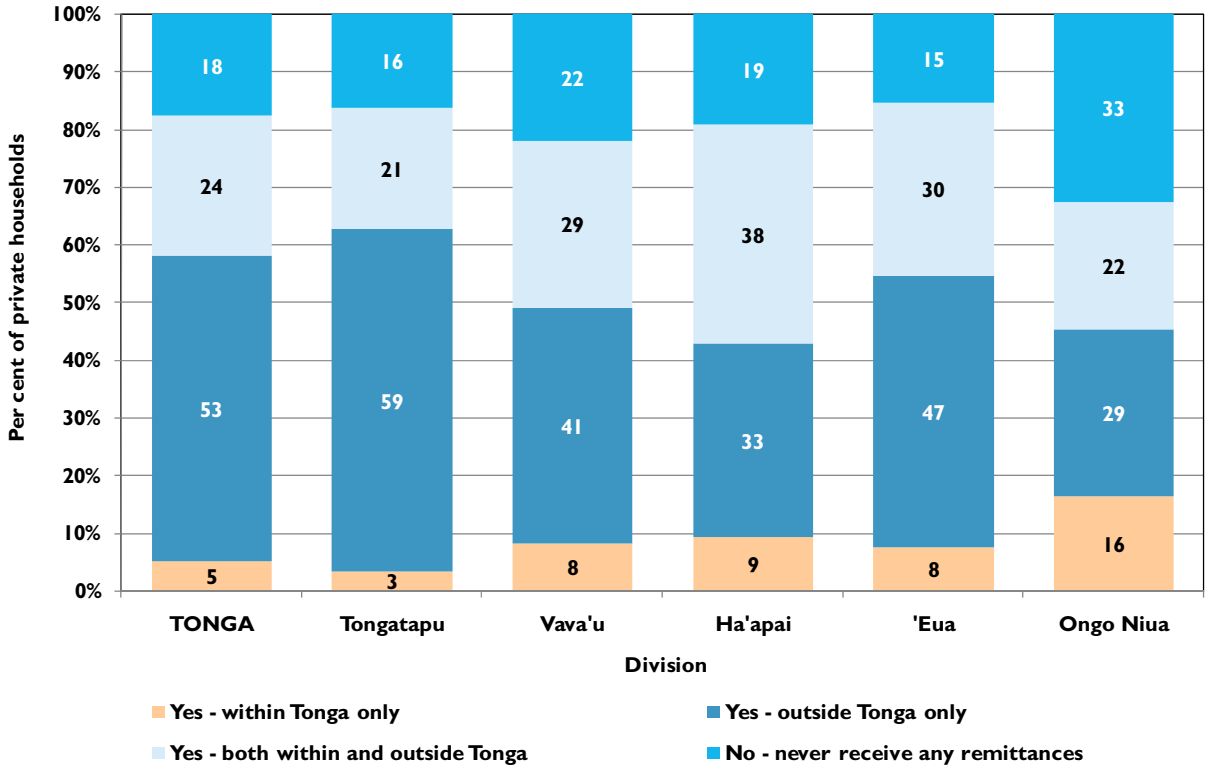
5.3.2 Remittances

About 82% of households received remittances during the 12 months prior to the census (Fig. 48), and only 18% did not receive any remittances.

More than half (53%) of all households received remittances from outside Tonga only, and another 24% received them from within and outside Tonga. Five per cent of all households received remittances from within Tonga only.

However, the importance and source of remittances varied by division. While one-third of all households in Ongo Niua did not receive any remittances, this amount was only 15% in ‘Eua. Ongo Niua had the highest proportion of households receiving remittances from within Tonga (16%), and Tongatapu had the highest proportion of households receiving remittances from outside Tonga only (59%).

Figure 48: Source of remittances for private households (by division and in % of households), Tonga: 2006



5.4 Amenities and capital goods

Please note that the following data for this section are presented as percentages of all private households by division (Table 31). The total number of households per division was as follows.

Table 31: Total number of private households by division, Tonga: 2006

	Division					
	TONGA	Tongatapu	Vava'u	Ha'apai	'Eua	Ongo Niua
Total number of private households	17,462	11,971	2,871	1,372	899	349

5.4.1 Private households by construction material used for dwelling[4]

About 65% of the material used for the **outside walls** of private dwellings was wood, and 27% was concrete blocks (Fig. 49). While the proportion of dwellings in Ha'apai using wood was 80% and only 11% using concrete blocks, just over half of all dwellings in 'Eua and Ongo Niua used wood. Here, the proportion of dwellings using concrete blocks exceeded 30% of all dwellings.

Metal accounted for 93% of the material used for **roofs** (Fig. 50), and there was little difference in the use of roofing material between the different divisions. A slightly higher proportion of dwellings in Ongo Niua (5%) used thatch for roofs compared with the other divisions.

[4] Note: several households may live in the same dwelling. Therefore the information presented in this section does not refer to the number or percentage of dwellings.

About 75% of all dwellings in Tonga had concrete **floors** (Fig. 51), while nearly 25% had wood floors. The proportion of dwellings with wood floors was just over 30% (slightly higher) in Vava'u and Ha'apai, and 18% (slightly lower) in 'Eua and Ongo Niua compared with the national average.

5.4.2 Private households by water source

About 81% of all households in Tonga obtained their **drinking water** from a cement tank (Fig. 52). The second most important source (15%) was piped water, although piped water was only available to a significant proportion of households in Tongatapu and 'Eua. Otherwise, 3% of all households relied on bottled water.

The main source of **water other than drinking water** was piped water (83% of all households), and cement tanks (15% of all households) (Fig. 53). The proportion of households relying on their own tank was over 40%. This amount was 47% in Ha'apai and Ongo Niua. In Ha'apai, 8% of all households obtained their water from a well.

Figure 49: Proportion of private households by division and the main type of material used for the outside walls of dwellings, Tonga: 2006

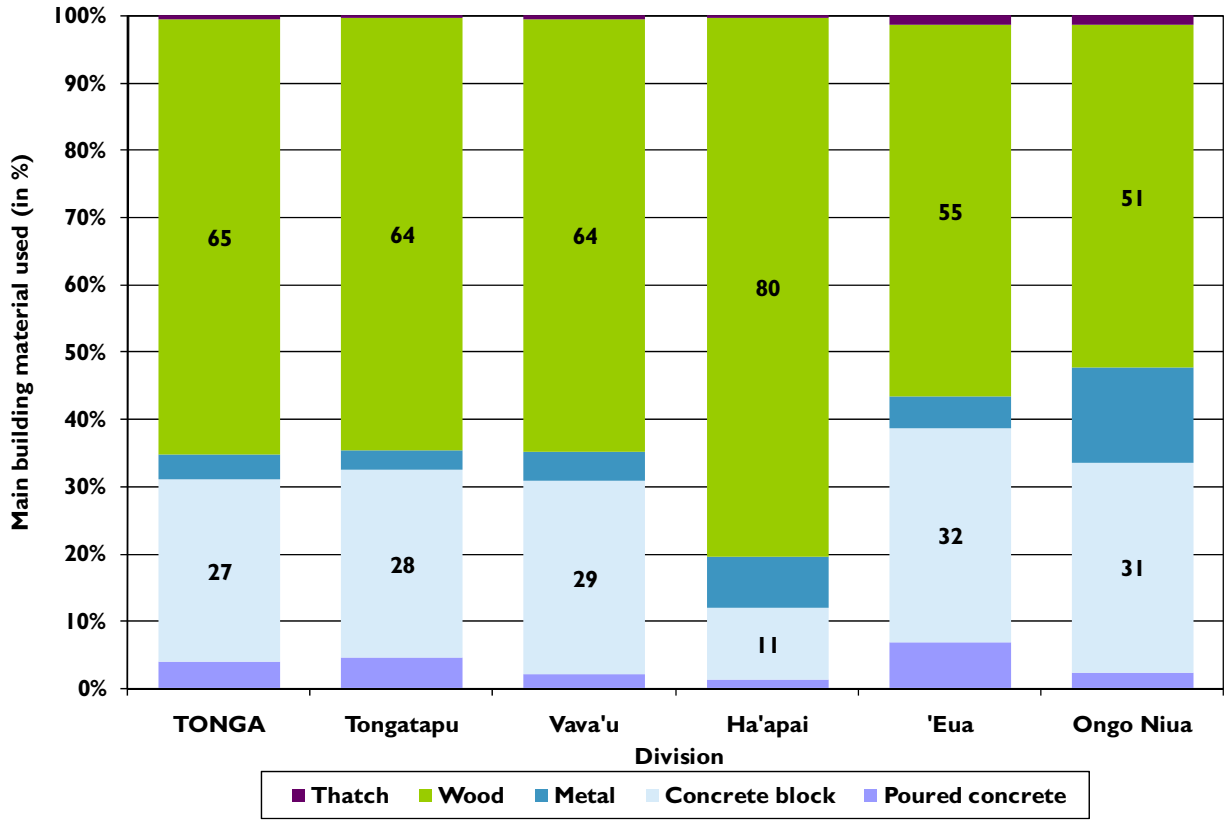


Figure 50: Proportion of private households by division and the main type of material used for the roofs of dwellings, Tonga: 2006

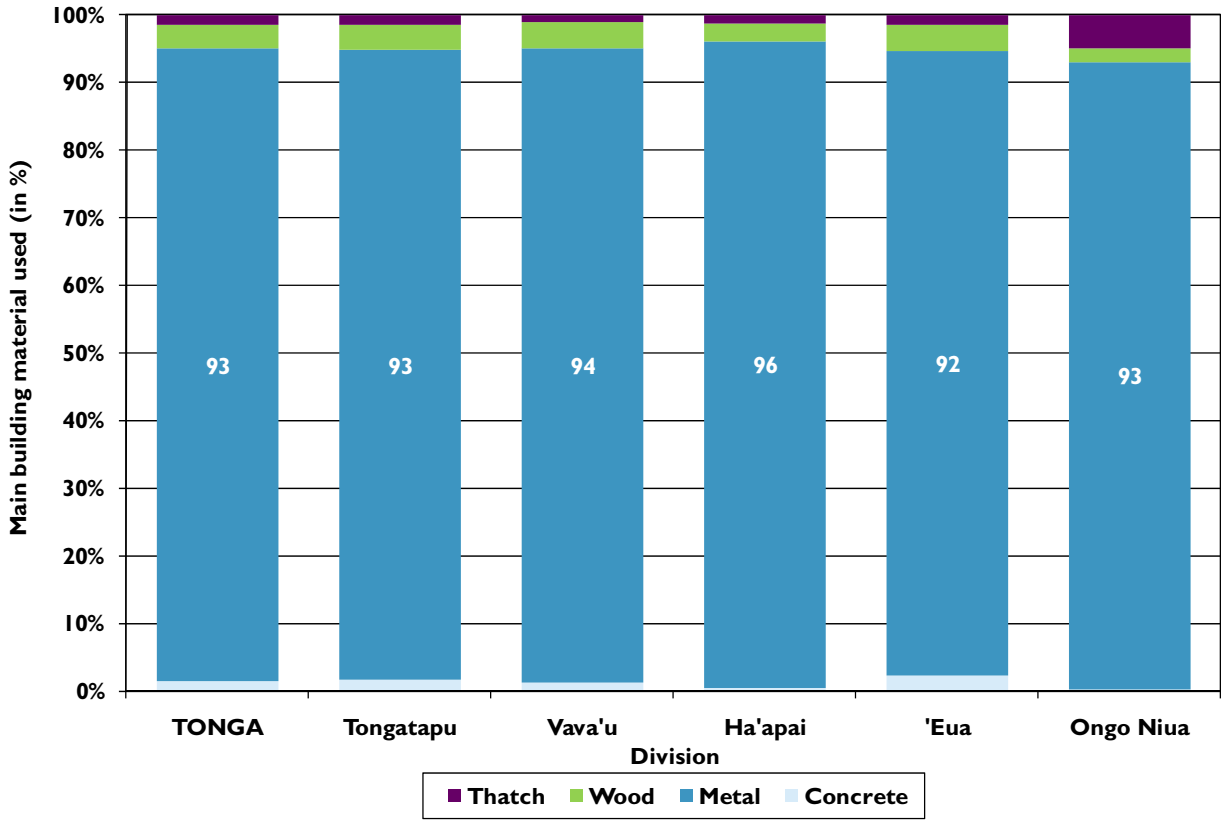


Figure 51: Proportion of private households by division and the main type of material used for the floors of dwelling, Tonga: 2006

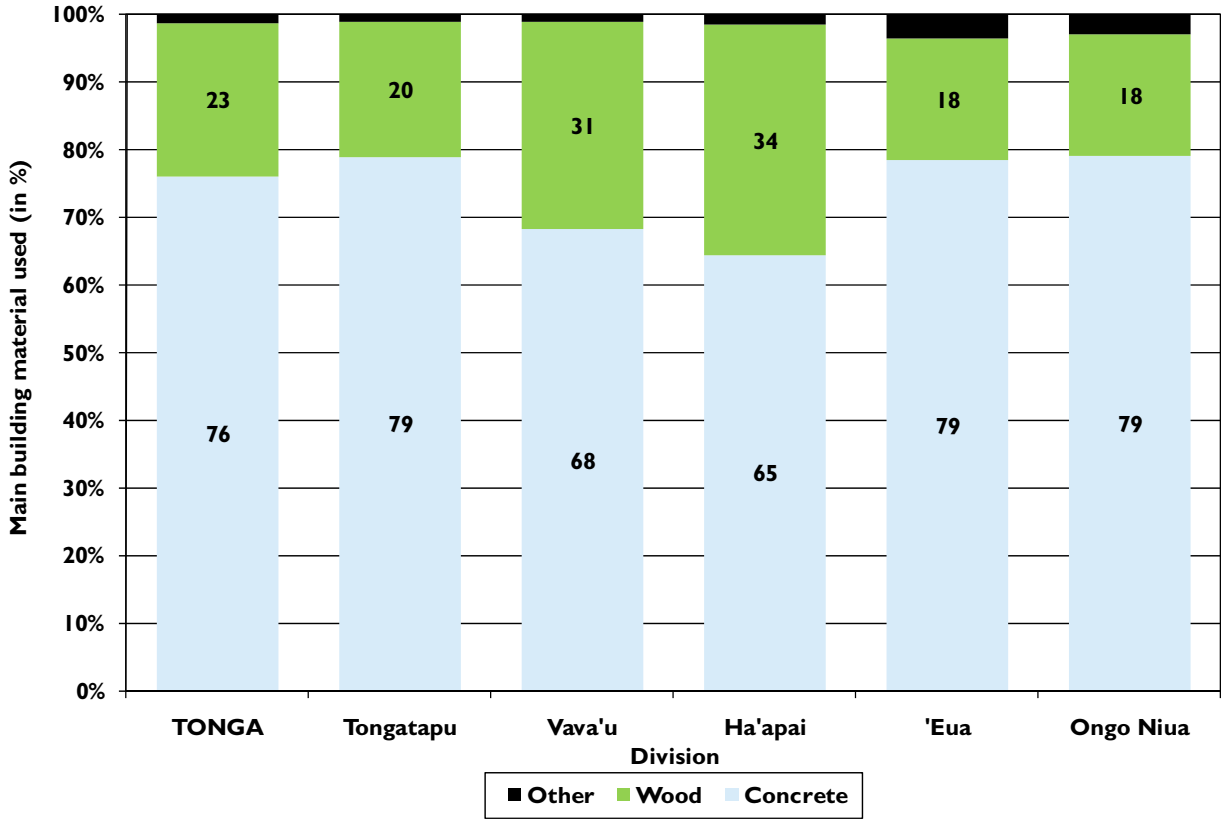


Figure 52: Proportion of private households by division and the main source of drinking water, Tonga: 2006

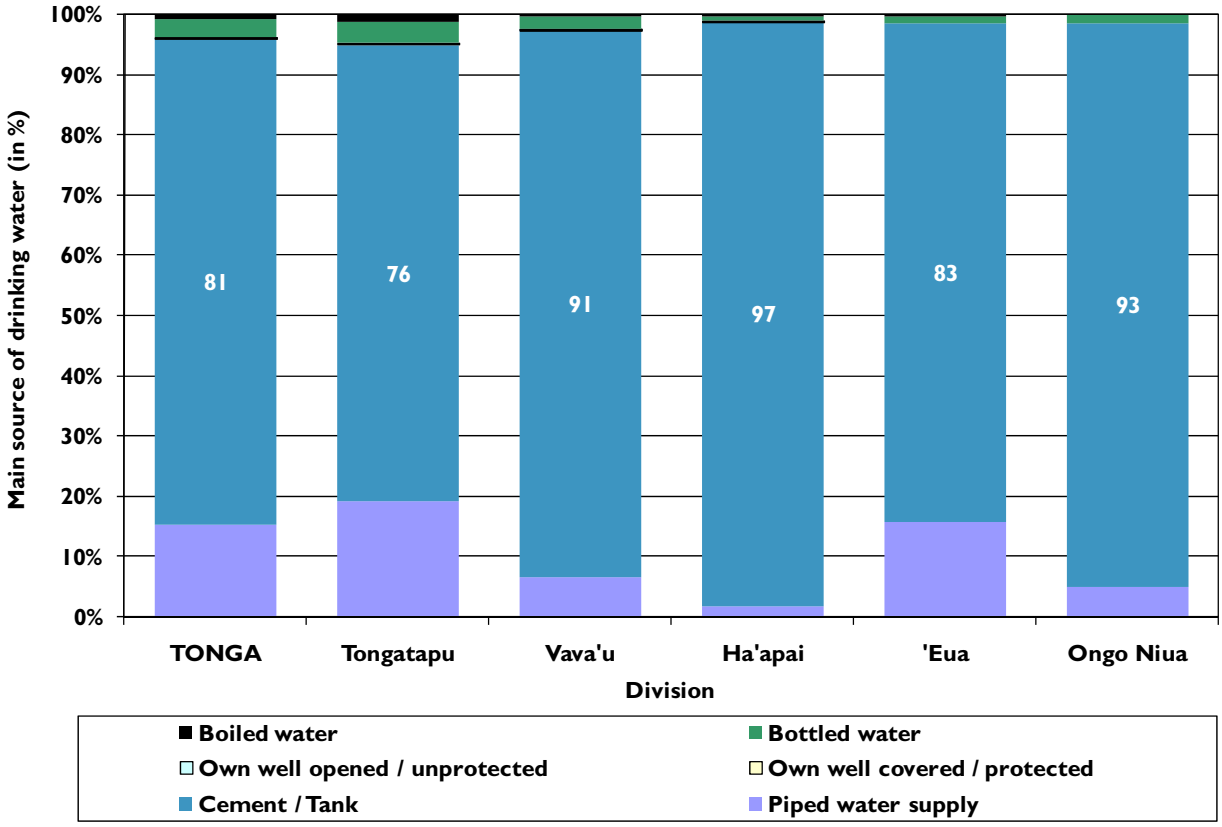
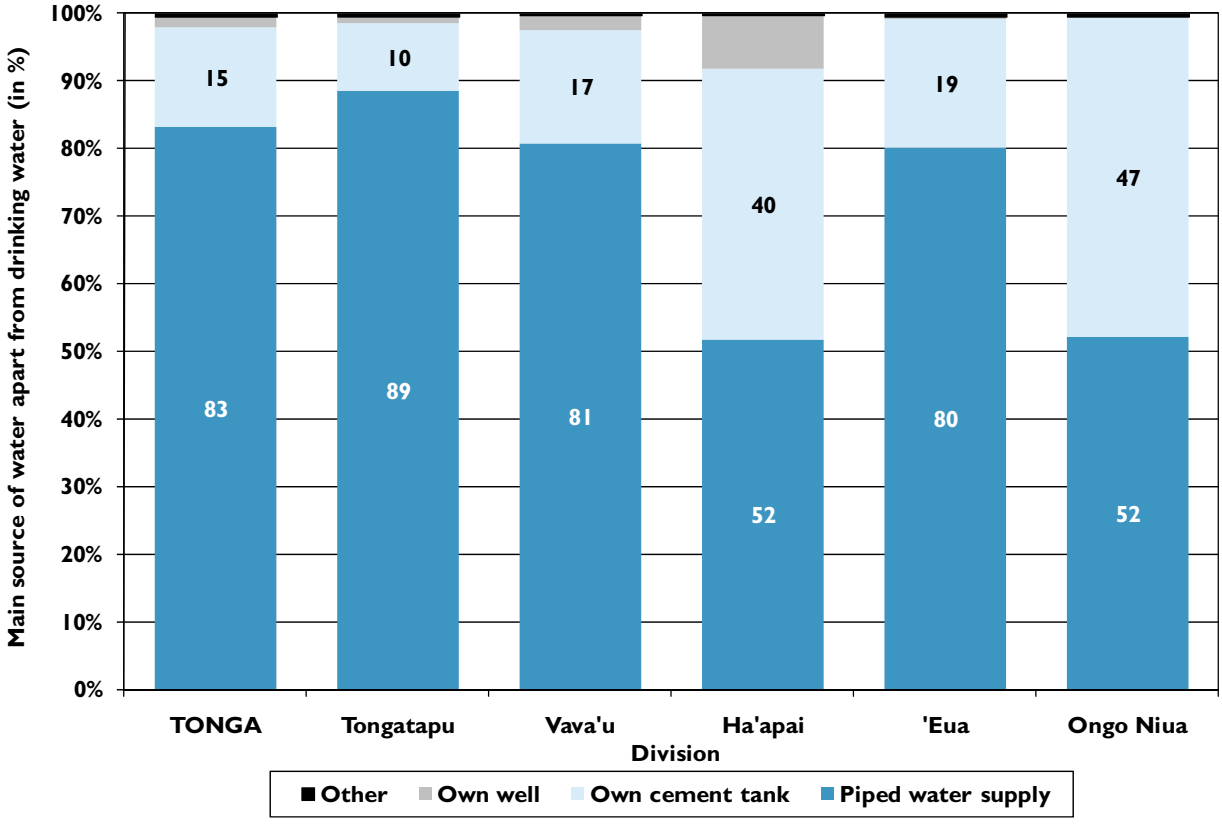


Figure 53: Proportion of private households by division and the main source of water apart from drinking water, Tonga: 2006



5.4.3 Private households by main toilet facility

While flush toilets were the most common type of **toilet facility** in Tonga**,** used by 70% of all households, there were significant differences by division (Fig. 54). While 80% of all households in Tongatapu had a flush toilet, this percentage was much lower in Ha'apai with only 38% of households using a flush toilet, and 34% in Ongo Niua. In these two latter divisions, more than half of all households used a pit toilet. On average, 11% of all households in Tonga used a manual flush toilet.

5.4.4 Private households by main energy source

The main source of **lighting** in Tonga was electricity, used by 89% of all households, although this percentage varied between 80% and 95% by division (Fig. 55). In Ongo Niua, electricity was not supplied. Instead, half of all households relied on kerosene lamps, and another 44% on solar panels as their main source of lighting.

Just over half of all households used gas as the main energy source for **cooking** (Fig. 56). However, gas was most commonly used in Tongatapu where about two-thirds of all households relied on gas. This percentage was much lower in all other divisions, where collected firewood was the main energy source for cooking, with more than 70% of households in Ha'apai and 'Eua relying firewood, and more than 80% of households in Ongo Niua.

Figure 54: Proportion of private households by division and main type of toilet facility, Tonga: 2006

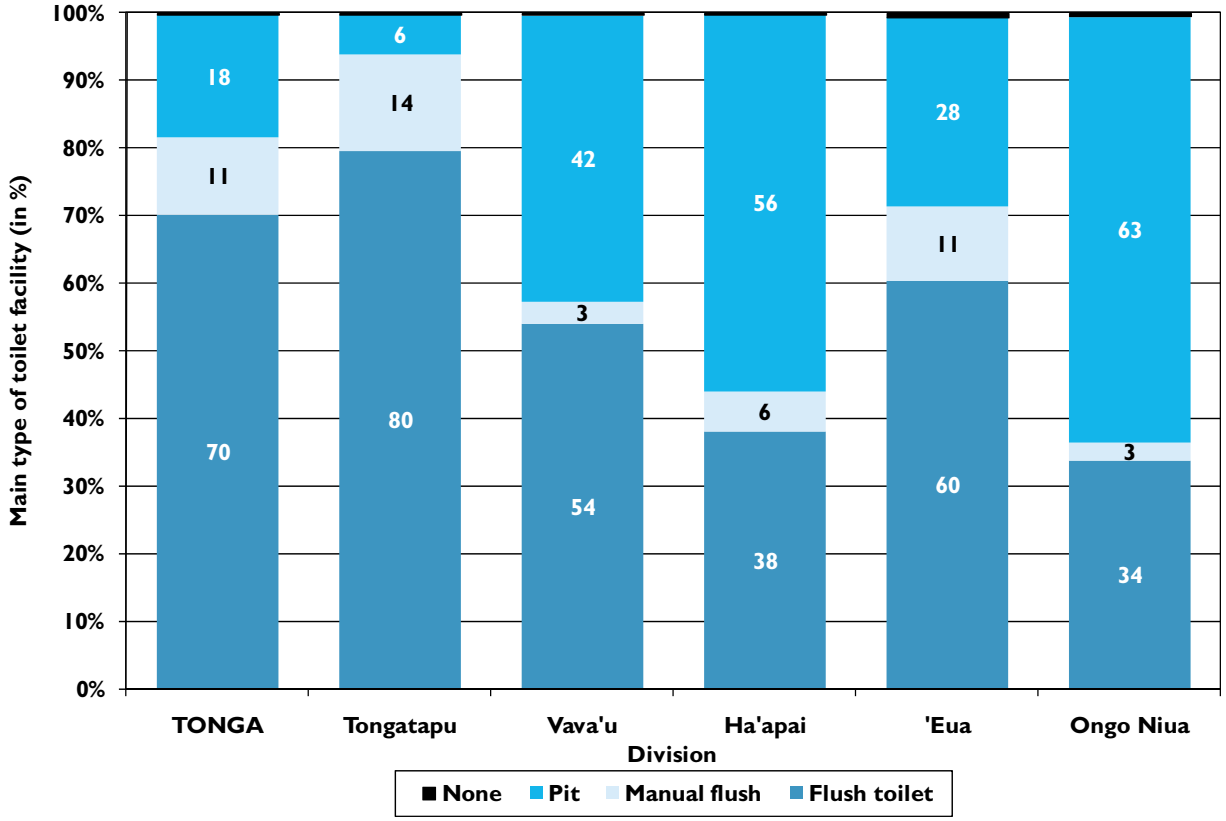


Figure 55: Proportion of private households by division and main source of lighting, Tonga: 2006

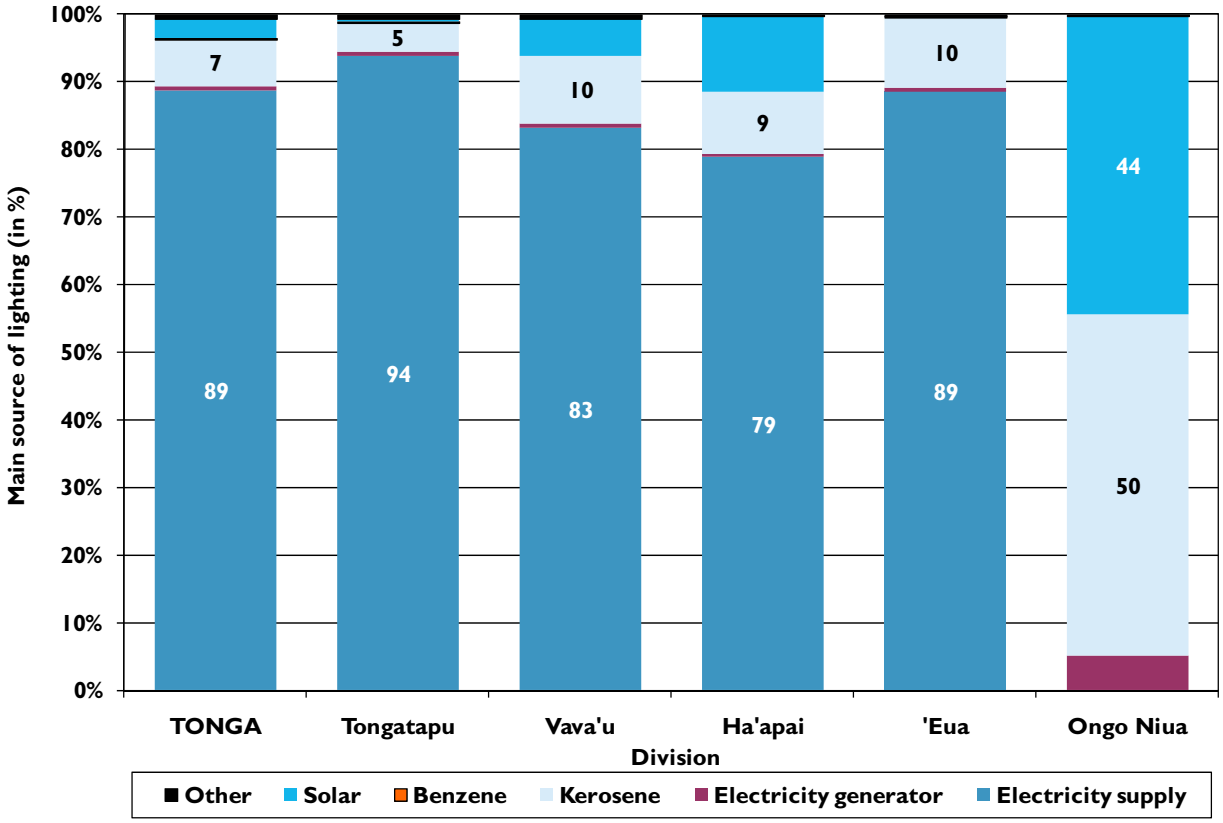
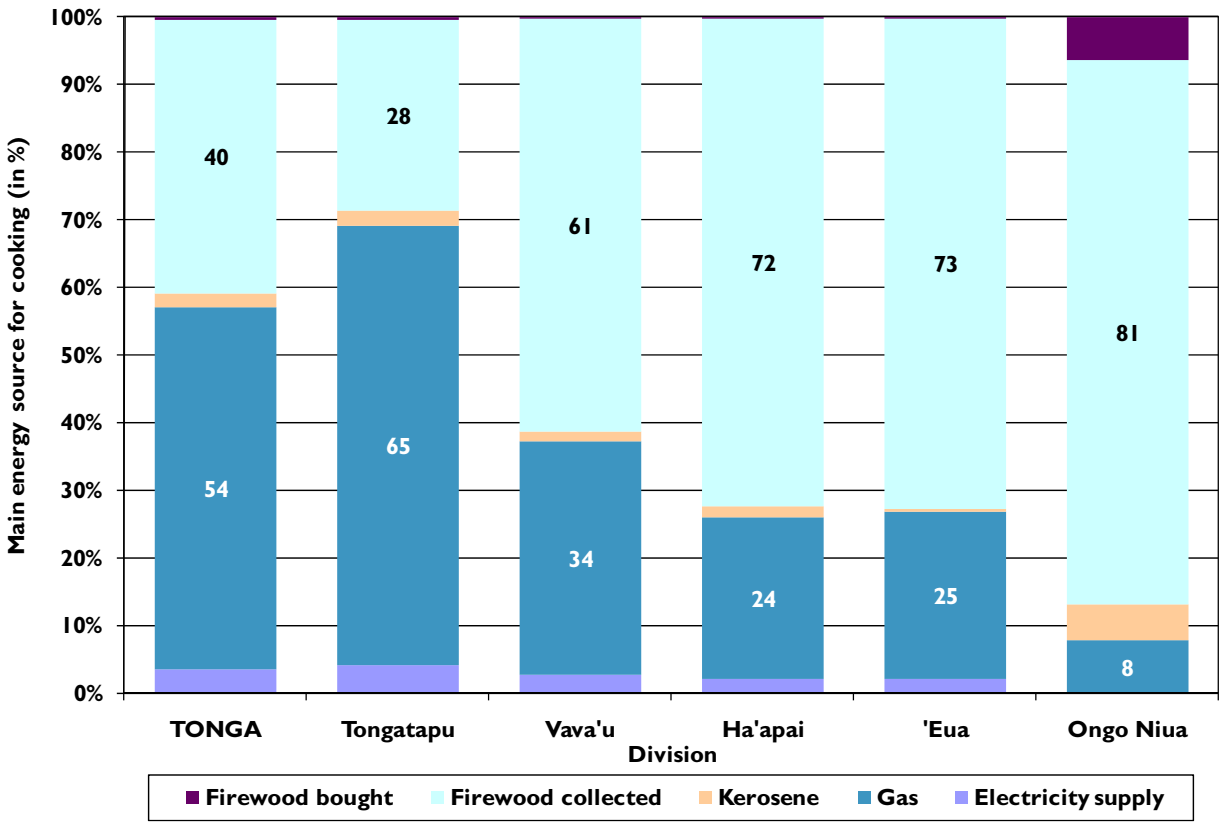


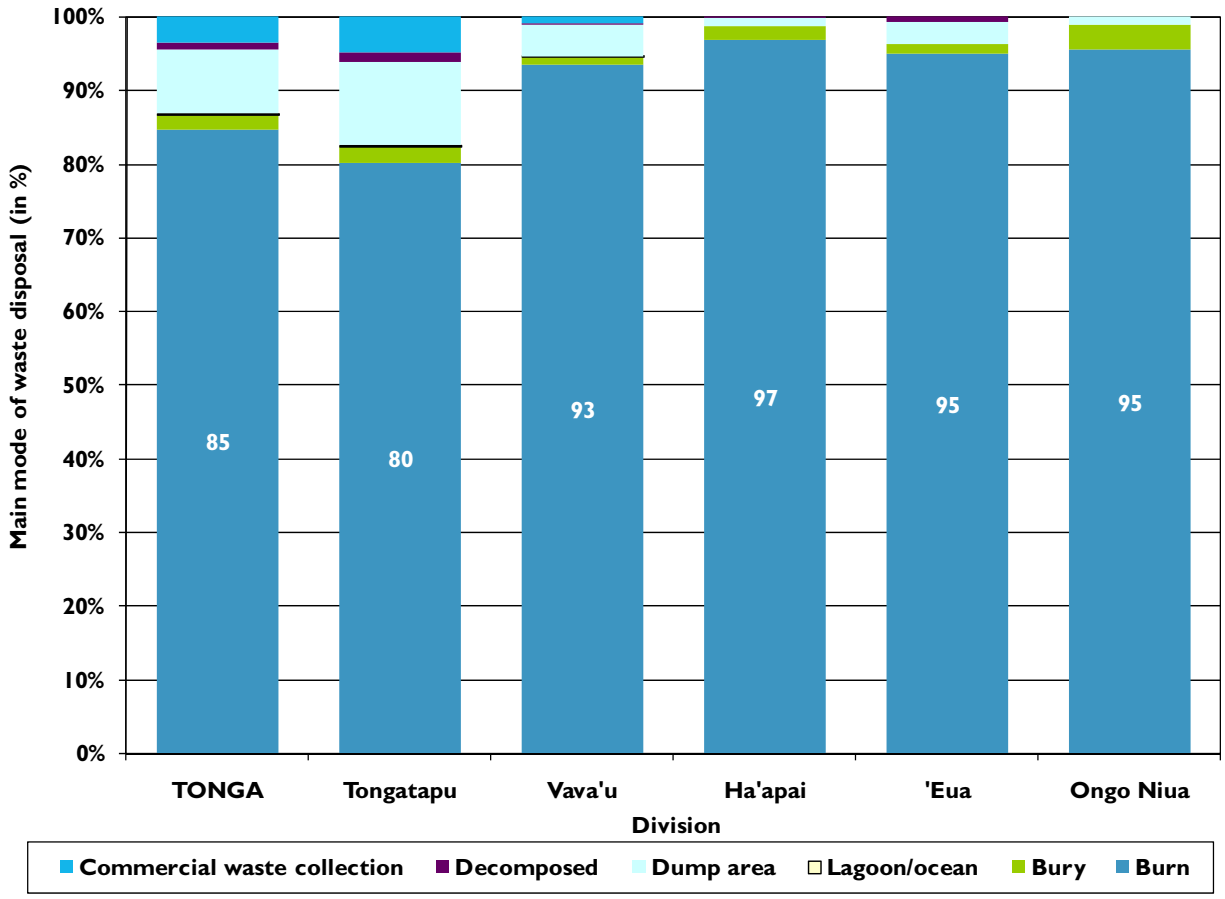
Figure 56: Proportion of private households by division and main energy source for cooking, Tonga: 2006



5.4.5 Private households by main means of waste disposal

Burning was the most common means of waste disposal in Tonga, practiced by 85% of all households (Fig. 57). In Tongatapu 11% of all households took their waste to the local dump area, and another 5% used a commercial waste collection.

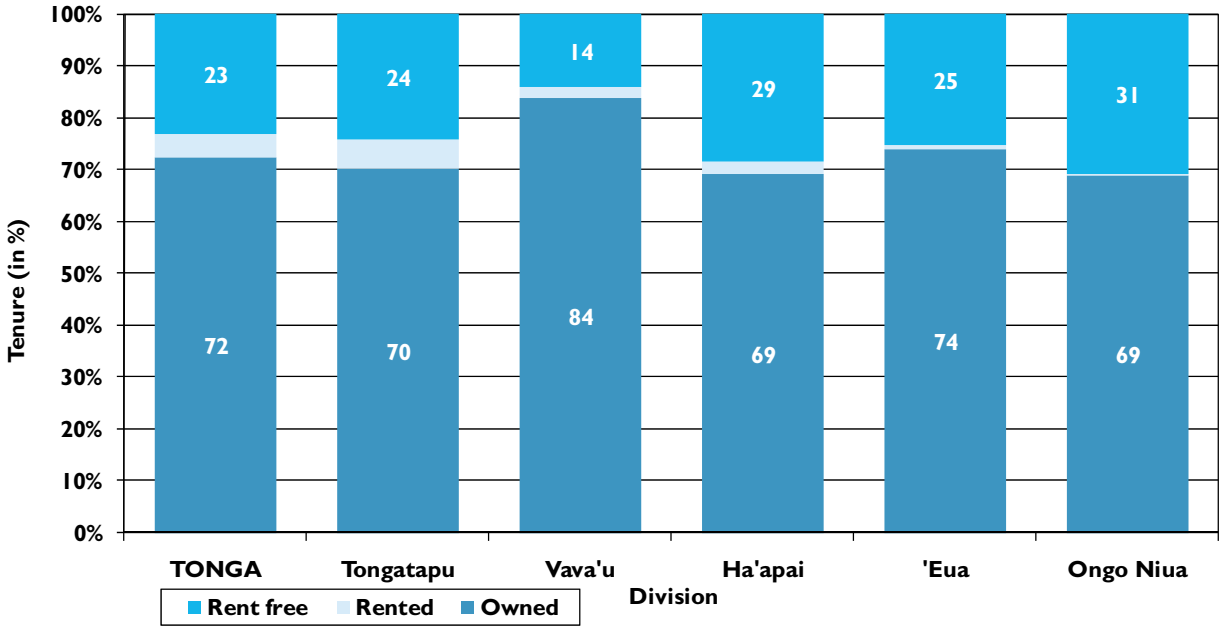
Figure 57: Proportion of private households by division and main mode of waste disposal, Tonga: 2006



5.4.6 Private households by tenure

The vast majority of households (72%) owned their dwelling outright (Fig. 58), 4% rented their dwelling, and another 23% stayed in their dwelling rent-free. About 6% of households in Tongatapu rented their dwelling, which was the highest number for all divisions. Compared with the national average, a higher proportion of households in Ha'apai, 'Eua, and Ongo Niua stayed in their dwelling rent-free.

Figure 58: Proportion of private households by division and tenure, Tonga: 2006



5.4.7 Private households and availability of various household items

This section briefly summarises the availability of a variety of household items (Table 32, and Figs. 59–71). In general, a higher proportion of households in Tongatapu (compared with all other divisions) used items such as a hot water system, motor vehicle, refrigerator, washing machine, TV, video/DVD player, mobile phone, and computer, and had access to the Internet. There were a few items that were used by a higher proportion of households in divisions other than Tongatapu. Boats, for example, were more common in Vava'u and Ha'apai, a bath or shower more common in Vava'u and 'Eua, and a landline telephone line was more frequent in Ongo Niua.

Table 32: Proportion of private households by division and availability of household items (as % of all households), Tonga: 2006

Item	TONGA	Tongatapu	Vava'u	Ha'apai	'Eua	Niuas
			%			
Boat	6	4	10	13	3	9
Hot water system	9	11	6	3	3	0
Bath or shower	95	95	96	94	98	91
Motor vehicle	58	66	46	28	48	19
Refrigerator	65	73	51	46	53	6
Washing machine	58	64	51	41	49	6
Television	72	83	45	45	70	11
Video/DVD player	58	61	55	55	45	16
Telephones: -landline-private	51	56	37	35	53	63
Mobile telephone	73	83	59	46	56	0
Computer	16	20	8	4	5	1
Internet access						
at home	5	7	3	1	1	0
elsewhere (incl. at work/café)	21	26	13	8	8	1
no access	73	67	84	91	91	99
Number of households	**17,462**	**11,971**	**2,871**	**1,372**	**899**	**349**

Figure 59: Proportion of private households by division and availability of household items (as % of all households), Tonga: 2006

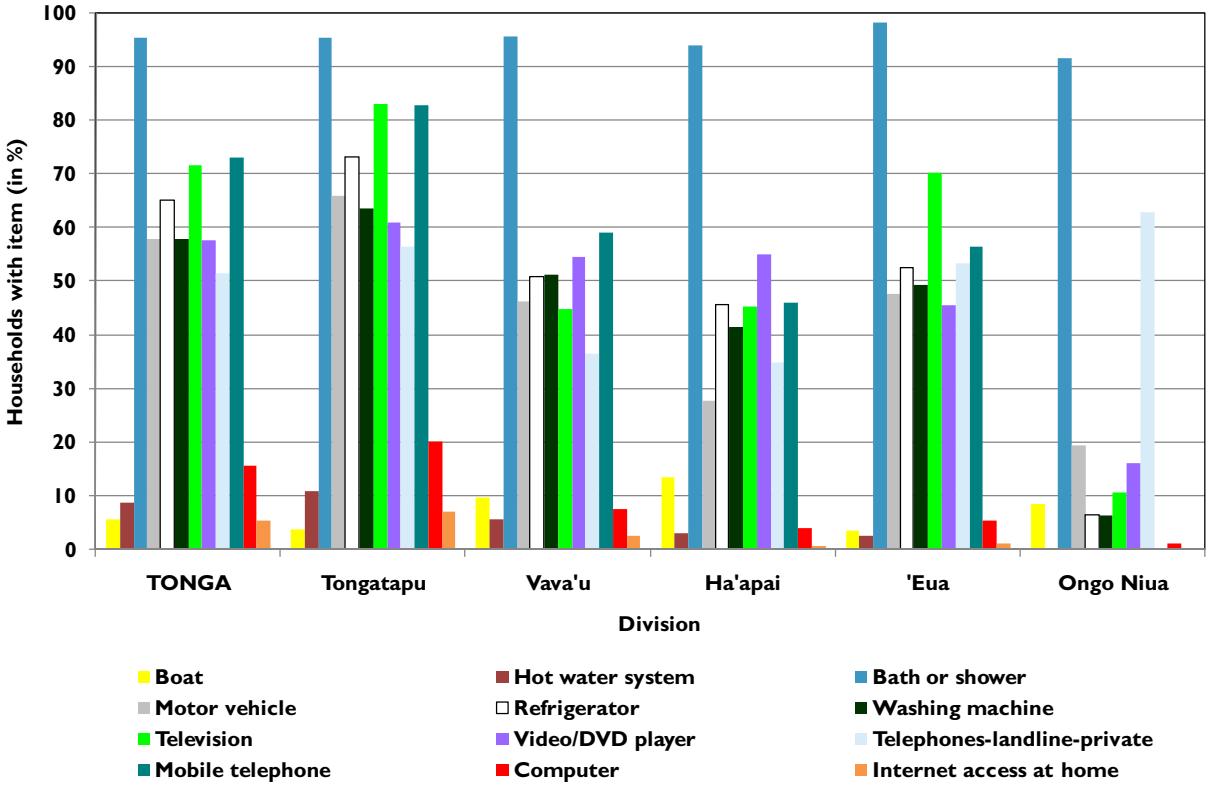


Figure 60: Proportion of private households by division and availability of at least one boat, Tonga: 2006

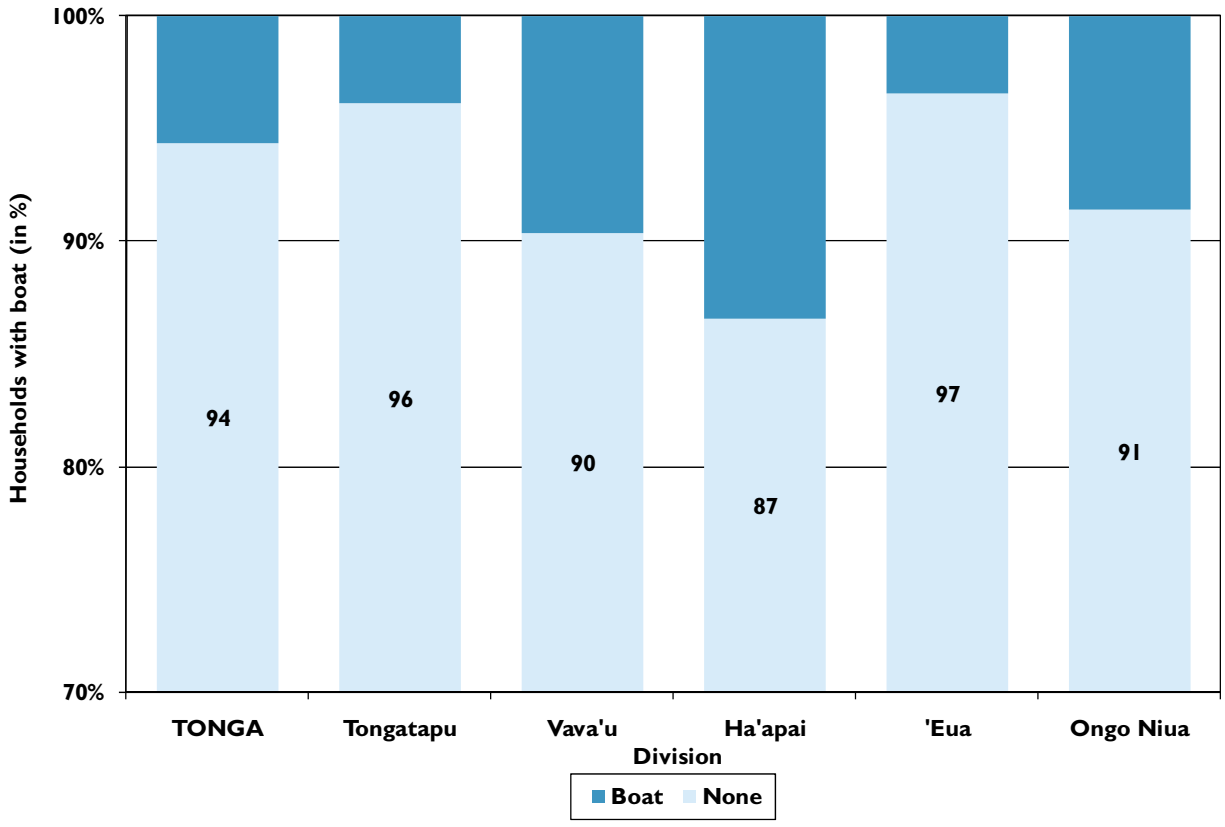


Figure 61: Proportion of private households by division and availability of a hot water system, Tonga: 2006

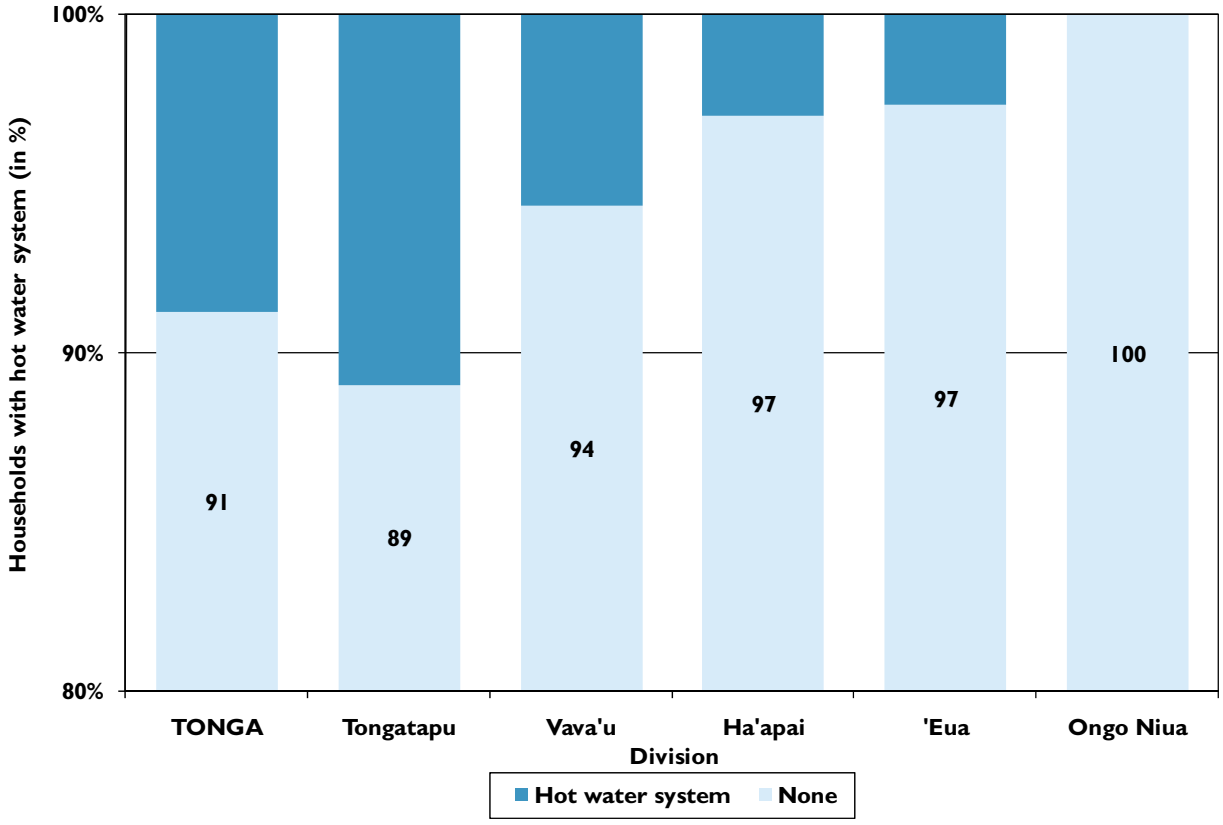


Figure 62: Proportion of private households by division and availability of a bath or shower, Tonga: 2006

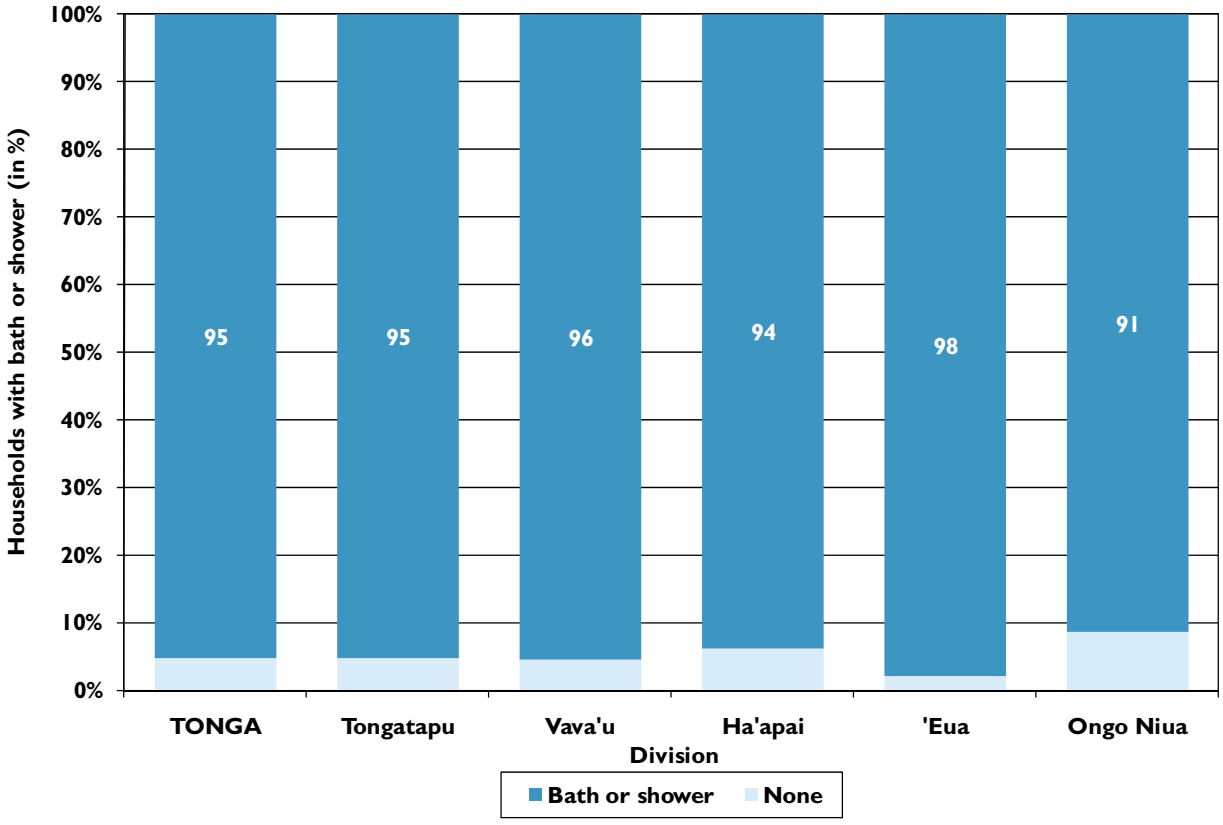


Figure 63: Proportion of private households by division and availability of at least one motor vehicle, Tonga: 2006

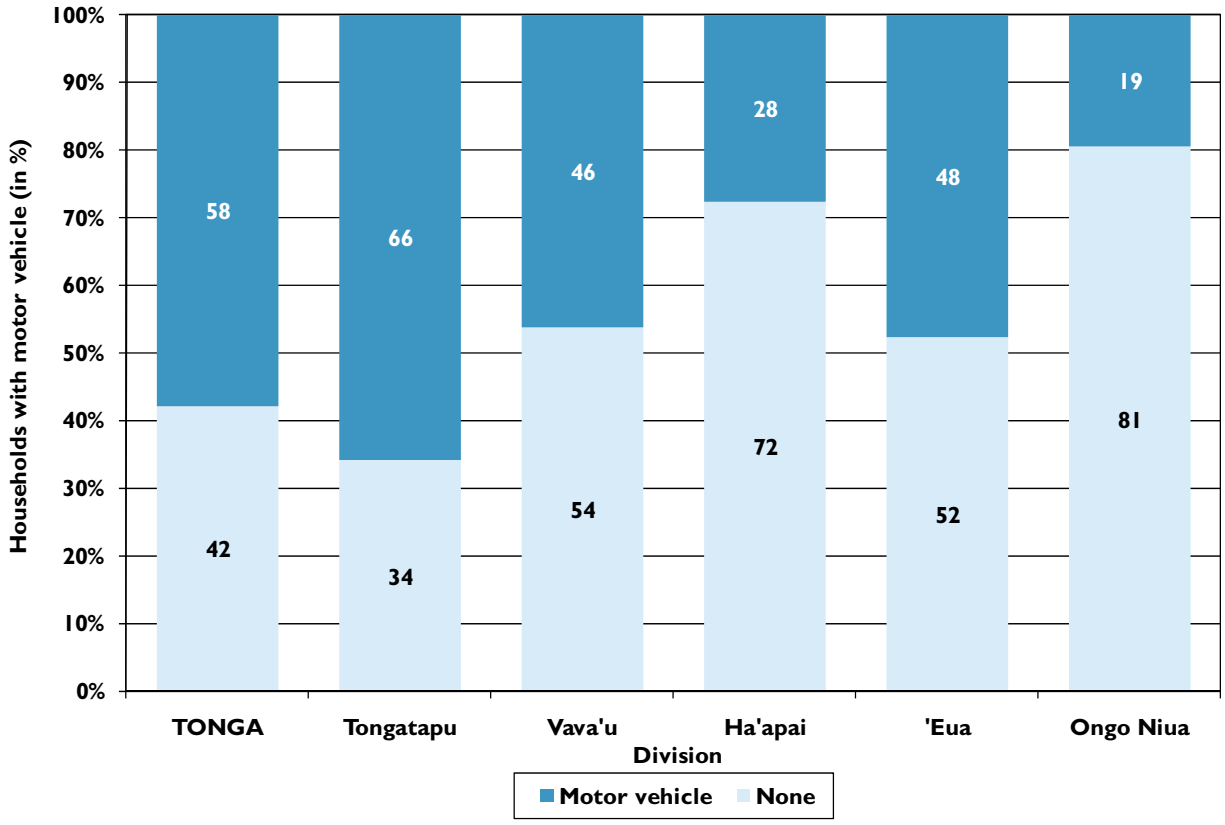


Figure 64: Proportion of private households by division and availability of a refrigerator, Tonga: 2006

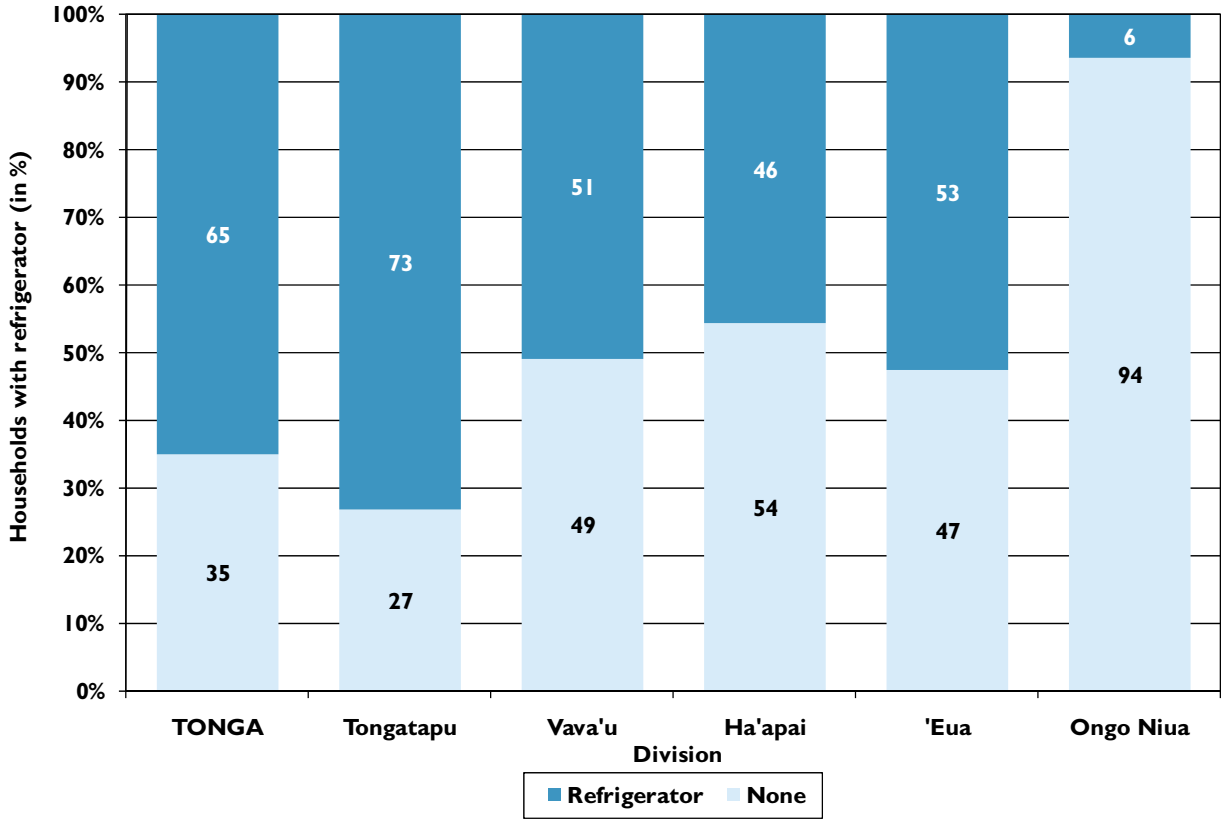


Figure 65: Proportion of private households by division and availability of a washing machine, Tonga: 2006

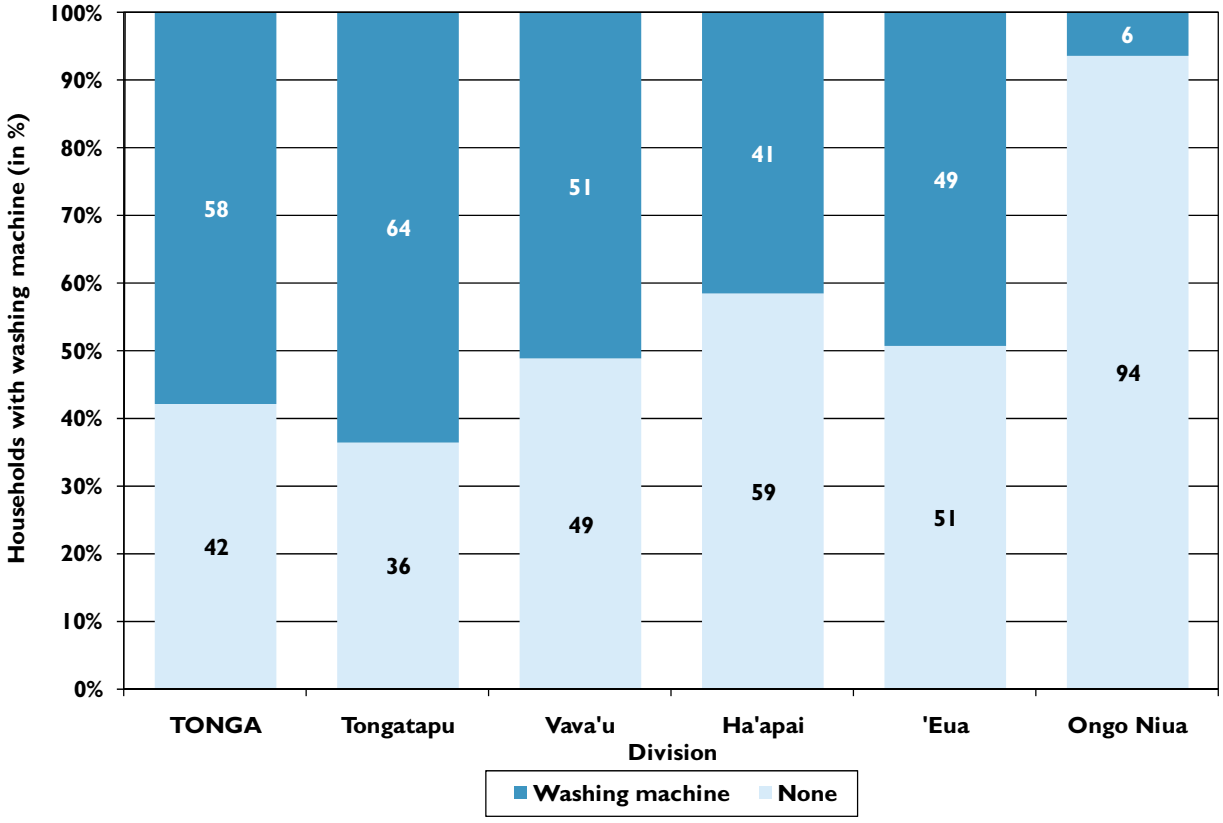


Figure 66: Proportion of private households by division and availability of at least one television, Tonga: 2006

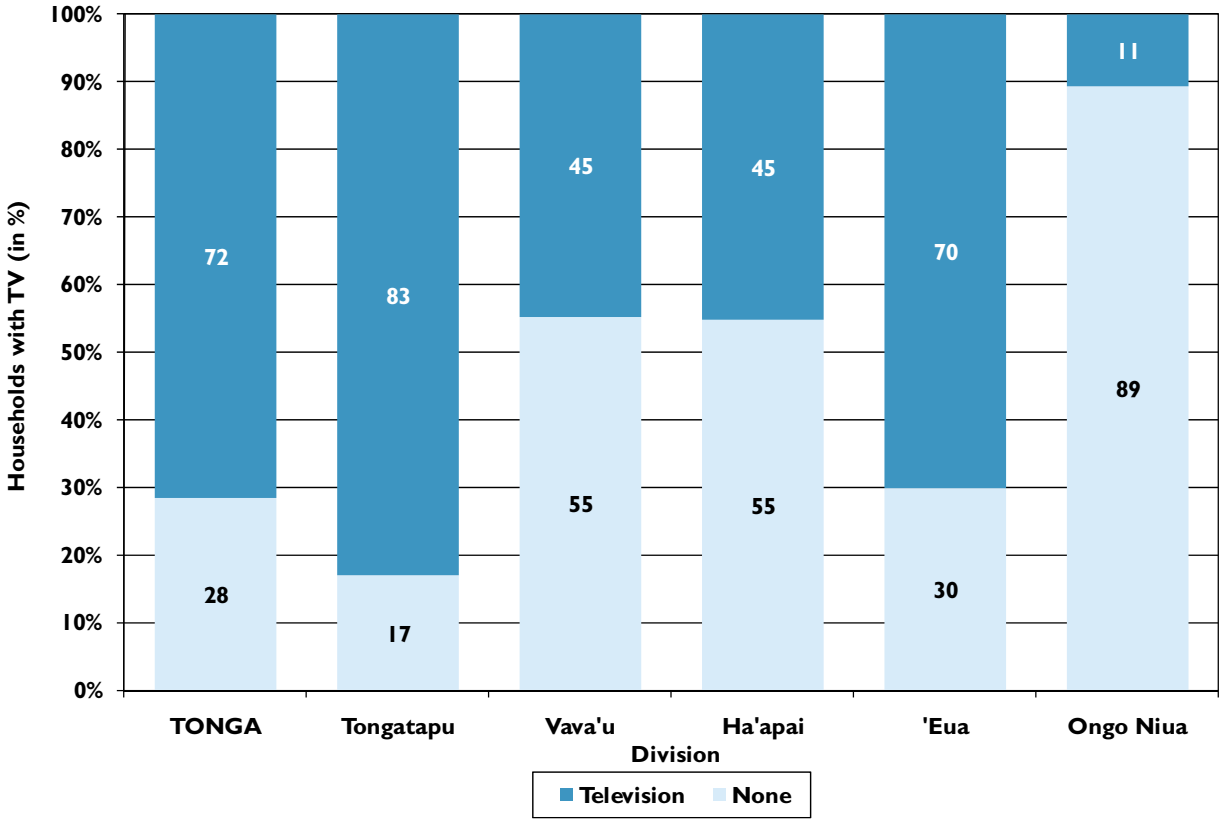


Figure 67: Proportion of private households by division and availability of at least one video or DVD player, Tonga: 2006

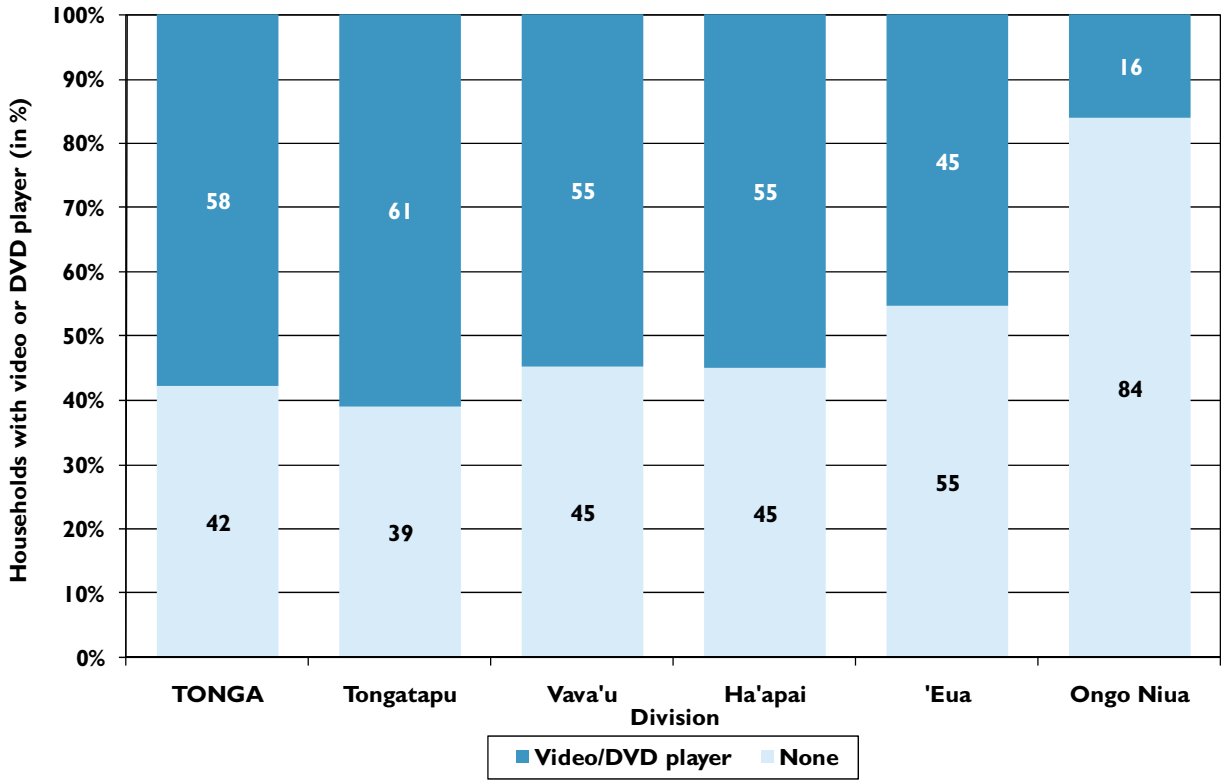


Figure 68: Proportion of private households by division and availability of a private landline telephone, Tonga: 2006

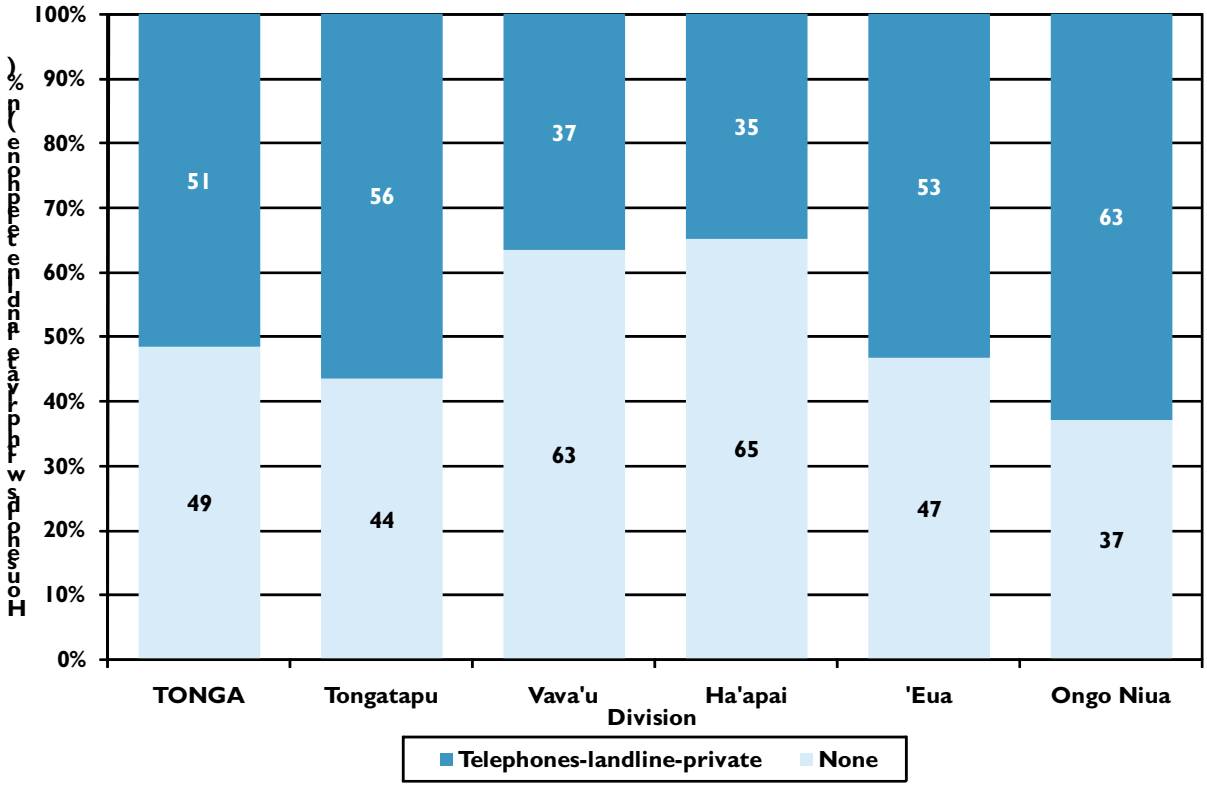


Figure 69: Proportion of private households by division and availability of a mobile telephone, Tonga: 2006

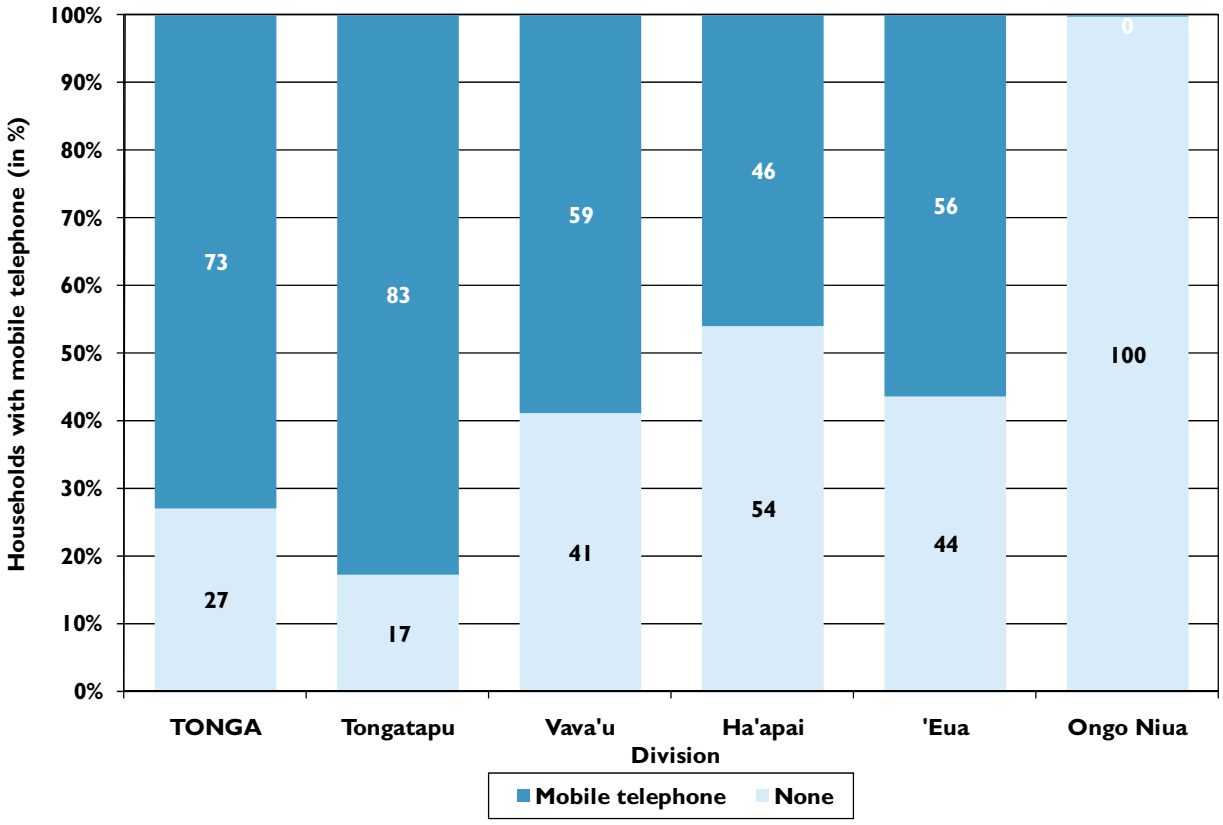


Figure 70: Proportion of private households by division and availability of a computer, Tonga: 2006

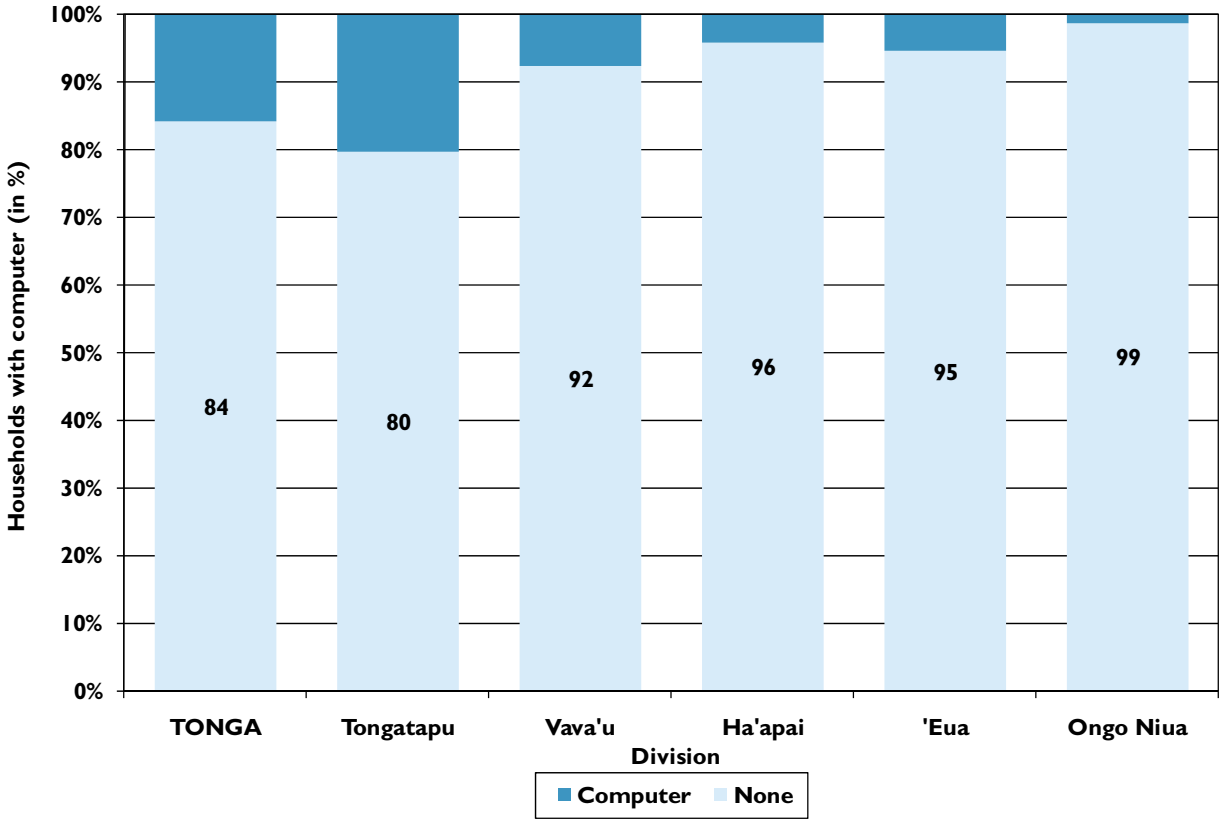
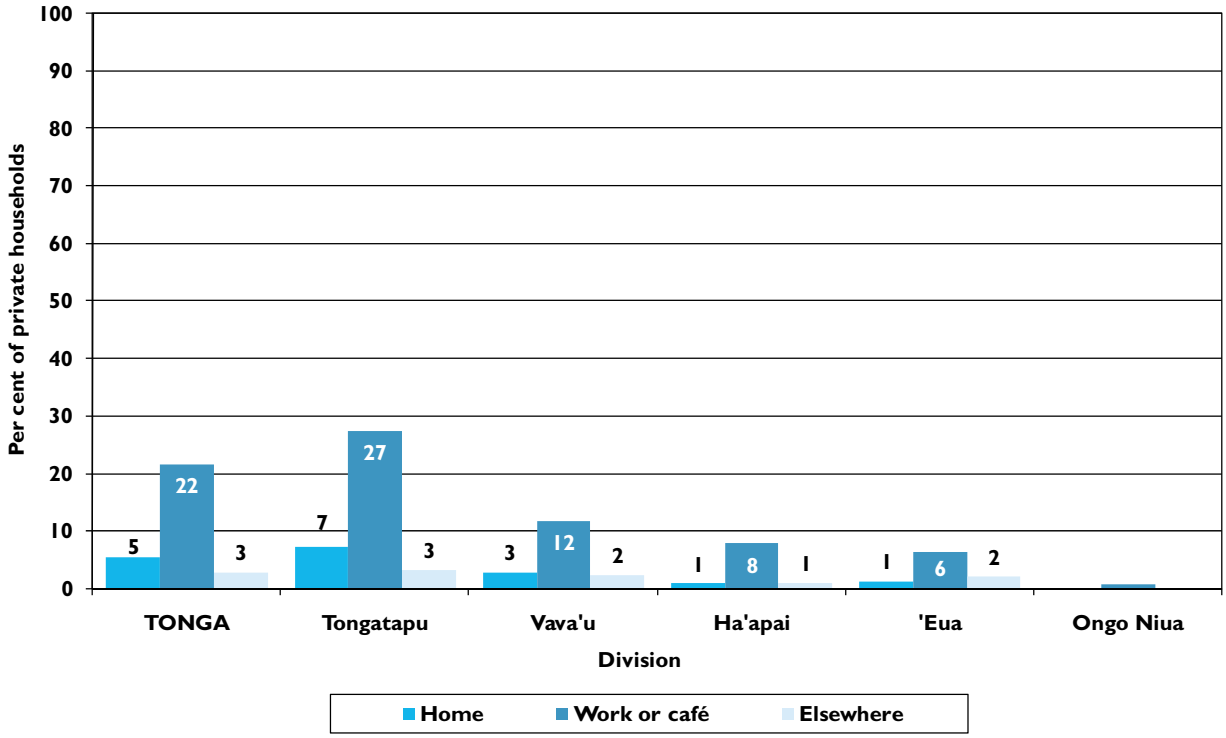


Figure 71: Proportion of private households by division and access to the Internet, Tonga: 2006



6. POPULATION PROJECTIONS

Timely and accurate information about population trends is in high demand by policy-makers, planners, and researchers. Knowledge about the current size and structure of a country's population is needed for the formulation and implementation of policies and programmes in almost all areas of public life. Because policies are aimed at resolving current issues through the achievement of goals in the future, knowledge about future population trends is required. Activities in areas as diverse as health, environment, poverty reduction, social progress, and economic growth rely on comprehensive and consistent demographic information.

The appropriate method to produce population trends is to prepare estimates and projections of population size and structure by age and sex.

The starting point for any projection is a reliable and current age–sex distribution of a population. Furthermore, information on recent levels and patterns of fertility, mortality, and migration is needed.

The cohort-component method was used to compute the population projections presented in this report. This procedure simulates population changes as a result of changes in the components of growth: fertility, mortality and migration. Based on past information and current levels, assumptions are made about future trends in these components of change. The assumed rates are applied to the age and sex structure of the population in a simulation that takes into account:

- the age at which people die is related to their sex and age,
- women have children, and
- some people change their country of residence.

The cohort-component method of projecting a population follows each cohort of people of the same age and sex throughout their lifetime, according to their exposure to fertility, mortality and migration[5].

The key to making meaningful projections lies in the choice of assumptions about future population developments. These assumptions concern possible future birth, death and migration rates.

6.1 Projection assumptions

As a general guideline, when preparing multiple assumptions about future levels of fertility, mortality and migration, it is advisable to arrive at outcomes that are symmetrical. This means that the level of low and high, or fast and slow, growth assumptions should be equally positioned with respect to the medium level assumption (i.e. above and below).

The following demographic inputs were developed for the projections.

Projection period

The population projections cover the 25-year period of 2006–2031.

Base population

Projections are based on the 2006 Tonga census age and sex distribution of the total enumerated population, adjusted to mid-year 2006.

[5] 1994. Arriaga E.E. Population analysis with microcomputers, volume I, Presentation of techniques, p. 309–310. US Census Bureau, Department of Commerce, USA.

Fertility

The estimated TFR of the period 2006 and associated ASFR, as described in section 3.1 (Table 6), are used as a starting point, with three different assumptions made about future fertility developments (Fig. 72).

The future TFR level of the medium fertility assumption is assumed to reach 1.9, which is the average level of TFR of populations in present-day Australia, France, New Zealand and the United States (App. 8). This level will be reached (by means of linear extrapolation) with a pace of fertility decline that is based on Tonga's recent past fertility trend. According to this pace, Tonga will reach a TFR of 1.9 in the year 2044. Since the population projections only include the period 2006–2031, the fertility level at the end of the projection period in 2031 will be 2.7.

The reason for choosing the fertility level of countries such as Australia, France, New Zealand and the United States as the future level for Tonga is twofold:

1) These countries have completed the "demographic transition" (see explanatory note in App. 10). Appendix 8 shows that the TFR of these four countries has remained at an almost constant level of 1.9 over the last 25 years (1980–2005).

2) They are regarded as the metropolitan focal points of Pacific Island countries.

Therefore the medium fertility assumption is set as follows.

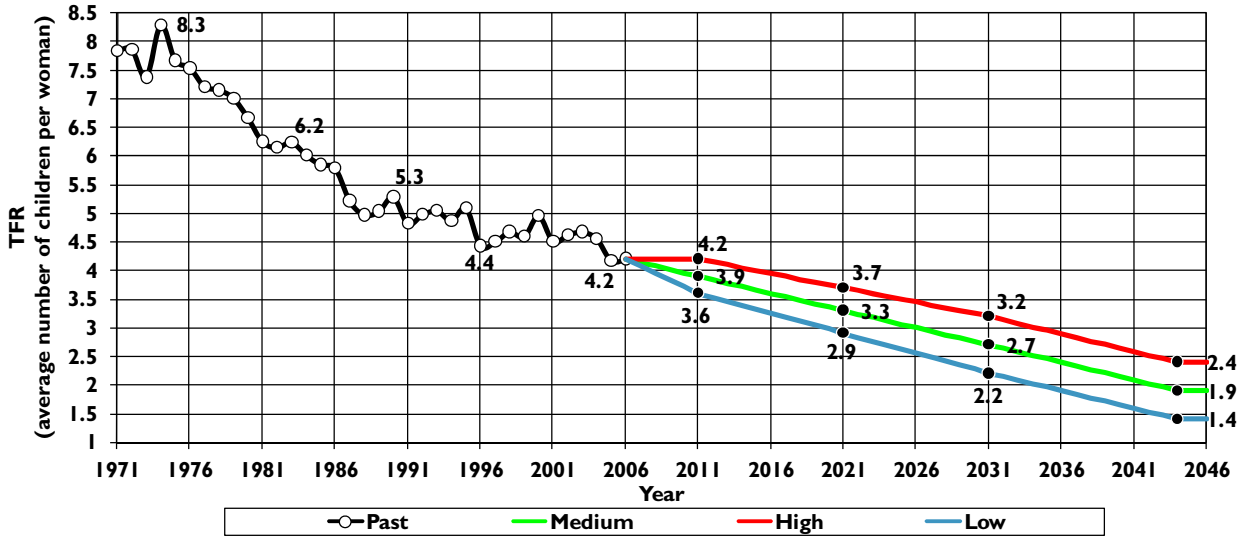
Assumption 1 — Medium Fertility: Fertility decreases to 2.7 in the year 2031 (and further to 1.9 in 2044).

The high and low fertility assumptions were built symmetrically around the medium fertility assumption.

Assumption 2 — High Fertility: The high fertility assumption assumes a TFR of 0.5 higher than the medium fertility level. Therefore, during the period 2006–2011, TFR initially remains constant at the 2006 level of 4.2 until 2011, when it decreases to 3.2 in 2031.

Assumption 3 — Low Fertility: The low fertility assumption assumes a TFR of 0.5 lower than the medium fertility level. Fertility decreases to 2.2 in the year 2031.

Figure 72: Estimated past levels of fertility, and future fertility assumptions for projections, Tonga: 1971–2046



Note: Fertility estimates for the years 1971–2005 were derived by using the own-children method, developed by Michael Levin, Harvard University Center for Population and Development Studies.

Mortality

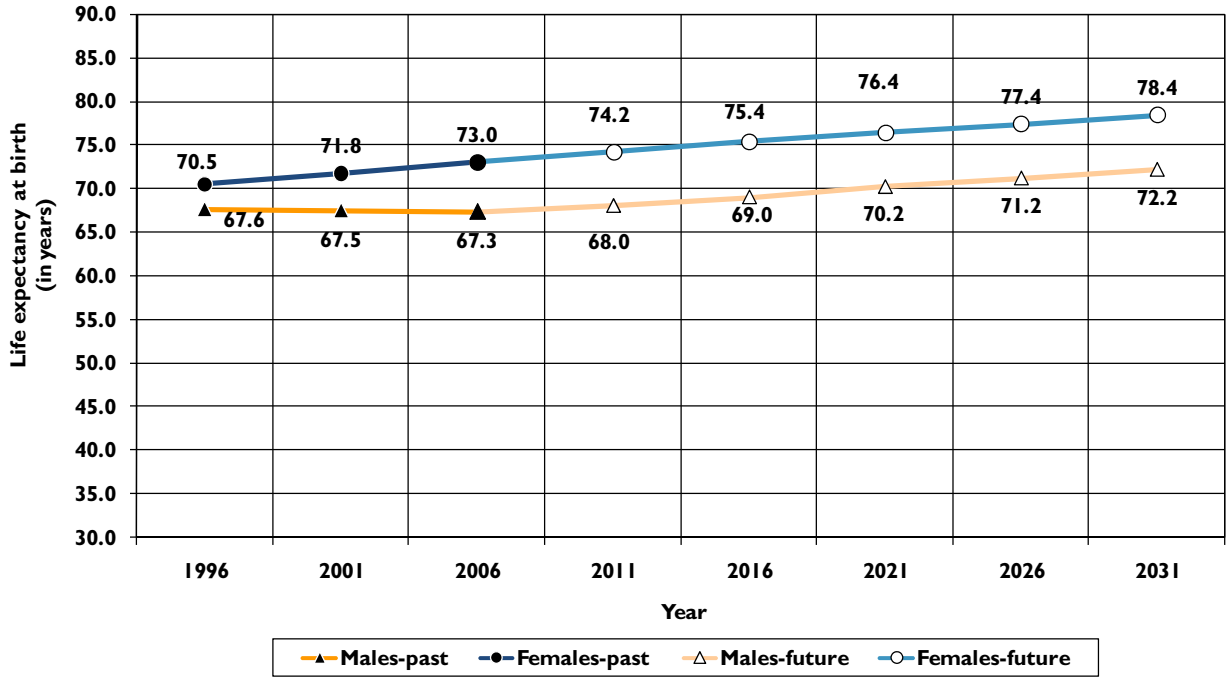
It is thought that under normal circumstances (meaning in the absence of catastrophes such as wars, epidemics and major natural disasters), Tonga's health situation and mortality levels will continuously improve throughout the projection period.

The estimated life expectancies at birth [E(0)] — 67.3 years and 73.0 years for males and females, respectively — are used as the starting point for projections in 2006. These estimates are based on the estimates as outlined in section 3.2.

Assumption: The population projections presented here assume a rising trend in life expectancy for males and females according to the UN working models of mortality improvement, as described in "World Population Prospects" (p. 144)[6]. According to this model, current estimated life expectancies gradually increase and reach 72.2 and 78.4 years in 2031 for males and females, respectively (Fig. 73).

Only one assumption regarding mortality is made. The reason for this is that variations in mortality levels (multiple assumptions) usually have only a minor impact on final projection results; they also would require the production of too many different scenarios that ultimately would only complicate the presentation of results.

Figure 73: Estimated past levels of mortality, and future mortality assumptions for projections, Tonga: 1996–2031



Migration

Making meaningful assumptions about future migration developments provides the single greatest difficulty for undertaking population projections, because many of the social and economic parameters shaping migration patterns depend largely on countries' overall social, economic and political developments, as well as environmental factors (e.g. possible sea level rise, frequency and strength of cyclones). All of these factors fluctuate widely and are hard to predict. Migration projections also depend on economic and political developments overseas, in particular on decisions of whether or not to provide working or residency visas, and/or establish immigration quotas for potential Tongan (labour) migrants.

[6] 1995. United Nations. World Population Prospects. NewYork: United Nations. 886 p.

The total number of migrants is expressed as **net migration**, which is the difference between the number of arrivals (immigrants) and departures (emigrants) during a certain time period.

Net migration = Arrivals (immigrants) minus **Departures (emigrants)**

Therefore, if net migration is positive it means that the number of arrivals (immigrants) was higher than the number of departures (emigrants); if net migration is negative, the number of departures (emigrants) is higher than the number of arrivals.

In section 3.3.2 the net migration rate for the intercensal period 1996–2006 was estimated to be about -18(‰). That is, approximately -1,800 people per year.

In total, four different migration assumptions were made, and the high and the low (zero) net migration assumptions were built symmetrically around the medium net migration assumption (Fig. 74). An additional migration variant assumes zero net migration for projections for the purpose of illustrating the impact of migration on Tonga's population development.

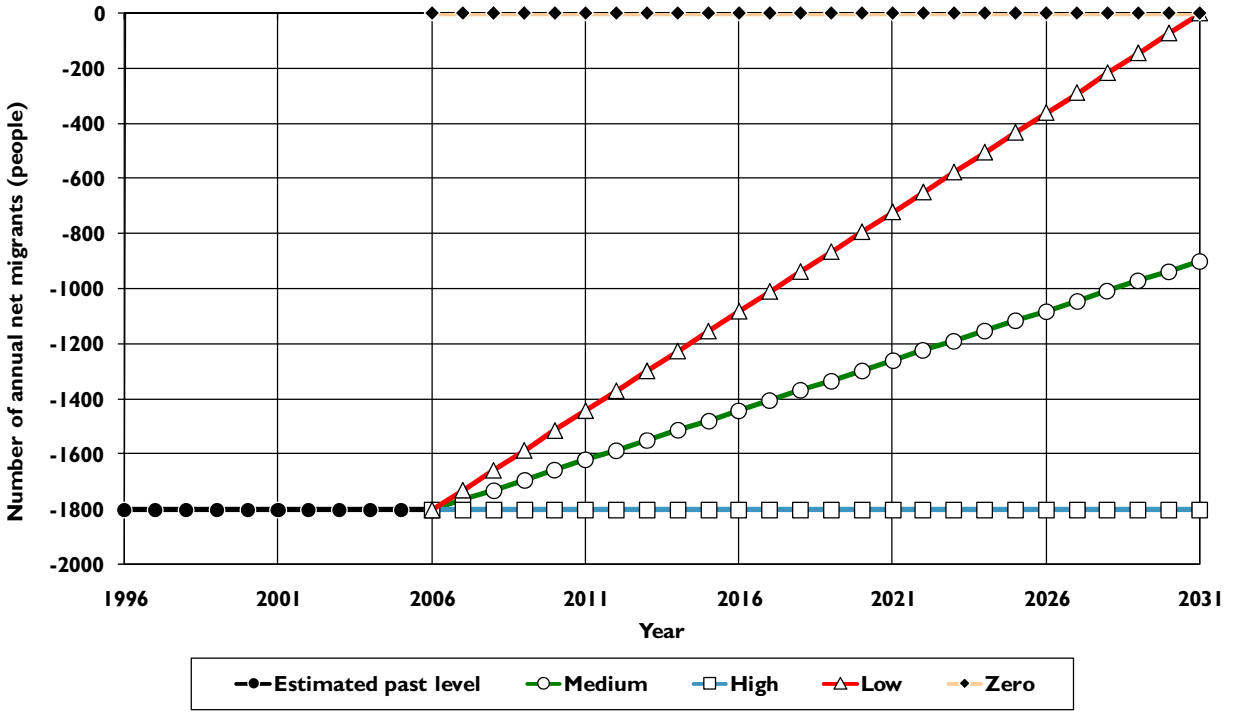
Assumption 1 — Medium net migration: net migration is assumed to gradually decrease to half its current size (-900 people per year) towards the end of the projection period in 2031.

Assumption 2 — High net migration: net migration is assumed to be constant at -1,800 people per year for the entire projection period 2006–2031.

Assumption 3 — Low net migration: net migration is assumed to gradually decrease to zero towards the end of the projection period.

Assumption 4 — Zero net migration: net migration is assumed to be zero for the entire projection period (number of arrivals [immigrants] and departures [emigrants] are equal).

Figure 74: Migration assumptions for population projections, Tonga: 2006–2031

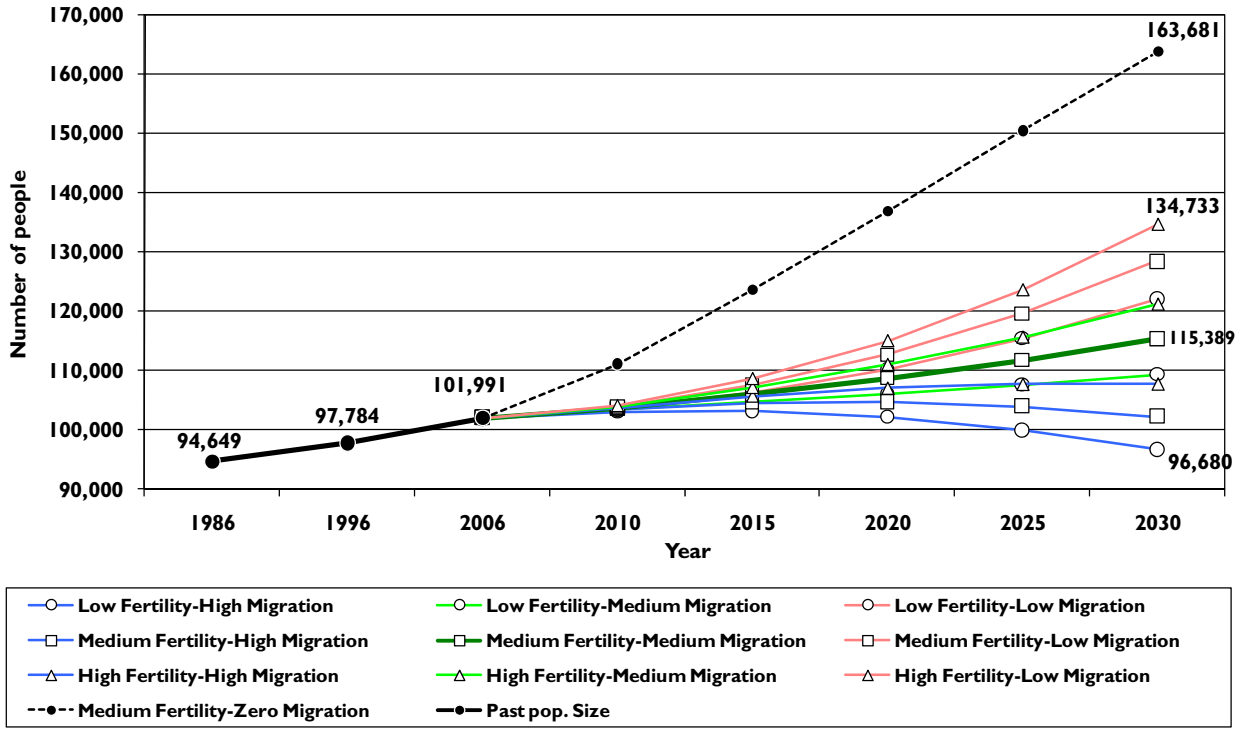


With regard to the age and sex structure of migrants, it is assumed that there will be equal numbers of males and females, and the age structure resembles that of a family type migration pattern (see section 3.3.2).

6.2 Projection results

The combination of the previously described three different fertility and three different migration assumptions (with one general mortality assumption), results in nine different projections (Fig. 75). These nine different projections highlight the impact of different levels of fertility on one hand, and the impact of migration on the other. An additional projection variant shows the growth of the population if net migration were zero (number of arrivals [immigrants] and departures [emigrants] are equal).

Figure 75: Past and future population trends according to 10 projection variants, Tonga: 2006–2031



Appendix 9 and Figure 75 illustrate the results and show the future population size. The higher the fertility level assumed, the higher the population outcome; and, the higher the number of annual net migrants (in negative terms), the lower the population size will be in the future.

It also can be seen that different fertility levels have a relatively small impact on the population size compared with the impact that migration assumptions have.

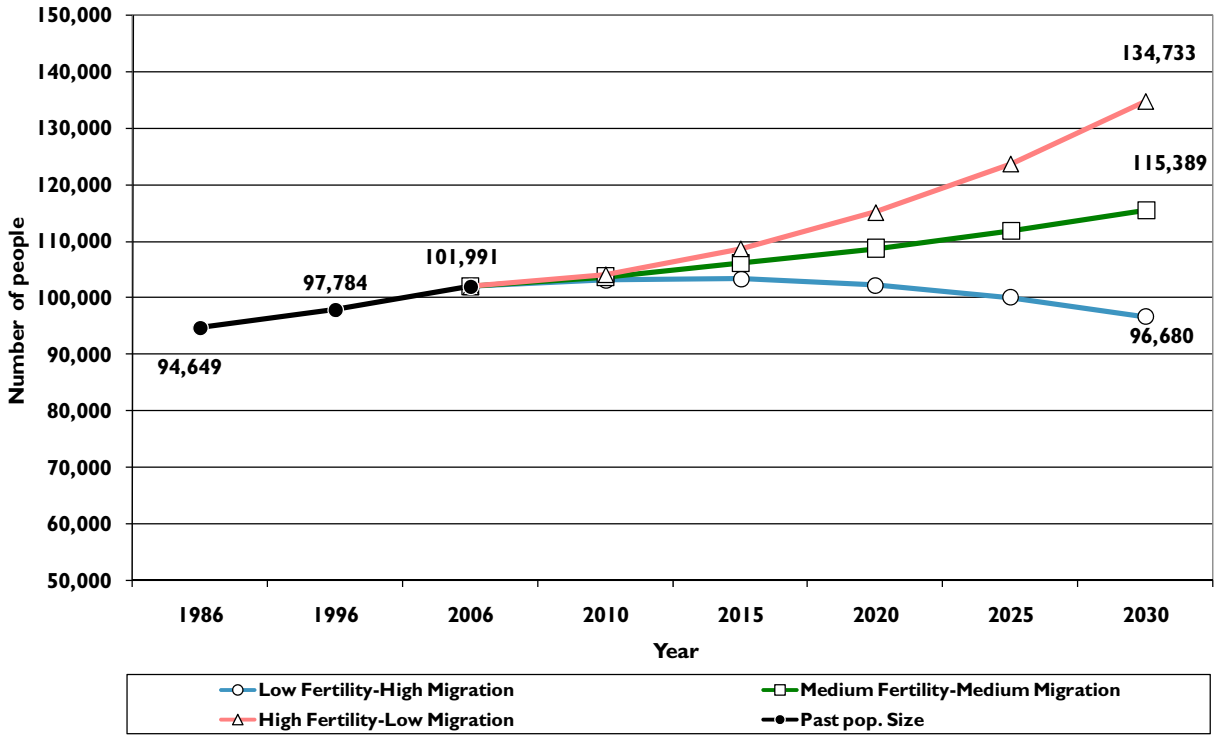
The three population projection scenarios (or variants) that show the most extreme impact on the population size and structure in comparison to an intermediate (medium) outcome (Fig. 76) are described in detail below:

1) **High population scenario.** This projection outcome is determined by applying the high fertility assumption (slow fertility decline) while assuming rapidly declining net migration rates. This scenario results in a population size of 134,733 in the year 2030.

2) **Medium population scenario.** This projection outcome is determined by applying the medium fertility assumption (moderate fertility decline), and the medium net migration assumption (assuming current net migrants of -1,800 to decrease to -900 until the 2031 — the end of the projection period). This scenario results in a population size of 115,389 in the year 2030.

3) **Low population scenario.** This projection outcome is determined by applying the low fertility assumption (fast fertility decline) in combination with a high net migration assumption (assuming constant current high level of net migration of -1,800 people annually throughout the projection period). This scenario results in a population size of 96,680 in the year 2030.

Figure 76: Past and future population trends according to high, medium, and low population projection scenarios, Tonga: 2006–2031



It can be seen that the impact of the different projections on the population size for the year 2010 are relatively minor. Significant population differences based on the different projection assumptions can only be expected thereafter. According to the extreme scenarios (low and high population scenarios), Tonga's population size will be between 96,680 and 134,733 people in the year 2030. It shows that the population would decrease in size if migration levels remain at its current level of -1,800 people per year.

According to the medium population scenario, the population size would be 115,389 people in 2030.

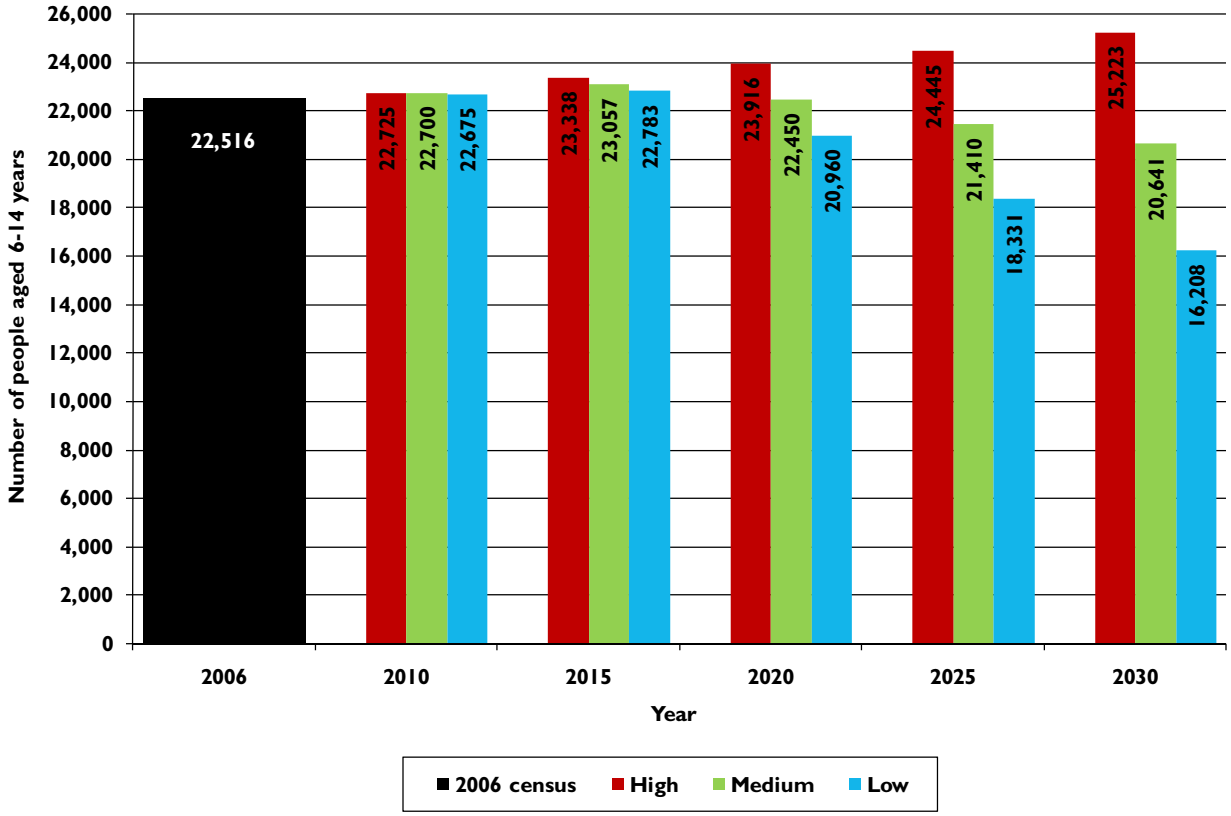
The population size in 2015 can be expected to be between 103,000 and 109,000 people, depending on the projection assumption made.

Figures 77–80 provide the comparative results of the various projections, and highlight the differential impact on population size, growth and structure, as a result of different levels and trends of fertility and different levels of migration.

The population aged 6–14 — the mandatory school age population — can be expected to remain at the 2006 level until the year 2010; from then onwards, the three different population scenarios will have very different impacts on the size of the school-age population (Fig. 77). This age group would decrease substantially in size if the fertility level decreased rapidly (as outlined by the low fertility assumption), and Tonga would experience high levels of out migration (high migration assumption), as outlined by the low population scenario. The high population variant results in a significant increase in the school age population from 2010 onwards.

According to the medium variant, the school age population aged 6–14 would initially increase slightly to 23,000 people in 2015 before decreasing to 20,600 in 2030.

Figure 77: Population aged 6–14 (mandatory school age) according to high, medium and low population projection scenarios, Tonga: 2006, 2010, 2015, 2020, 2025 and 2030



The general impact on the future population structure by broad age groups can be seen in Table 33 and Figures 78–80.

Regardless of the population scenario used, the proportion and size of the working age population (aged 15–59) will be significantly larger in 2030 than in 2006 (Fig. 80). According to the high population scenario, the working age population would increase from 54,716 in 2006 to over 78,000 in 2030, an increase of 43%. According to the medium population scenario, the working age population would increase by 25% to 68,438 people. Even assuming a low population scenario, the size of the population aged 15–59 would be 58,770 — larger than in 2006.

Another general outcome is that the population aged 60 and older will be significantly larger than 8,322 in 2006, and will be 12,000 or more in 2030 (Fig. 80).

The proportion of the young population aged 0–14 (as part of the total population) will decrease until 2030, regardless of the type of projection scenario used (Table 33). It will decrease from 38% to a range of 27–32% of the total population.

However, the size of the population younger than 15 years will most likely decrease from about 39,000 in 2006 to less than 35,000 in 2030 (according to the medium and low population scenarios), and would only be 26,000 people according to the low population scenario. Only the high population scenario would result in a higher number of 0–14 year-olds in 2006 (Fig. 80).

The population will grow older regardless of which projection variant is used, as is expressed in the median age, which will increase from 21.0 years in 2006 to between 24.3 and 27.7 years as a result of a decrease of the proportion of the young population aged 0–14, and an increase in the proportion of the population aged 60 and older (Table 33).

The three different projection scenarios will produce very different population growth rates: the high population scenario will result in an annual population growth rate of 1.2% between 2006 and 2030, while the medium population scenario will only produce 0.5% annual growth (similar to the current population growth rate), while the low population scenario will produce negative growth (i.e. population decline) of -0.2% annually.

Table 33: Population structure and indicators according to three different projection scenarios, Tonga: 2030

Indicator	2006 Census	2030		
		High	Medium	Low
Population by broad age groups (%)				
0–14 years	38	32	30	27
15–59 years	54	58	59	61
60 years and older	8	10	11	12
	100	100	100	100
Dependency ratio	86	73	69	65
Median age	21.0	24.3	25.7	27.7
Average annual growth rate (%)	0.4	1.2	0.5	-0.2
Sex ratio	103	103	103	103

Figure 78: 2010 population projection by broad age groups according to three scenarios

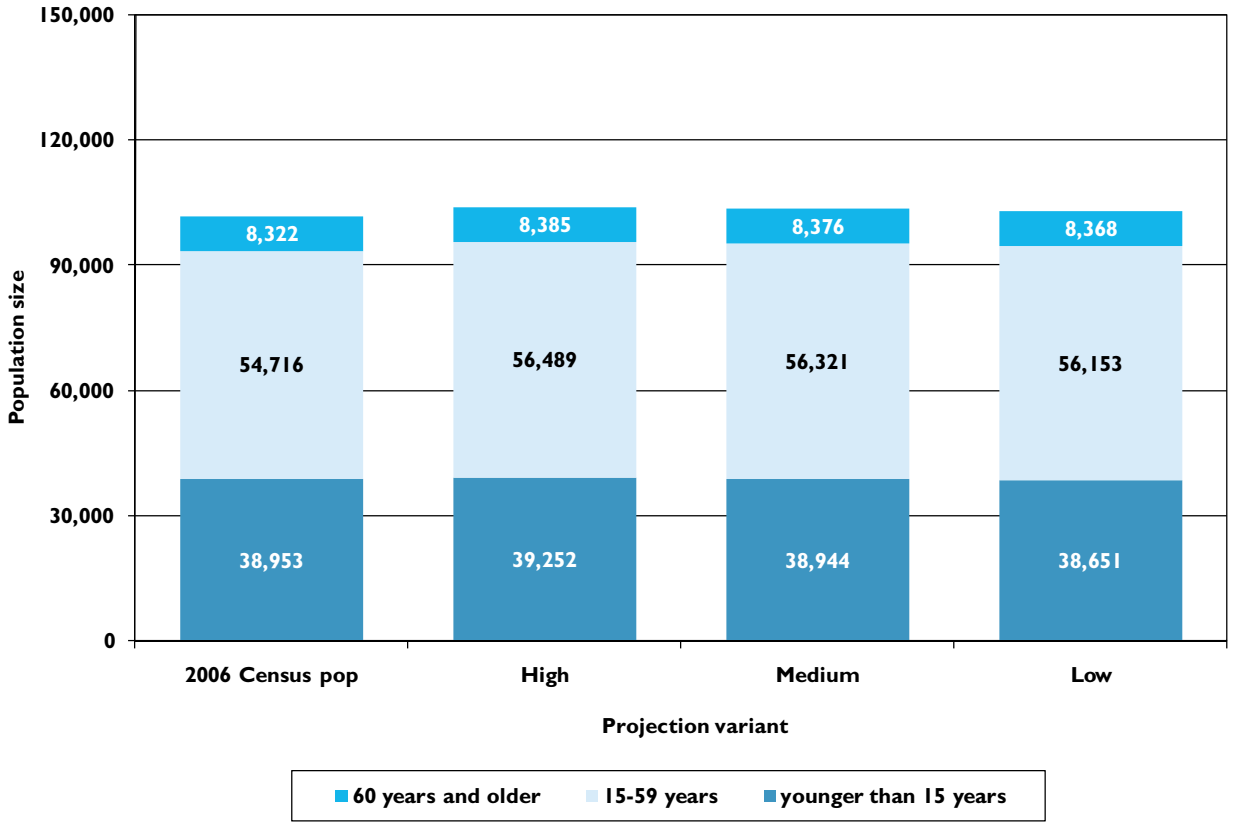


Figure 79: 2015 population projection by broad age groups according to three scenarios

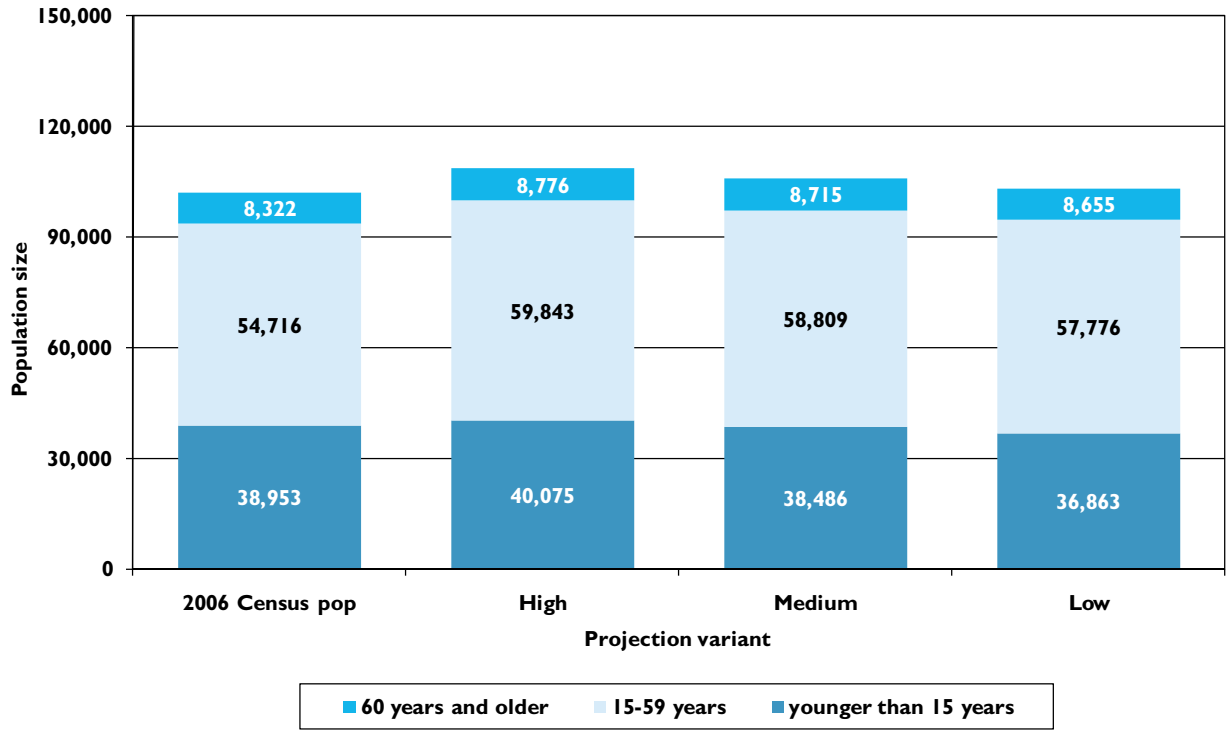
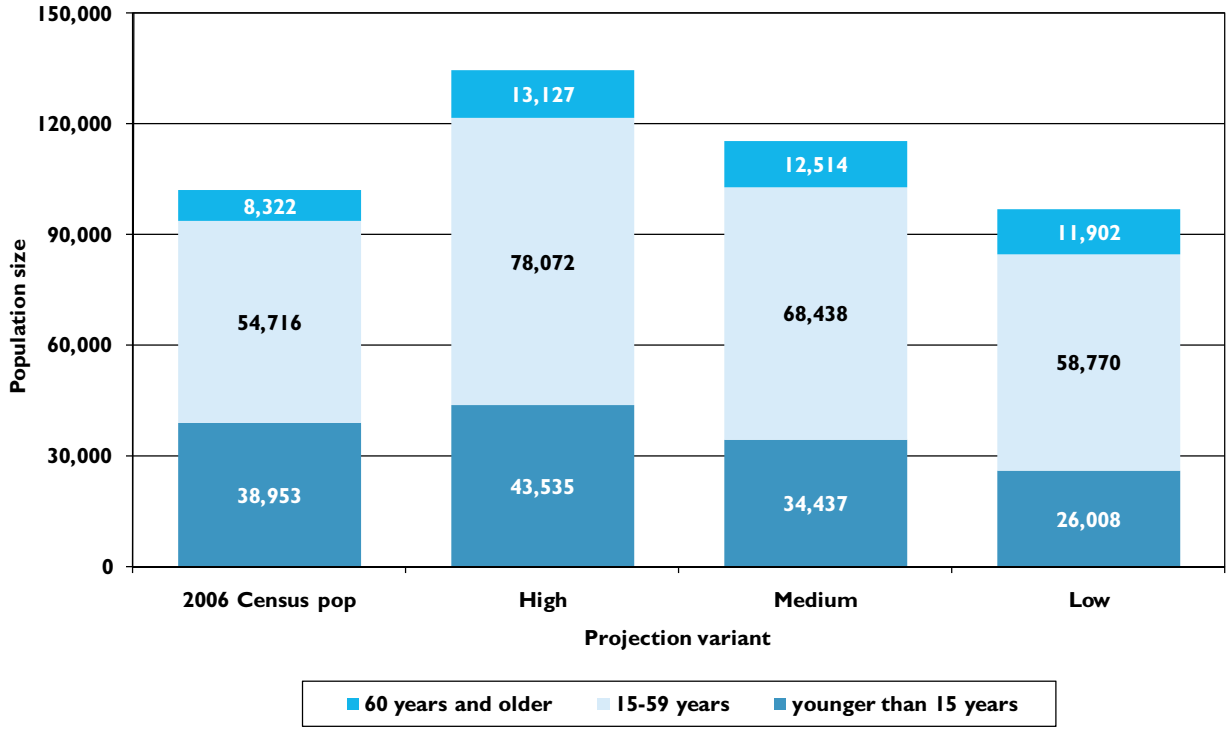


Figure 80: 2030 population projection by broad age groups according to three scenarios



The different impacts on the population size and structure are furthermore illustrated as population pyramids (Figs. 81–84). The shaded area represents the enumerated 2006 population size by sex and age group, and the outlined area represents the estimated (projected) population size in 2030, according to the high (Fig. 81), medium (Fig. 82), and low (Fig. 83) population scenarios.

In addition, Figure 84 illustrates the impact of migration, or rather the lack of it. It compares the population size in 2030 if net migration is zero during the entire projection period 2006–2030. As was shown in Figure 75, the population would then be 163,681 people.

Figure 81: Population pyramid, high population projection, Tonga: 2006 and 2030

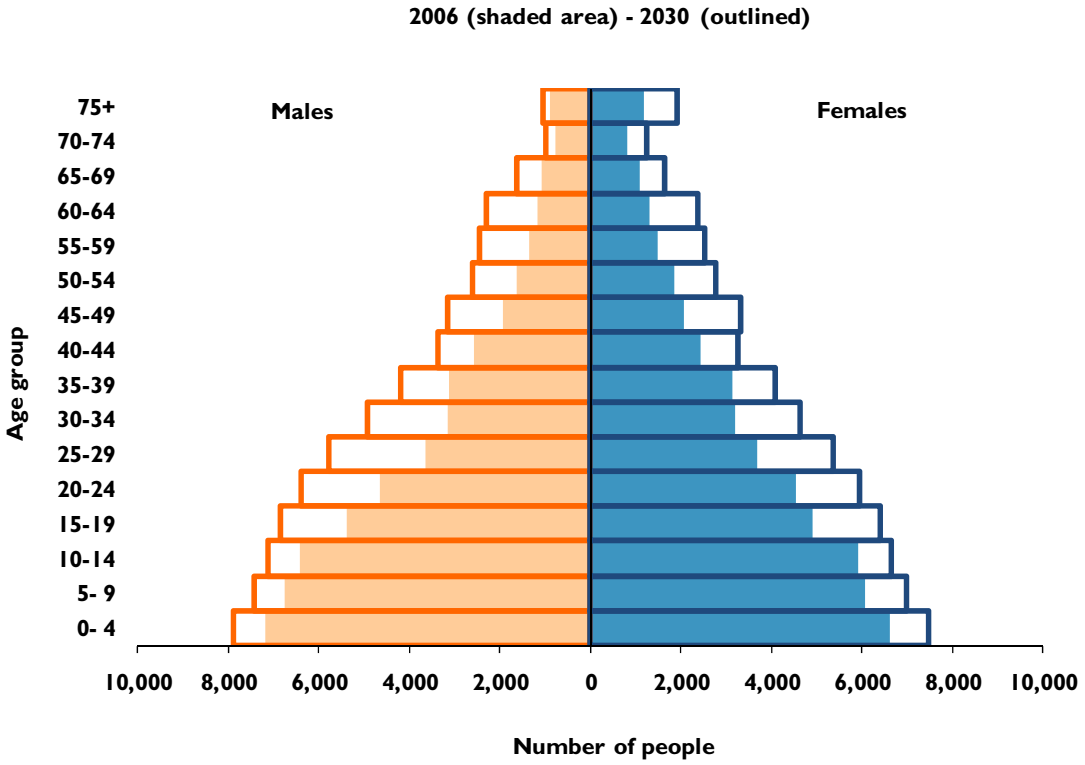


Figure 82: Population pyramid, medium population projection, Tonga: 2006 and 2030

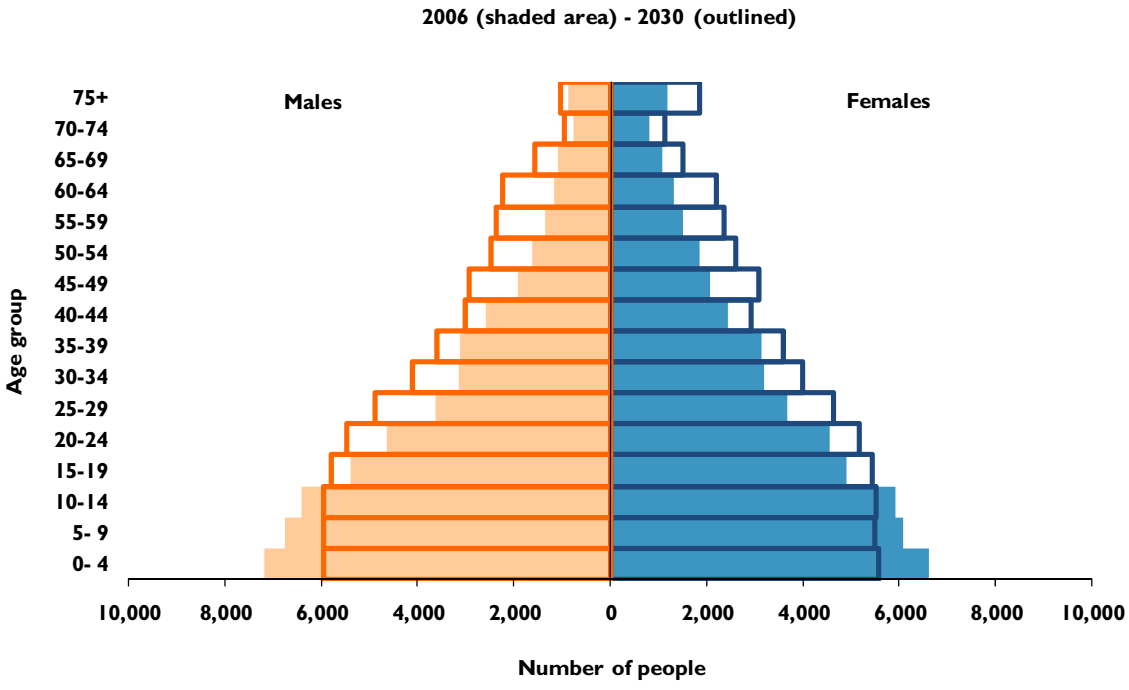


Figure 83: Population pyramid, low population projection, Tonga: 2006 and 2030

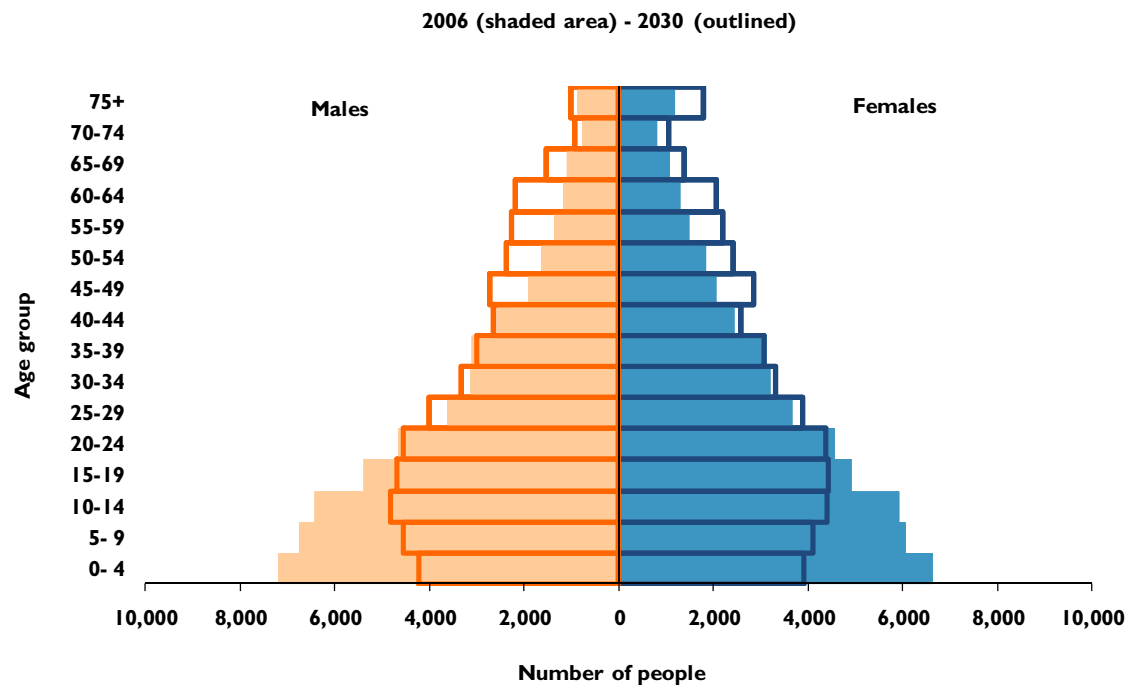
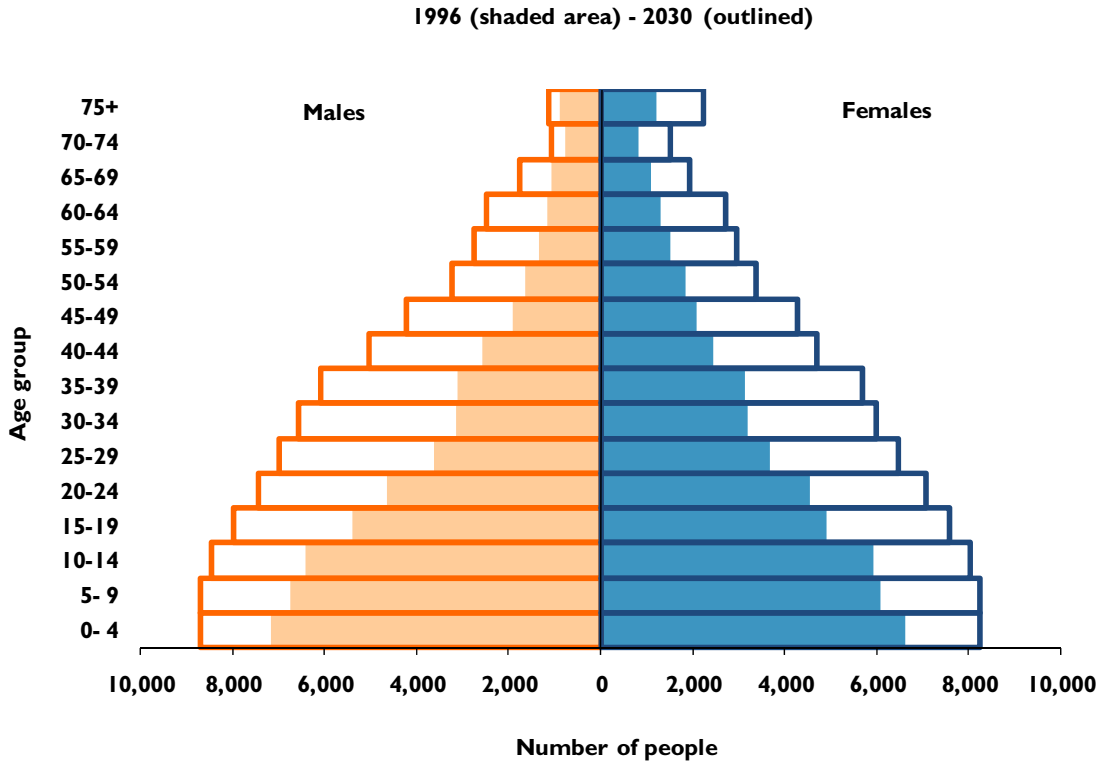


Figure 84: Population pyramid, zero migration projection, Tonga: 2006 and 2030



The different shaped pyramids of the three different projection scenarios clearly illustrate that the difference in population size and structure in 2030 is the size of the population aged 0–19. It highlights the predominant effect of the assumed fertility level on future population size and structure: the lower the assumption of the future fertility level, the smaller the size of the population younger than 20 years of age in the future.

Comparing the pyramids of the high, medium and low population growth variants (Figs. 81–83) with the pyramid that shows the population size and structure if migration were zero for the period 2006–2030 (Fig. 84), clearly shows the impact of international migration. It shows that without the impact of international migration (negative net migration), the population will be significantly larger, and "bulkier" in shape, meaning that the working age population will be especially affected by migration.

Most likely outcome

Predicting the likelihood of a certain future population size and structure is difficult for any country, and the further into the future the prediction, the more uncertain the outcome.

Therefore, several projection variants need to be produced to allow users to choose from an outcome that seems most probable according to their own views and opinions. Most data users, however, prefer to use a recommended projection variant that depicts a "most likely outcome". Such a variant is usually called the "medium" projection variant using the medium fertility and migration assumption.

Population changes close to those presented in the medium population scenario — which uses the medium fertility assumption (TFR decreases from its current level of 4.2 to 2.7 in 2031), and the medium migration assumption (a gradual decline of currently -1,800 net migrants annually to -900 annually in 2031) — appear to be the most likely outcome (see Figs. 75 and 76, green middle line, and App. 9 middle outlined boxes) because:

- The relatively high fertility level is expected to decline as it has in Tonga's recent past, and is furthermore expected to do so based on historical worldwide observations of countries with a similar level of fertility (see also the "theory of demographic transition", App. 10). Therefore, the high fertility assumption, with its very slow fertility decline, seems to be a more unlikely outcome.

- Although fertility levels (TFR) have already declined to well below 2 in many parts of the world, such rapid fertility decline is not expected to occur before the end of the projection period in 2031, based on Tonga's relatively slow past pace of fertility decline. Hence, the low fertility assumption, assuming a rapid fertility decline, appears an equally unlikely outcome.

- While it is nearly impossible to predict future migration patterns and levels, the medium migration assumption appears to be the most realistic because it produces similar rates of population growth as those experienced during the past 30 years from 1976–2006. Higher levels of migration are limited through immigration restrictions posed by possible destination countries. Furthermore, through a reduction in anticipated birth rates, there will be fewer numbers of potential migrants in future, resulting in a reduction of the "migrant stock".

- On the other hand, lower levels seem unlikely in view of Tonga's long established steady flow of migration to destination countries such as New Zealand, Australia, and the United States.

7. IMPLICATIONS OF DEMOGRAPHIC TRENDS

7.1 Population dynamics

7.1.1 Fertility

Tonga's annual population growth of 0.4% is the result of a relatively high natural growth rate counterbalanced by high emigration rates. The high natural growth is the result of high fertility (birth) rates. The average number of children per woman (TFR) has only dropped marginally during the 10-year period 1996–2006 from about 4.3 to 4.2 children per woman.

Should the government wish to influence fertility levels, policies and programmes directed toward the expansion of family-planning services and reproductive health programmes should be considered. Availability and accessibility of family planning services for women (and their partners) of all ages will empower them to make conscious decisions about the number and spacing of their births. Furthermore, pregnancies of young women are often unwanted and the result of unprotected sex. This is a major health concern, especially considering the risk of HIV/AIDS and sexually transmitted diseases.

Teen pregnancy is a social issue; children of teenage mothers often have lower educational levels, higher rates of poverty, and other poorer "life outcomes". In general, teenage pregnancy usually occurs outside of marriage and, for this reason, it often carries a social stigma.

Many stakeholders are involved in teenage reproductive health strategies, working at various levels to reduce teenage pregnancy by increasing the knowledge and practice of family planning, promoting peer education, providing sex education advisory services including contraceptives, involving young people in service design, educating the parents of teenagers on effective communication, providing better support for teenage mothers (such as help returning to education, advice and support), working with young fathers, giving better childcare, and increasing the availability of supported housing.

7.1.2 Mortality

Estimates of mortality level presented in this report suggest that females live longer than males, and live on average almost six years longer than males. Life expectancy at birth is estimated at 67.3 and 73.0 for males and females, respectively. This compares with 77.5 and 81.7 years for males and females in New Zealand.

Improved mortality rates mean that healthier people live longer lives. In working towards this goal, the following efforts should be made:

- improve infant, child and maternal health by improving primary health care programmes;
- expand immunization programmes;
- prevent HIV/AIDS and STDs by:
    - Increasing awareness and knowledge of safer sexual behaviours and practices by using appropriate language;
    - Targeting priority groups (youth, women and men, particularly aged 10–24);
    - Enhancing education programmes to encourage open discussions (between partners and their children) on issues of sexual behaviours;
    - Promoting and disseminating information outlining the advantages and proper use of condoms by men and women, with an emphasis on targeting male organisations;
    - Reviewing, developing, implementing and evaluating the effectiveness of appropriate policies;
    - Delaying young peoples' initial sexual activity;
    - Developing a well-planned media campaign throughout the year based on health promotion with regards to HIV/AIDS;
    - Ensuring protection of the rights of people living with HIV/AIDS;

    - Ensuring that people living with HIV/AIDS have free and unrestricted access to medical treatment, facilities and support services;
    - Ensuring that a reliable HIV/AIDS testing system is in place;
    - Establishing a voluntary, confidential system of HIV/AIDS testing with informed consent that includes pre and post test counseling;
- combat the prevalence of diabetes and heart disease;
- provide a hygienic and safe living environment;
- promote healthy eating habits and food nutrition programmes;
- advocate a general healthy life style including regular physical exercise; and
- discourage smoking and excessive alcohol consumption.

7.1.3 Internal migration

The fact that many islands and districts in divisions such as Vava'u, Ha'apai, and especially Ongo Niua have shown negative population growth rates (i.e. a population decline) during the intercensal period, points to a possible dissatisfaction with living conditions in these areas. Reasons may include the lack of post-secondary education opportunities (for tertiary or vocational/technical qualifications), and limited employment opportunities. Nuku'alofa and/or overseas destinations attract people by offering higher living standards through the availability and accessibility to services such as medical and educational institutions, entertainment facilities, and a wide range of employment opportunities.

The remoteness of most islands and high transportation costs cause imported products to be quite expensive. This will increasingly be aggravated by the smaller size of the market (economy of scale). A declining population might result in a general reduction in the supply and variety of goods and services, as an ever declining population means fewer customers (demand) for educational and health services, established businesses, farmers and fishers, who supply the local market. This may lead to a decline in improved services of any kind, and may even result in the closure of shops and general services, which in turn may lead to further population decline.

If the government wishes to change this trend, at least some of the disadvantages of living in the outer islands need to be eased by improving the abovementioned services and opportunities.

Since Nuku'alofa's/Tongatapu's population growth rate was also very low — certainly much lower than the national natural growth rate — it can be concluded that many, if not most, emigrants from the outer islands chose to reside overseas rather than in Nuku'alofa.

7.1.4 International migration

Unfortunately, data on arrivals and departures provided by the Ministry of Foreign Affairs and Immigration, remain incomplete and are unusable for detailed migration analysis. Because departure cards are not collected, it is impossible to derive timely and accurate migration statistics.

Therefore, the net migration level can only be crudely estimated by comparing intercensal population growth with estimated rates of natural increase for the same time period. While this method provides a reasonably robust indication of net migration, planners and policy-makers require more detailed and timelier information on the demographic makeup of opposing migration streams in order to make and implement realistic policy decisions. Hence, further improvements are needed to collect and process information on age, sex and nationality of all arriving and departing passengers in Tonga.

If improvements prove to be impossible, an alternative would be to apply the proper demographic methodologies, by comparing the two nearest censuses, to calculate the desired population data. The disadvantage of this option is that this can only be done after the analysis of the latest census is completed. This exercise could prove more timely (and costly) than an efficient registration system that would provide regular and timely migration information.

Tonga's 1996–2006 intercensal estimates of net migration is estimated to be -18/1000 population. This translates into a net loss of 1,800 people annually, or 150 people per month. The high rates of (negative) migration offset, to a large extent, Tonga's otherwise high natural population growth rate. The fact that many people are leaving Tonga points to a possible dissatisfaction with local living conditions. It shows that those who emigrate or who are planning to leave expect to better themselves, in ways that vary from person to person. A specially designed survey may shed more light on the specific motives and aspirations of migrants.

7.1.5 Population projections

Knowledge about the current size and structure of a country's population is needed for the formulation and implementation of policies and programmes in almost all areas of public life. Because policies are aimed at achieving goals in the future, knowledge about future population trends is required.

The population projection scenarios presented in this report point to a slowly growing population for Tonga during the next 25 years. The medium-variant scenario of the projections points to a population of about 103,600 in 2010 and 115,400 people in 2030.

Changes in Tonga's population age structure, as a result of possible declining fertility rates, will have an impact on the proportion of the young population aged 0–14. Changes will be reflected in a smaller proportion of those under the age of 15, and a larger working age population aged 15–59. As a result, the dependency ratio of Tonga's population will decrease, and the population's median age will increase by about 3–7 years.

The proportion of the population aged 60 and older will increase from 8% in 2006 to 10–12% of the total population in 2030.

The working age population is expected to increase considerably, both in proportion and in absolute numbers. According to the medium population scenario, the working age population will be more than 68,000 people in 2030.

The needs of this larger population size and its different population subgroups should be considered in development plans in areas as diverse as health, education, environment, and economic growth.

7.2 Crosscutting issues

Tonga will most likely experience a continued, although slow, population growth during the next few years. Appropriate health, education, and social welfare programmes must be in place to fulfill the needs and aspirations of Tonga's communities.

7.2.1 Vital statistics

A well functioning registration system, able to supply accurate and timely statistics on population developments, is of fundamental importance to planners and policy-makers. To make reliable estimates regarding fertility and mortality indicator levels and trends, a complete registration system needs to be in place; one that records the number of deaths by age and sex, and the number of births by sex and by age of mother, and especially by place of mother's usual place of residence. Improved coordination between all agencies involved is required.

By tracking all immigrants and exiting people, policy-makers will have an accurate and current picture of Tonga's total population size and structure. Such information will be indispensable for policy planning purposes and policy formulation.

7.2.2 The environment

Careful use of terrestrial and marine resources forms the basis of a sustainable and healthy life for Tonga's people. As such, maintaining a healthy and sustainable living environment should be a top priority for the government and people of Tonga. Apart from enabling a good quality of life for local people, conservation of the environment can foster a vibrant tourism industry.

The size and density of the population has a direct impact on water and energy consumption, sewage and waste production, general infrastructure such as roads, the use of land, and the development of agriculture and marine resources.

High population densities put considerable stress on the environment. Consequently, there is a higher demand on environmental health services, such as public garbage collection, and most importantly, a well-functioning sewage system. In addition, water sources need to be protected.

7.2.3 Households

Population growth not only contributes to an increased demand in water and energy supply, waste disposal, sewage connections and general infrastructure, but also to an increase in the number of households due to changes in average household size. Even if the population size remained stable, the number of households would still increase when households and/or family structures break up into smaller units, often described as the transition from extended family type households to nuclear family type living arrangements.

Households and families that are economically incapable of sustaining an acceptable and healthy lifestyle might need extra assistance from the government, since unhealthy living environments affect everyone in the long term. In particular, access to clean water, public electricity, an adequate publicsewage system and waste disposal facilities should all be the minimum housing standard for Tonga’s population.

7.2.4 Health services and well-being

The health status of each individual and his/her family members is probably one of the most important concerns people have. Therefore, the availability, use and affordability of quality health care and medical services are major issues of concern. Government and health officials need to address the challenges of health services and the health care system.

On Tonga’s outer islands, small population sizes and remoteness inhibit the operation of state-of-the-art health services that require the employment of specialist personnel and the purchase and maintenance of specialised equipment. However resident medical staff need to be sufficiently qualified to provide basic health care. An efficient referral service to the nearest health facility, together with regular visits by medical specialists, is needed to ensure that peoples’ health demands are met.

The population projections have shown that the population aged 60 and older will increase during the next 25 years. This requires strengthening of special services for the growing number of elderly people, including a pension scheme with retirement benefits, and specialised health care for the elderly.

7.2.5 Education

Educational level is a key indicator of development and quality of life in a country. Education plays an important role in development through its links with demographic, as well as economic and social factors. In general, there is a close and complex relationship between education, fertility, morbidity, mortality and mobility: when couples are better educated, they tend to have fewer children, their children’s health status improves, and their survival rates tend to increase. Higher levels of educational attainment also contribute to a better qualified workforce, higher wages, and better economic performance than for people who have little or no formal education and training.

In this regard, it is a benefit that young people leave the country to attend higher educational institutions. However, graduates need to return to suitable employment to avoid a "brain drain" and to retain the educated with their newly acquired knowledge and skills.

Although data on educational attainment show that men have achieved, on average, slightly higher educational levels than females, information on current school enrolment shows a far more balanced picture, with more females currently enrolled than males.

7.2.6 Economic activity and labour market

Economic activity and employment are shaped by the size of the working age population, the educational skill level of the labour force, and the economic resources available to a country.

Although a high proportion (57%) of Tonga's population aged 15 and older was economically active (in the labour force), only a relatively small proportion (37%) was engaged in paid employment. These relatively few people (23,438) supported the rest of the population with respect to paid income, meaning that one paid person supports, on average, about 3.5 other people.

According to projection results presented in this report, the working age population will increase significantly during the next 25 years. Government and business officials are encouraged to collaborate in developing innovative strategies that will promote economic diversification and growth.

7.2.7 Good governance

Good governance and effective policy-making should provide the framework for sustainable development within which the interrelationship of population, environment, and all possible socioeconomic aspects of a country can prosper cohesively.

In this regard it is important that policy-makers, planners, politicians and community leaders are aware of the needs and aspirations of their country's people in order to effectively provide for the specific needs of the population, and the different population sub-groups. Then government needs to know about its country's population structure, population processes and socioeconomic characteristics in order to plan for an adequate standard of living, and for a proper provision and distribution of goods and services.

GLOSSARY

Indicator	Definition
Age–dependency ratio	Number of people in the "dependent" age category (population younger than 15 years plus population 60 years and older) per 100 in the "economically productive ages" 15–59 years
Average age at (first) marriage (SMAM)	Approximation of average age at marriage, based on proportion of population never married (single)
Balance equation	Population growth = births – deaths + net migration
Births — estimated number for 2006	Estimated age-specific fertility rates (ASFR) X enumerated number of women by age in 2006
Child mortality rate (1q5)	The probability of dying between age 1 and age 5
Crude birth rate (CBR)	Estimated number of births per 1,000 population (2,945/101,991 X 1,000)
Crude death rate (CDR)	Estimated number of deaths per 1,000 population (709/101,991 X 1,000)
Crude net migration rate	Rate of growth minus rate of natural increase
Deaths — estimated number for 2006	Estimated age-specific death rates [m(x)] by sex (from life table) X enumerated population by age and sex in 2006
Employment–population ratio	Proportion of employed people in cash work (by a given age and sex), as part of the corresponding total number of people of the same age and sex
Infant mortality rate (IMR)	Number of infant deaths (children younger than 1 year) per 1,000 births
Intercensal period	Time period between two censuses
Labour force	People employed (cash work plus village work) and unemployed (excludes those not seeking employment)
Labour force participation rate	Proportion of people in the labour force (by a given age and sex), as part of the corresponding total number of people of the same age and sex
Life expectancy at birth	Number of years a newborn baby can expect to live on average

Mean age at childbearing	Average age of women when giving birth
Median age	The age at which exactly half the population is older and half is younger
Parity (average)	Average number of children per woman
Rate of growth (%)	Average annual growth rate during 1996–2006 ln(TotPop2006/TotPop1996)/10 X 100
Rate of natural increase	Crude birth rate (CBR) minus crude death rate (CDR)
Sex ratio	Number of males per 100 females
Teenage fertility rate	Number of births by women aged 15–19 per 1,000
Total fertility rate (TFR)	Average number of children per woman
Under 5 mortality (q5)	The probability of dying between birth and age 5.
Urban population	Total population of the villages Kolofo'ou, Ma'ufanga, Kolomotu'a. Urban boundaries are defined based on the size of village population: villages with a population size of at least 5,000 people are defined as urban

APPENDIX TABLES

Appendix 1: Arriaga method for estimating age-specific fertility rates (ASFRs) for two points in time and age patterns of fertility (Arriaga-Brass)*

First enumeration: Nov 1996

Fertility pattern is tabulated by age of woman at enumeration

Age Group of Woman	Children Ever Born	Age Specific Fertility rates (ASFR)	Fertility Consistent with C.E.B. (ASFR)	Fertility Pattern by Age at Survey Date	Fertility Pattern by Age at Birth of Child	Cumulation of		Adjustment factors	Age Specific Fertility Rates Based on Adjustment Factor for the Age Group		
						ASFR	Fertility Pattern by Age at Birth		20 - 25	25 - 30	30 - 35
November 1996 to November 1997											
				Recorded	Calculated						
15 - 20	0.029	0.015	0.027	0.015	0.021	0.027	0.021	1.285	0.022	0.021	0.021
20 - 25	0.455	0.145	0.158	0.145	0.160	0.185	0.181	1.023	0.164	0.158	0.161
25 - 30	1.524	0.236	0.231	0.236	0.239	0.416	0.420	0.990	0.245	0.237	0.241
30 - 35	2.800	0.213	0.237	0.213	0.208	0.653	0.628	1.039	0.213	0.206	0.209
35 - 40	4.051	0.154	0.175	0.154	0.147	0.828	0.775	1.067	0.151	0.146	0.148
40 - 45	4.859	0.070	0.089	0.070	0.062	0.916	0.837	1.095	0.063	0.061	0.062
45 - 50	5.150	0.013	0.032	0.013	0.009	0.949	0.846	1.121	0.009	0.009	0.009
Total Fertility Rate:			4.7		4.2				**4.33**	**4.19**	**4.26**

Last enumeration: Nov 2006

Fertility pattern is tabulated by age of woman at enumeration

Age Group of Woman	Children Ever Born	Age Specific Fertility rates (ASFR)	Fertility Consistent with C.E.B. (ASFR)	Fertility Pattern by Age at Survey Date	Fertility Pattern by Age at Birth of Child	Cumulation of		Adjustment factors	Age Specific Fertility Rates Based on Adjustment Factor for the Age Group		
						ASFR	Fertility Pattern by Age at Birth		20 - 25	25 - 30	30 - 35
November 2005 to November 2006											
				Recorded	Calculated						
15 - 20	0.030	0.016	0.027	0.016	0.021	0.027	0.021	1.281	0.024	0.024	0.024
20 - 25	0.435	0.124	0.147	0.124	0.135	0.174	0.156	**1.115**	0.150	0.151	0.151
25 - 30	1.418	0.188	0.215	0.188	0.192	0.389	0.348	**1.119**	0.214	0.215	0.214
30 - 35	2.597	0.197	0.211	0.197	0.195	0.601	0.543	**1.106**	0.217	0.218	0.218
35 - 40	3.640	0.154	0.130	0.154	0.146	0.731	0.689	1.061	0.163	0.163	0.163
40 - 45	4.228	0.055	0.057	0.055	0.048	0.788	0.737	1.069	0.054	0.054	0.054
45 - 50	4.433	0.014	0.021	0.014	0.011	0.810	0.748	1.082	0.012	0.012	0.012
Total Fertility Rate:			4.0		3.7				**4.17**	**4.19**	**4.18**

* = MORTPAK4.1, procedure FERTPF, United Nations

Appendix 2: Fertility estimates based on the Arriaga method*

Year and item or age	ASFR from CEB		ASFR		Adjusting factors	Adjusted ASFR's based on age group			
	ASFR	cumulative	pattern	cumulative		20-29	25-29	25-34	30-34
1996 Census									
ASFR corrected for one-half year between birth and reporting.									
15-19	0.027	0.027	0.021	0.021	1.302	0.021	0.021	0.021	0.022
20-24	0.158	0.185	0.159	0.180	1.028	0.161	0.158	0.162	0.165
25-29	0.231	0.416	0.239	0.420	0.992	0.242	0.237	0.243	0.249
30-34	0.237	0.653	0.209	0.628	1.039	0.211	0.207	0.212	0.217
35-39	0.175	0.828	0.147	0.775	1.067	0.149	0.146	0.149	0.153
40-44	0.063	0.891	0.062	0.837	1.064	0.062	0.061	0.063	0.064
45-49	0.014	0.905	0.009	0.846	1.069	0.009	0.009	0.009	0.010
TFR	4.5		4.2			**4.27**	**4.20**	**4.30**	**4.40**
Mean age at childbearing			30.6						
2006 Census									
ASFR corrected for one-half year between birth and reporting.									
15-19	0.027	0.027	0.021	0.021	1.289	0.024	0.024	0.024	0.023
20-24	0.147	0.174	0.134	0.156	1.119	0.150	0.151	0.150	0.149
25-29	0.215	0.389	0.192	0.348	1.120	0.215	0.215	0.214	0.212
30-34	0.211	0.600	0.195	0.543	1.106	0.219	0.219	0.217	0.216
35-39	0.130	0.731	0.146	0.689	1.061	0.163	0.163	0.162	0.161
40-44	0.047	0.778	0.049	0.737	1.055	0.054	0.055	0.054	0.054
45-49	0.013	0.791	0.011	0.748	1.057	0.012	0.012	0.012	0.012
TFR	4.0		3.7			**4.19**	**4.19**	**4.16**	**4.14**
Mean age at childbearing			30.8						

* = PAS spreadsheets, procedure ARFE-2, US Census Bureau

Appendix 3: Child mortality indices based on number of children ever born and still alive, for males*, Tonga: 2006

Age group of women	Reference Date	United Nations Models (Palloni-Heligman Equations)					Reference Date	Coale-Demeny Model (Trussell Equations)			
		Latin Am.	Chilean	So. Asian	Far East	General		West	North	East	South
Infant mortality rate											
15 - 20	Oct 2005	< .028	< .031	< .032	< .015	< .024	Jan 2006	< .013	< .017	< .016	< .036
20 - 25	**Dec 2004**	< .028	< .031	< .032	**0.022**	< .024	Feb 2005	0.023	0.022	0.023	< .036
25 - 30	Sep 2003	< .028	< .031	< .032	0.017	< .024	Aug 2003	0.017	< .017	0.018	< .036
30 - 35	Dec 2001	< .028	< .031	< .032	0.018	< .024	Sep 2001	0.019	0.018	0.020	< .036
35 - 40	Sep 1999	< .028	< .031	< .032	0.021	< .024	Jul 1999	0.020	0.020	0.022	< .036
40 - 45	Dec 1996	< .028	< .031	< .032	0.02	< .024	Dec 1996	0.020	0.019	0.021	< .036
45 - 50	Oct 1993	< .028	< .031	< .032	0.022	< .024	Nov 1993	0.021	0.019	0.023	< .036
Probability of dying between ages 1 and 5											
15 - 20	Oct 2005	< .008	< .004	< .008	< .002	< .005	Jan 2006	< .002	< .004	< .002	< .005
20 - 25	**Dec 2004**	< .008	< .004	< .008	**0.004**	< .005	Feb 2005	0.004	0.005	0.003	< .005
25 - 30	Sep 2003	< .008	< .004	< .008	0.003	< .005	Aug 2003	0.002	< .004	0.002	< .005
30 - 35	Dec 2001	< .008	< .004	< .008	0.003	< .005	Sep 2001	0.003	0.003	0.002	< .005
35 - 40	Sep 1999	< .008	< .004	< .008	0.004	< .005	Jul 1999	0.003	0.004	0.002	< .005
40 - 45	Dec 1996	< .008	< .004	< .008	0.004	< .005	Dec 1996	0.003	0.004	0.002	< .005
45 - 50	Oct 1993	< .008	< .004	< .008	0.004	< .005	Nov 1993	0.004	0.004	0.003	< .005
Child mortality											
15 - 20	Oct 2005	< .036	< .035	< .04	< .017	< .029	Jan 2006	< .015	< .021	< .018	< .041
20 - 25	**Dec 2004**	< .036	< .035	< .04	**0.026**	< .029	Feb 2005	0.027	0.027	0.026	< .041
25 - 30	Sep 2003	< .036	< .035	< .04	0.02	< .029	Aug 2003	0.020	< .021	0.019	< .041
30 - 35	Dec 2001	< .036	< .035	< .04	0.022	< .029	Sep 2001	0.022	0.021	0.021	< .041
35 - 40	Sep 1999	< .036	< .035	< .04	0.024	< .029	Jul 1999	0.023	0.024	0.024	< .041
40 - 45	Dec 1996	< .036	< .035	< .04	0.024	< .029	Dec 1996	0.023	0.023	0.024	< .041
45 - 50	Oct 1993	< .036	< .035	< .04	0.027	< .029	Nov 1993	0.024	0.023	0.026	< .041

* = using procedure CEBCS of MORTPAK 4.1

Appendix 4: Child mortality indices based on number of children ever born and still alive, for females*, Tonga: 2006

Age group of women	Reference date	United Nations Models (Palloni-Heligman Equations)					Reference date	Coale-Demeny Model (Trussell Equations)			
		Latin Am.	Chilean	So. Asian	Far East	General		West	North	East	South
Infant mortality rate											
15 - 20	Sep 2005	0.072	0.079	0.072	0.071	0.072	Dec 2005	0.078	0.076	0.078	0.074
20 - 25	Nov 2004	< .028	< .031	< .032	0.015	< .024	**Jan 2005**	**0.016**	< .017	0.016	< .036
25 - 30	Oct 2003	< .028	< .031	< .032	0.016	< .024	Sep 2003	0.017	< .017	0.017	< .036
30 - 35	Mar 2002	< .028	< .031	< .032	0.016	< .024	Dec 2001	0.017	< .017	0.017	< .036
35 - 40	Feb 2000	< .028	< .031	< .032	0.018	< .024	Dec 1999	0.017	< .017	0.019	< .036
40 - 45	Aug 1997	< .028	< .031	< .032	0.016	< .024	Jul 1997	0.016	< .017	0.017	< .036
45 - 50	Jun 1994	< .028	< .031	< .032	0.017	< .024	Jul 1994	0.016	< .017	0.018	< .036
Probability of dying between ages 1 and 5											
15 - 20	Sep 2005	0.037	0.016	0.032	0.030	0.031	Dec 2005	0.034	0.050	0.022	0.026
20 - 25	Nov 2004	< .008	< .004	< .008	0.002	< .005	**Jan 2005**	**0.002**	< .004	0.001	< .005
25 - 30	Oct 2003	< .008	< .004	< .008	0.003	< .005	Sep 2003	0.002	< .004	0.001	< .005
30 - 35	Mar 2002	< .008	< .004	< .008	0.003	< .005	Dec 2001	0.002	< .004	0.001	< .005
35 - 40	Feb 2000	< .008	< .004	< .008	0.003	< .005	Dec 1999	0.003	< .004	0.002	< .005
40 - 45	Aug 1997	< .008	< .004	< .008	0.003	< .005	Jul 1997	0.002	< .004	0.001	< .005
45 - 50	Jun 1994	< .008	< .004	< .008	0.003	< .005	Jul 1994	0.002	< .004	0.002	< .005
Child mortality											
15 - 20	Sep 2005	0.106	0.094	0.102	0.099	0.101	Dec 2005	0.110	0.122	0.098	0.098
20 - 25	Nov 2004	< .036	< .035	< .040	0.017	< .029	**Jan 2005**	**0.018**	< .021	0.017	< .041
25 - 30	Oct 2003	< .036	< .035	< .040	0.019	< .029	Sep 2003	0.019	< .021	0.019	< .041
30 - 35	Mar 2002	< .036	< .035	< .040	0.019	< .029	Dec 2001	0.019	< .021	0.019	< .041
35 - 40	Feb 2000	< .036	< .035	< .040	0.020	< .029	Dec 1999	0.020	< .021	0.020	< .041
40 - 45	Aug 1997	< .036	< .035	< .040	0.019	< .029	Jul 1997	0.018	< .021	0.018	< .041
45 - 50	Jun 1994	< .036	< .035	< .040	0.020	< .029	Jul 1994	0.018	< .021	0.019	< .041

* = using procedure CEBCS of MORTPAK 4.1

Appendix 5: Reported/registered number of deaths by age and sex, Tonga: 2003–2006

Age group	Number of deaths from civil registration									Number of deaths from 2006 census		
	2003			2004			2005*			Dec 2005 - Nov 2006		
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
<1	21	13	34	21	14	35			31	8	7	15
1-4	12	5	17	6	2	8			8	10	4	14
5-9	7	4	11	6	4	10				4	4	8
10-14	6	2	8	2	3	5			6	4	5	9
15-19	5	4	9	8	6	14				11	0	11
20-24	9	1	10	10	2	12			17	9	2	11
25-29	4	4	8	8	2	10				4	0	4
30-34	10	5	15	11	2	13			20	5	4	9
35-39	10	4	14	6	3	9				5	9	14
40-44	8	10	18	12	4	16			23	12	10	22
45-49	15	6	21	20	4	24				19	24	43
50-54	11	17	28	13	10	23			58	23	13	36
55-59	22	16	38	29	18	47				17	10	27
60-64	34	23	57	36	19	55			76	30	18	48
65-69	28	33	61	26	13	39				30	18	48
70-74	45	37	82	41	23	64			124	29	36	65
75-79	38	37	75	33	32	65			180	95	76	171
80+	57	54	111	61	49	110						0
NS	0	0	0	0	0	0				13	4	17
Total	**342**	**275**	**617**	**349**	**210**	**559**			**543**	**328**	**244**	**572**

* data not available by sex, and only for broad age groups

Appendix 6: Estimated number of deaths by age and sex for 2006, based on 2006 census population and calculated m(x,n)-values from abridged life tables for males and females, Tonga: 2006

Age group	2006 census population			m(x,n)		Number of deaths		
	Males	Females	Total	Males	Females	Males	Females	Total
0	1,425	1,323	2,748	0.0224	0.0162	32	21	53
1-4	5,761	5,290	11,050	0.0010	0.0005	6	3	8
5-9	6,756	6,063	12,820	0.0008	0.0007	5	4	10
10-14	6,423	5,912	12,335	0.0006	0.0006	4	4	7
15-19	5,392	4,900	10,292	0.0015	0.0007	8	3	12
20-24	4,656	4,546	9,202	0.0020	0.0004	9	2	11
25-29	3,645	3,668	7,313	0.0015	0.0005	5	2	7
30-34	3,151	3,193	6,345	0.0028	0.0011	9	4	12
35-39	3,117	3,119	6,236	0.0023	0.0017	7	5	12
40-44	2,582	2,438	5,020	0.0041	0.0033	11	8	19
45-49	1,926	2,060	3,987	0.0094	0.0055	18	11	29
50-54	1,637	1,832	3,469	0.0096	0.0072	16	13	29
55-59	1,361	1,491	2,852	0.0167	0.0098	23	15	37
60-64	1,171	1,302	2,473	0.0286	0.0153	33	20	53
65-69	1,094	1,083	2,177	0.0257	0.0196	28	21	49
70-74	778	810	1,588	0.0494	0.0394	38	32	70
75-79	511	589	1,100	0.1061	0.0693	54	41	95
80+	385	599	984	0.2473	0.1634	95	98	193
Total	**51,772**	**50,219**	**101,991**			**402**	**307**	**709**

Appendix 7A: Population aged 15 and older by labour market activity, sex, and urban–rural residence, Tonga: 2006

Region/Sex	Labour Force					Non Labour Force				Total
	Paid work	Subsistence work	Work unspecified	Un-employed	**Total**	Student	Retired, disabled, family responsibilities	Other*	Total	
Total	23,438	11,497	355	388	**35,678**	8,906	10,312	8,189	27,407	**63,085**
Urban	6,222	1,449	133	126	7,930	2,289	2,943	2,129	7,361	15,291
Rural	17,216	10,048	222	262	27,748	6,617	7,369	6,060	20,046	47,794
Males	14,273	5,499	184	214	**20,170**	4,396	3,115	3,760	11,271	**31,441**
Urban	3,792	624	64	70	4,550	1,108	881	1,003	2,992	7,542
Rural	10,481	4,875	120	144	15,620	3,288	2,234	2,757	8,279	23,899
Females	9,165	5,998	171	174	**15,508**	4,510	7,197	4,429	16,136	**31,644**
Urban	2,430	825	69	56	3,380	1,181	2,062	1,126	4,369	7,749
Rural	6,735	5,173	102	118	12,128	3,329	5,135	3,303	11,767	23,895

"Other" includes people that did not work because:

- they were not interested in finding work: 5,996
- they were not willing and available to work: 308
- of weather condition: 159
- they cannot afford transportation cost: 36
- they did not look for work because they believed that no work was available: 1,241
- not specified: 449

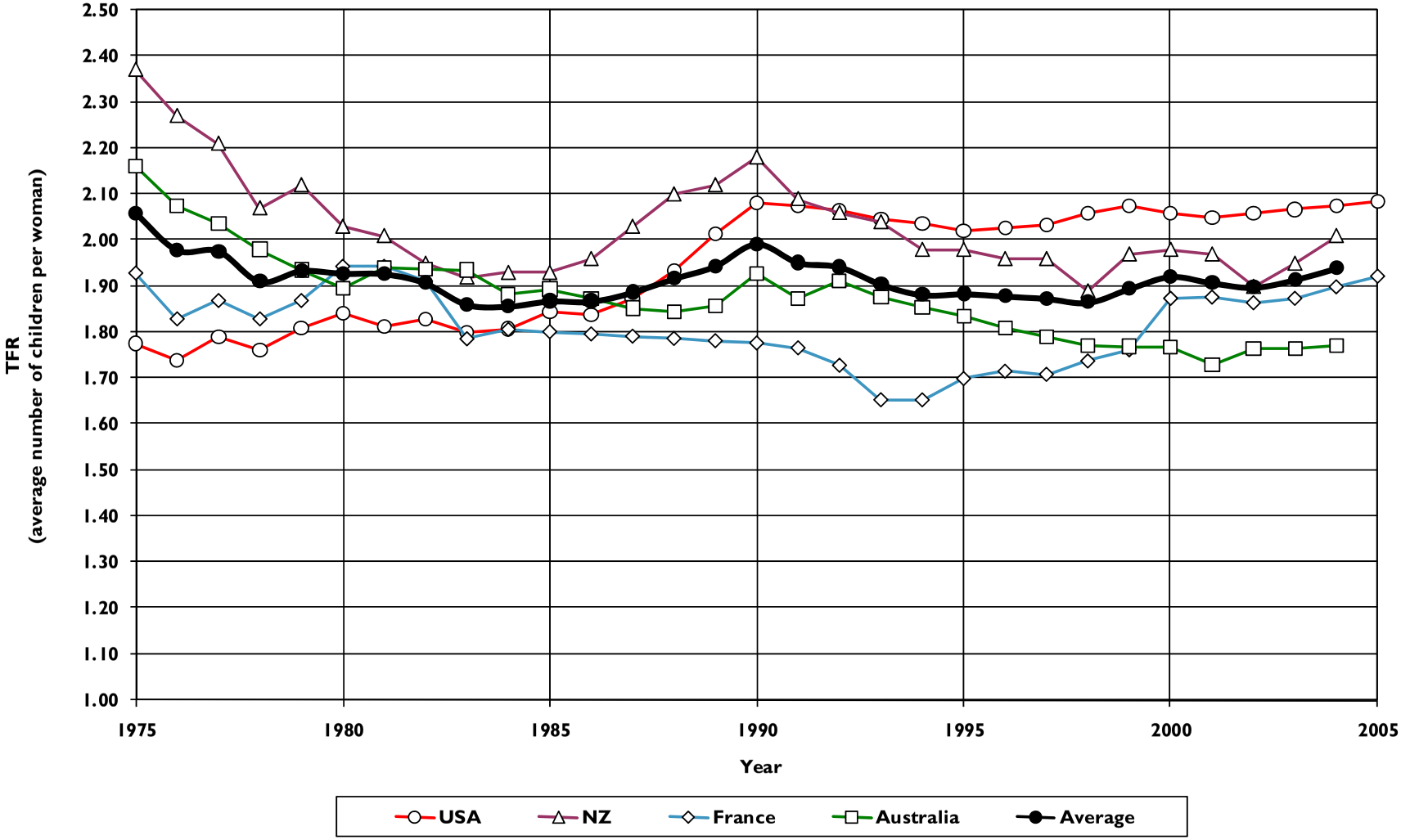
Appendix 7B: Population aged 15 and older by labour market activity, sex, and urban–rural residence, Tonga: 2006 (according to an adjusted definition of unemployed)

Region/Sex	Labour Force					Non Labour Force				Total
	Paid work	Subsistence work	Work unspecified	Un-employed	**Total**	Student	Retired, disabled, family responsibilities	Other*	Total	
Total	23,438	11,497	355	1,824	**37,114**	8,906	10,312	6,753	25,971	**63,085**
Urban	6,222	1,449	133	445	8,249	2,289	2,943	1,810	7,042	15,291
Rural	17,216	10,048	222	1,379	28,865	6,617	7,369	4,943	18,929	47,794
Males	14,273	5,499	184	924	**20,880**	4,396	3,115	3,050	10,561	**31,441**
Urban	3,792	624	64	230	4,710	1,108	881	843	2,832	7,542
Rural	10,481	4,875	120	694	16,170	3,288	2,234	2,207	7,729	23,899
Females	9,165	5,998	171	900	**16,234**	4,510	7,197	3,703	15,410	**31,644**
Urban	2,430	825	69	215	3,539	1,181	2,062	967	4,210	7,749
Rural	6,735	5,173	102	685	12,695	3,329	5,135	2,736	11,200	23,895

Unemployed include people that did not work because:
- they did not look for work because they believed that no work was available: 1,241
- of weather condition: 159
- they cannot afford transportation cost: 36

"Other" include people that did not work because:
- they were not interested in finding work: 5,996
- they were not willing and available to work: 308
- not specified: 449

Appendix 8: Total fertility rate (TFR) of Australia, France, New Zealand and the United States of America, and the average TFR of these four countries: 1975–2005



Appendix 9: Projected population size according to nine projection scenarios (combination of three different fertility and migration assumptions), Tonga: 2010, 2015 and 2030

Year 2010			
Fertility assumption (TFR from 2006 to 2031)	**Migration assumption**		
	Low (fast decline)	**Medium (slow decline)**	**High (constant)**
High (slow decline) (4.2 → 3.2)	104,126	103,891	103,656
Medium (medium decline) (4.2 → 2.7)	103,876	**103,641**	103,407
Low (fast decline) (4.2 → 2.2)	103,640	103,406	103,171
Year 2015			
Fertility assumption (TFR from 2006 to 2031)	**Migration assumption**		
	Low (fast decline)	**Medium (slow decline)**	**High (constant)**
High (slow decline) (4.2 → 3.2)	108,694	107,187	105,681
Medium (medium decline) (4.2 → 2.7)	107,507	**106,011**	104,514
Low (fast decline) (4.2 → 2.2)	106,262	104,777	103,293
Year 2030			
Fertility assumption (TFR from 2006 to 2031)	**Migration assumption**		
	Low (fast decline)	**Medium (slow decline)**	**High (constant)**
High (slow decline) (4.2 → 3.2)	134,733	121,216	107,697
Medium (medium decline) (4.2 → 2.7)	128,504	**115,389**	102,273
Low (fast decline) (4.2 → 2.2)	122,085	109,383	96,680

Appendix 10: The demographic transition

According to the theory of demographic transition, over time all countries will undergo change from high rates of births and deaths to low rates of births and deaths. This transition process is usually closely associated with economic, social and scientific developments. This is assumed to happen in four distinct stages:

Stage 1: High birth rate, high death rate → little or no population growth
Stage 2: High birth rate, falling death rate → high growth
Stage 3: Declining birth rate, relatively low death rate → slowed growth
Stage 4: Low birth rate, low death rate → very low growth

Historically, high levels of births and deaths kept most populations from growing rapidly through time. In fact, many populations not only failed to grow but also completely died out when birth rates did not compensate for high death rates (**stage 1**). There are few populations/communities left today at stage 1.

Death rates eventually fell as living conditions, nutrition and public health improved. The decline in mortality usually preceded the decline in fertility, resulting in population growth during the transition period (**stage 2**). In Europe and other industrialised countries, death rates fell slowly. With the added benefit of medical advances, death rates fell more rapidly in the countries that began the transition in the 20th century. These are/were primarily developing countries. Their death rates often fell much faster than in European countries because they benefited from Western inventions and innovations.

In general, fertility rates fell neither as quickly nor as dramatically as death rates, and thus populations grew rapidly.

Stage 3 is characterized by falling birth rates, which occur for many reasons and vary from country to country and population to population. A decrease in birth rates may result from: a transition from a non-monetary to a monetary economy, urbanization, a change in values from a community emphasis to individualism, increasing emphasis on consumerism, improved education, availability of (modern) family planning methods (i.e. contraceptives), greater involvement of women in the workplace, rising cost of living, rising cost of raising children, and preferences in how people want to spend their time.

The demographic transition is regarded as completed when both birth and death rates have reached a low and stable level (**stage 4**). As a result, population growth is very low.

Originally, the theory of demographic transition included only the four stages described above. There is now another stage, the **post-transition period** (although it is uncertain whether all countries will reach this stage).

Post-transition period: Very low birth rate, low death rate → negative growth

When fertility falls to very low levels and stays there for a protracted period, a slow rate of population growth can turn into a negative one, resulting in a population decrease. Many countries in Europe and some in Asia now have TFRs well below two children per woman. The TFRs of the Republic of Korea, Ukraine, Czech Republic, Slovakia, Slovenia, Republic of Moldova, Bulgaria, and Belarus — all about 1.2 — are among the world's lowest, and those of several other countries were not far behind. The TFRs of Macao and Hong Kong were even less than 1 child per woman on average. Many of the factors that lowered fertility in the first place — greater involvement of women in the workplace, rising cost of living, and preferences in how people want to spend their time — appear to be keeping fertility rates very low.

While the theory of demographic transition describes the population history of western Europe quite well, for many reasons developing countries do not always exhibit the same patterns of change. In some cases early contact with outside societies resulted in local epidemics, as groups succumbed to diseases against which they had no natural immunity, resulting in increased death rates. When health conditions improved

as a result of the application of new and efficient disease control technologies, death rates declined, while birth rates sometimes increased. This combination of factors produced population growth rates in today's developing countries that are much higher than ever experienced in pre-industrial western Europe.

Stylised graph of the European demographic transition

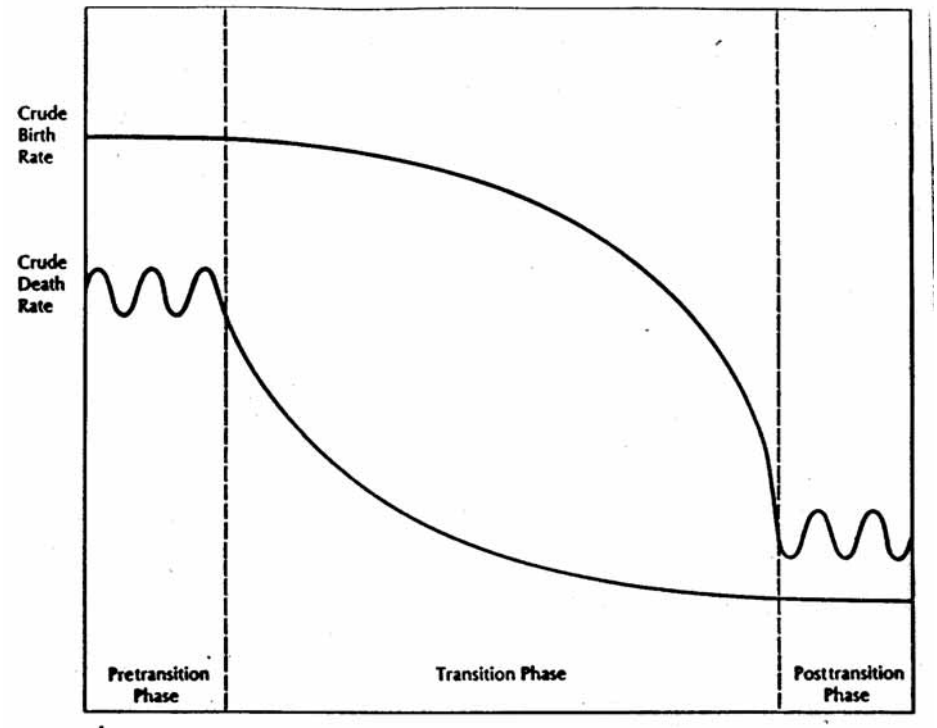


Figure 3–2 A SIMPLIFIED DIAGRAM OF THE EUROPEAN DEMOGRAPHIC TRANSITION
Source: Ansley J. Coale, 1974, p. 49.

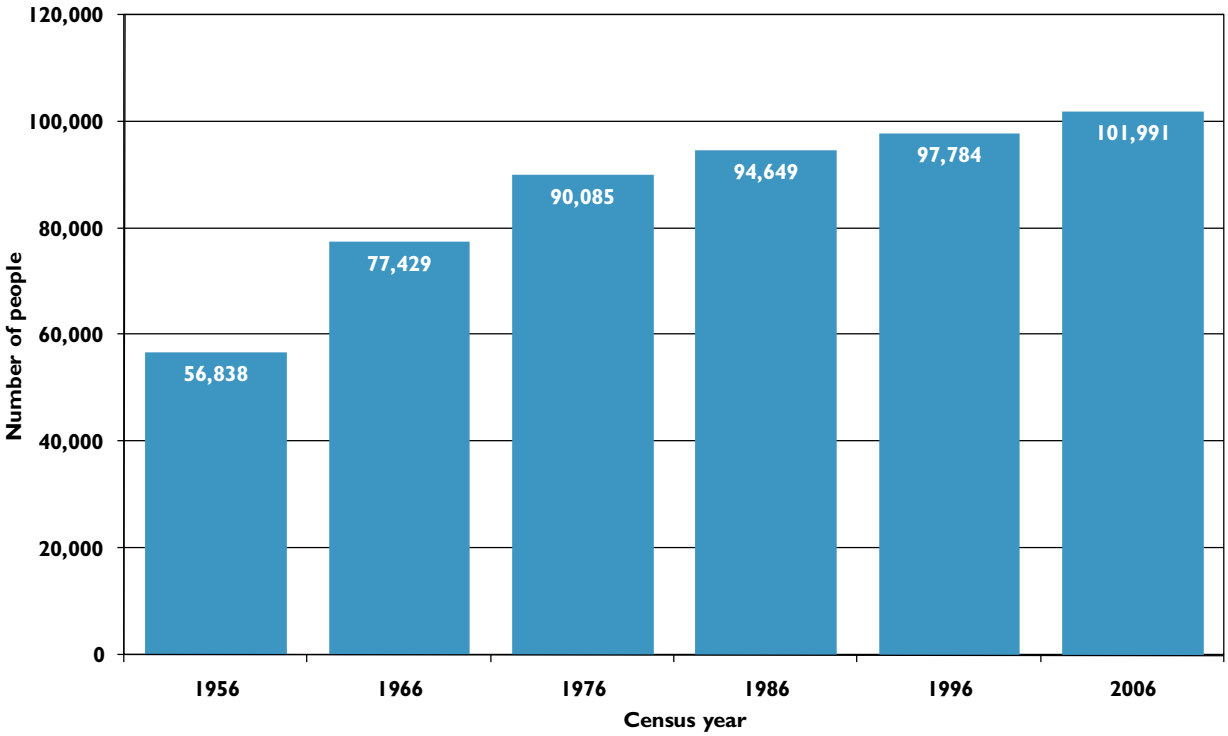
Sources: 2004. Population Handbook, Population Reference Bureau, Inc, Washington D.C., 5th Edition; 1999. Papua New Guinea National Population Policy 2000–2010, Department of Planning

Appendix 11: Divisions and districts in Tonga

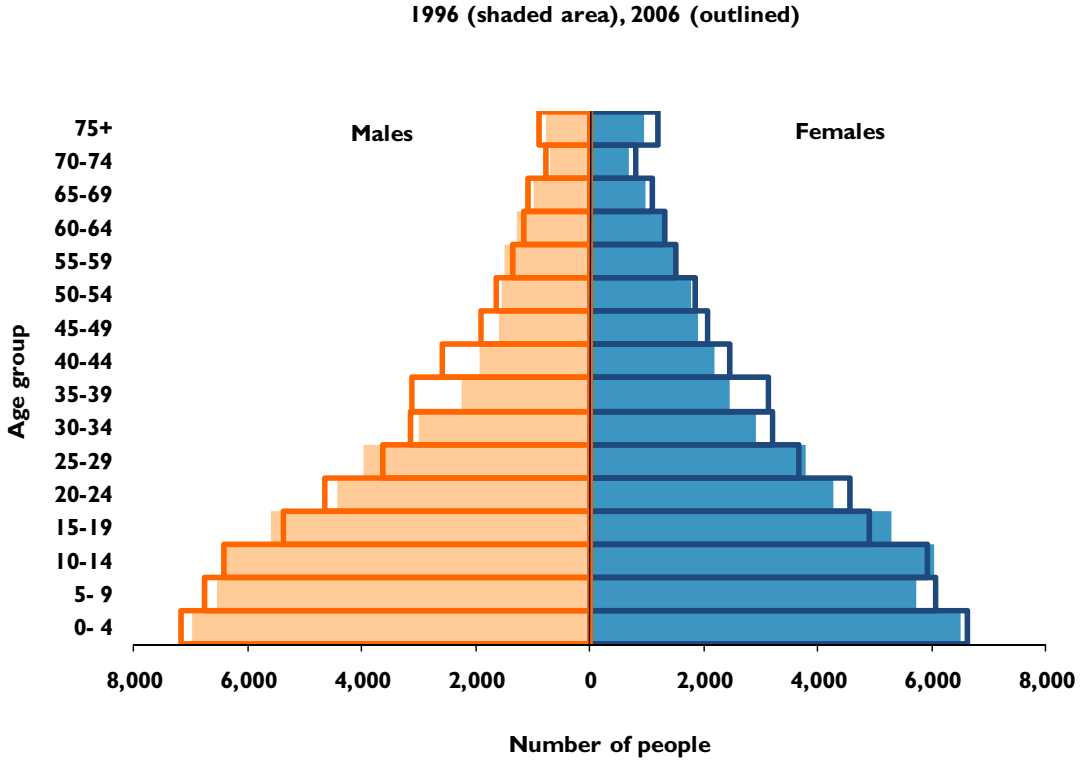
Divisions	TONGATAPU	VAVA'U	HA'APAI	‘EUA	ONGO NIUA
Districts	Kolofo'ou Kolomotu'a Vaini Tatakamotonga Lapaha Nukunuku Kolovai	Neiafu Pangaimotu Hahake Leimatu'a Hihifo Motu	Pangai Hp Foa Lulunga Mu'omu'a Ha'ano Uiha	‘Eua Motu'a ‘Eua Fo'ou	Niuatoputapu Niuafo'ou

TONGA

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



TONGA

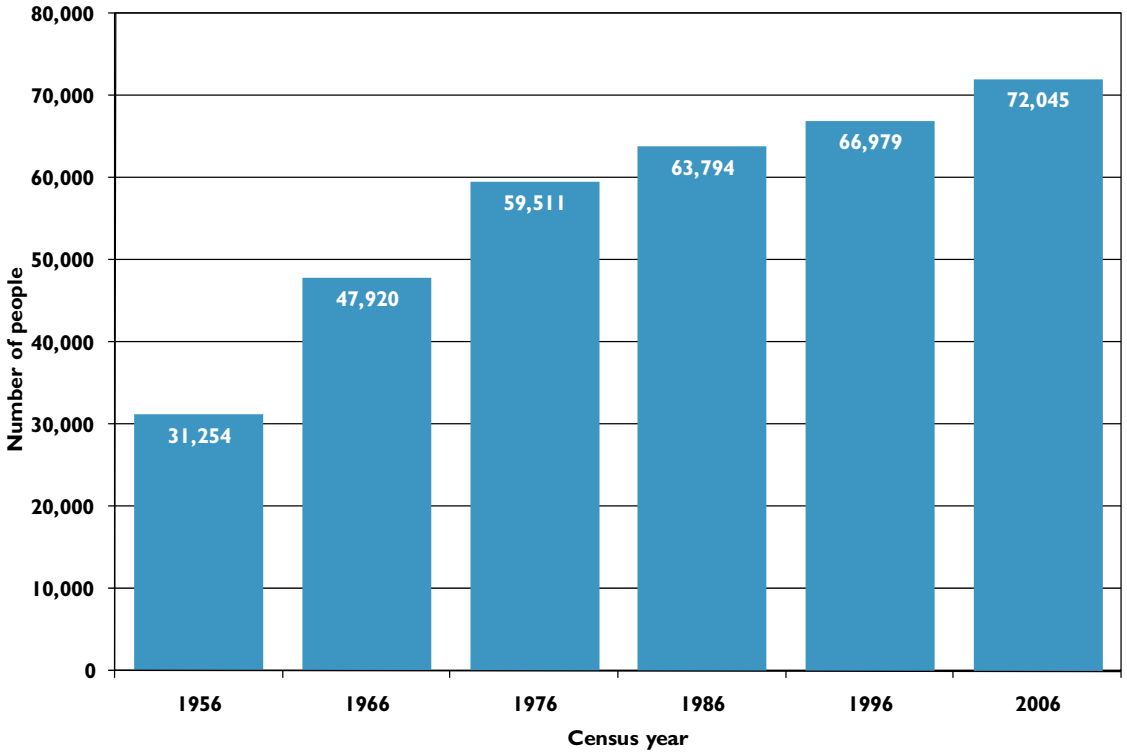
1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	6,987	6,492	13,479	0-4	7,186	6,613	13,799
5-9	6,539	5,719	12,258	5-9	6,756	6,063	12,820
10-14	6,482	6,039	12,521	10-14	6,423	5,912	12,335
15-19	5,609	5,286	10,895	15-19	5,392	4,900	10,292
20-24	4,445	4,277	8,722	20-24	4,656	4,546	9,202
25-29	3,972	3,785	7,757	25-29	3,645	3,668	7,313
30-34	3,009	2,909	5,918	30-34	3,151	3,193	6,345
35-39	2,244	2,442	4,686	35-39	3,117	3,119	6,236
40-44	1,933	2,189	4,122	40-44	2,582	2,438	5,020
45-49	1,606	1,892	3,498	45-49	1,926	2,060	3,987
50-54	1,548	1,762	3,310	50-54	1,637	1,832	3,469
55-59	1,500	1,508	3,008	55-59	1,361	1,491	2,852
60-64	1,289	1,273	2,562	60-64	1,171	1,302	2,473
65-69	995	976	1,971	65-69	1,094	1,083	2,177
70-74	691	679	1,370	70-74	778	810	1,588
75+	766	941	1,707	75+	896	1,189	2,084
Total	49,615	48,169	**97,784**	Total	51,772	50,219	**101,991**
Population by broad age groups (in numbers)							
0-14	20,008	18,250	38,258	**0-14**	20,365	18,588	38,953
15-24	10,054	9,563	19,617	**15-24**	10,048	9,447	19,494
25-59	15,812	16,487	32,299	**25-59**	17,420	17,801	35,222
25-64	17,101	17,760	34,861	**25-64**	18,591	19,103	37,695
60+	3,741	3,869	7,610	**60+**	3,939	4,383	8,322
65+	2,452	2,596	5,048	**65+**	2,768	3,081	5,849
Population by broad age groups (in percentages)							
0-14	40	38	39	**0-14**	39	37	38
15-24	20	20	20	**15-24**	19	19	19
25-59	32	34	33	**25-59**	34	35	35
25-64	34	37	36	**25-64**	36	38	37
60+	8	8	8	**60+**	8	9	8
65+	5	5	5	**65+**	5	6	6
Age dependency ratio							
15-59			**88**	**15-59**			**86**
15-64			**79**	**15-64**			**78**
Sex ratio (males per 100 females)							
			103				**103**
Median age (years)							
Total	**19.3**	**20.6**	**19.9**	**Total**	**20.1**	**21.8**	**21.0**

Population growth 1996-2006			
	Males	Females	**Total**
Total	2,157	2,050	**4,207**
Average annual	216	205	**421**
Percentage difference %	4.3	4.3	**4.3**
Average annual growth rate	0.4	0.4	**0.4**

* 122 people who did not state their age were distributed proportionally by known ages in 2006. This may cause some basic tables to differ slightly from numbers shown here.

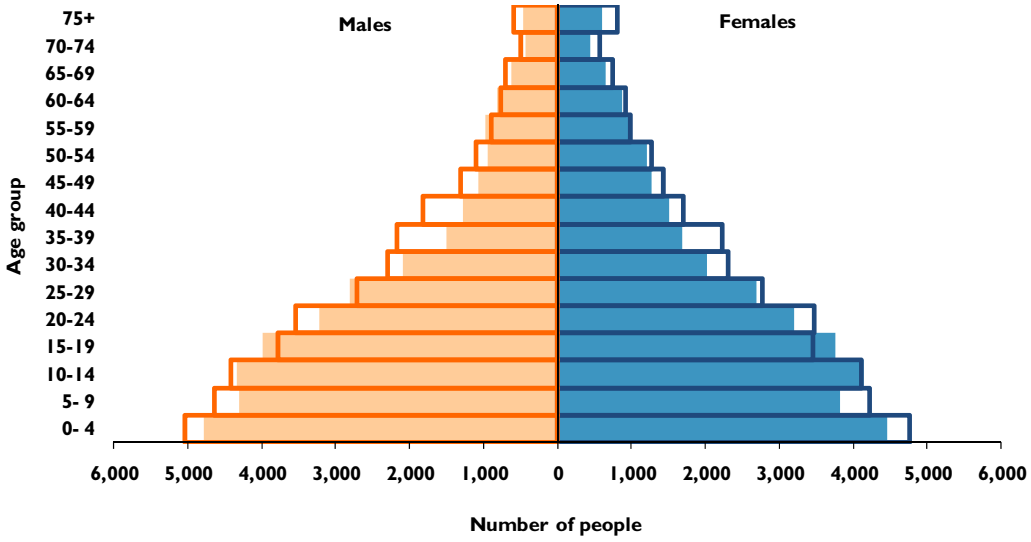
TONGATAPU

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006

1996 (shaded area), 2006 (outlined)



TONGATAPU

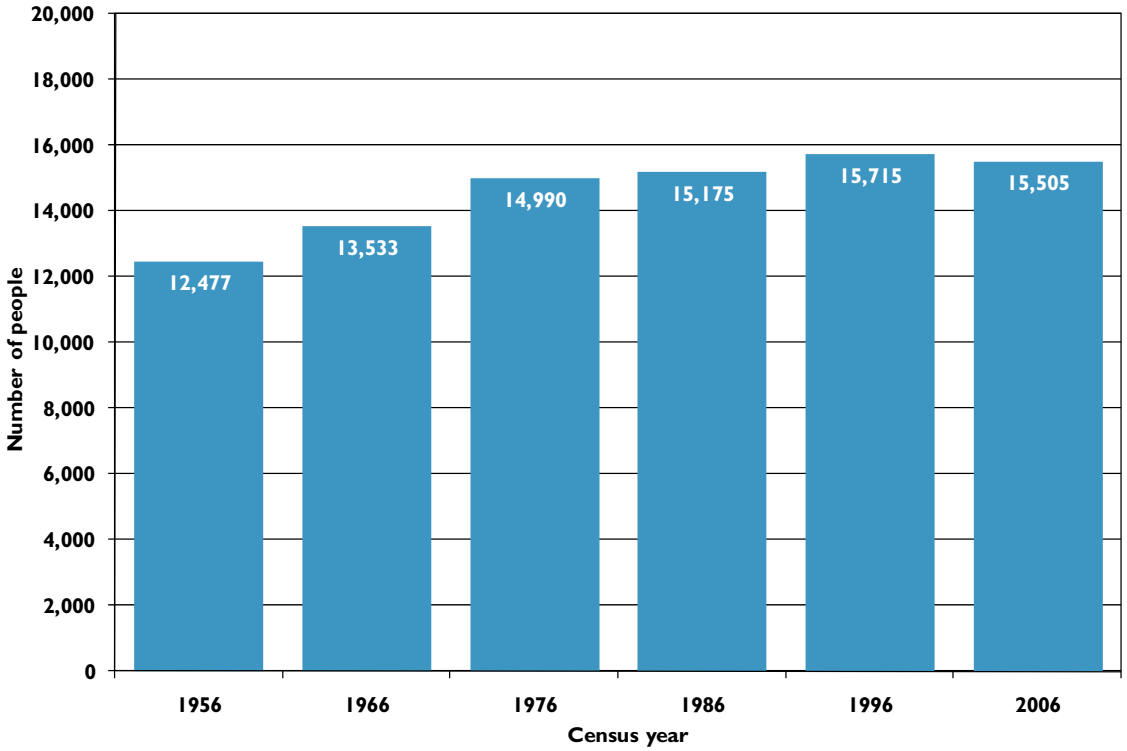
1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	4,787	4,448	9,235	0-4	5,042	4,753	9,795
5-9	4,317	3,809	8,126	5-9	4,647	4,211	8,858
10-14	4,350	4,138	8,488	10-14	4,426	4,107	8,534
15-19	3,989	3,757	7,746	15-19	3,777	3,446	7,223
20-24	3,234	3,189	6,423	20-24	3,543	3,465	7,008
25-29	2,808	2,686	5,494	25-29	2,725	2,765	5,490
30-34	2,101	2,008	4,109	30-34	2,303	2,297	4,601
35-39	1,507	1,687	3,194	35-39	2,182	2,230	4,412
40-44	1,290	1,500	2,790	40-44	1,818	1,696	3,514
45-49	1,073	1,260	2,333	45-49	1,316	1,430	2,746
50-54	955	1,203	2,158	50-54	1,112	1,265	2,377
55-59	982	1,000	1,982	55-59	905	987	1,891
60-64	822	868	1,690	60-64	768	914	1,682
65-69	634	639	1,273	65-69	713	740	1,454
70-74	436	439	875	70-74	500	564	1,064
75+	468	595	1,063	75+	593	803	1,397
Total	33,753	33,226	**66,979**	Total	36,372	35,673	**72,045**
Population by broad age groups (in numbers)							
0-14	13,454	12,395	25,849	**0-14**	14,115	13,071	27,187
15-24	7,223	6,946	14,169	**15-24**	7,320	6,911	14,231
25-59	10,716	11,344	22,060	**25-59**	12,362	12,669	25,031
25-64	11,538	12,212	23,750	**25-64**	13,131	13,583	26,713
60+	2,360	2,541	4,901	**60+**	2,575	3,022	5,597
65+	1,538	1,673	3,211	**65+**	1,806	2,108	3,915
Population by broad age groups (in percentages)							
0-14	40	37	39	**0-14**	39	37	38
15-24	21	21	21	**15-24**	20	19	20
25-59	32	34	33	**25-59**	34	36	35
25-64	34	37	35	**25-64**	36	38	37
60+	7	8	7	**60+**	7	8	8
65+	5	5	5	**65+**	5	6	5
Age dependency ratio							
15-59			**85**	**15-59**			**83**
15-64			**77**	**15-64**			**76**
Sex ratio (males per 100 females)							
			102				**102**
Median age (years)							
Total	**19.3**	**20.7**	**19.9**	**Total**	**20.4**	**21.9**	**21.2**

Population growth 1996-2006			
	Males	Females	**Total**
Total	2,619	2,447	**5,066**
Average annual	262	245	**507**
Percentage difference %	7.8	7.4	**7.6**
Average annual growth rate	0.7	0.7	**0.7**

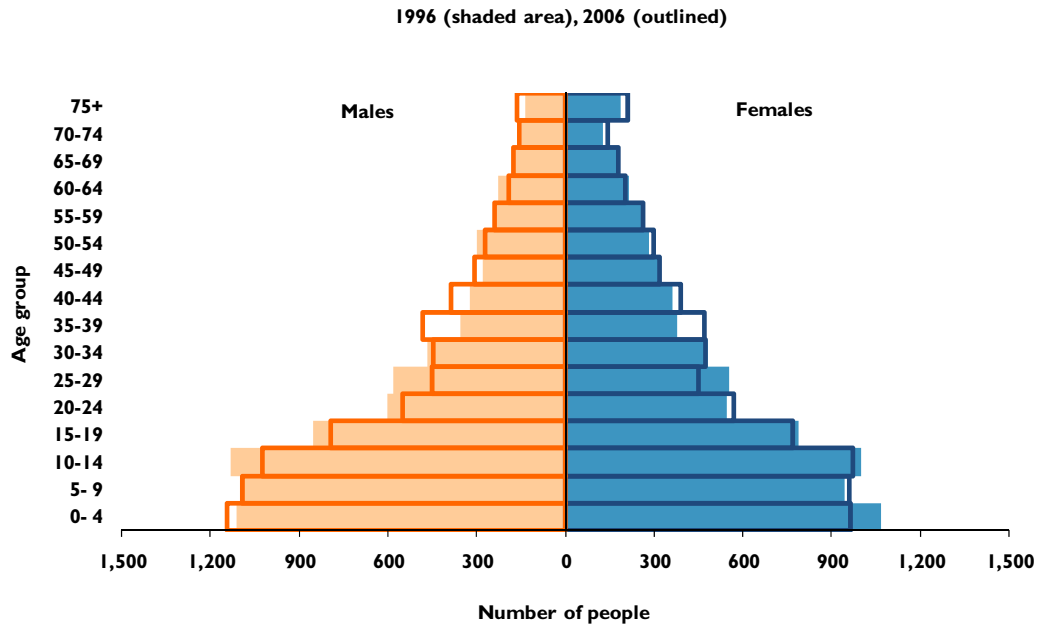
* 88 people who did not state their age were distributed proportionally by known ages in 2006. This may cause some basic tables to differ slightly from numbers shown here

VAVA'U

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



VAVA'U

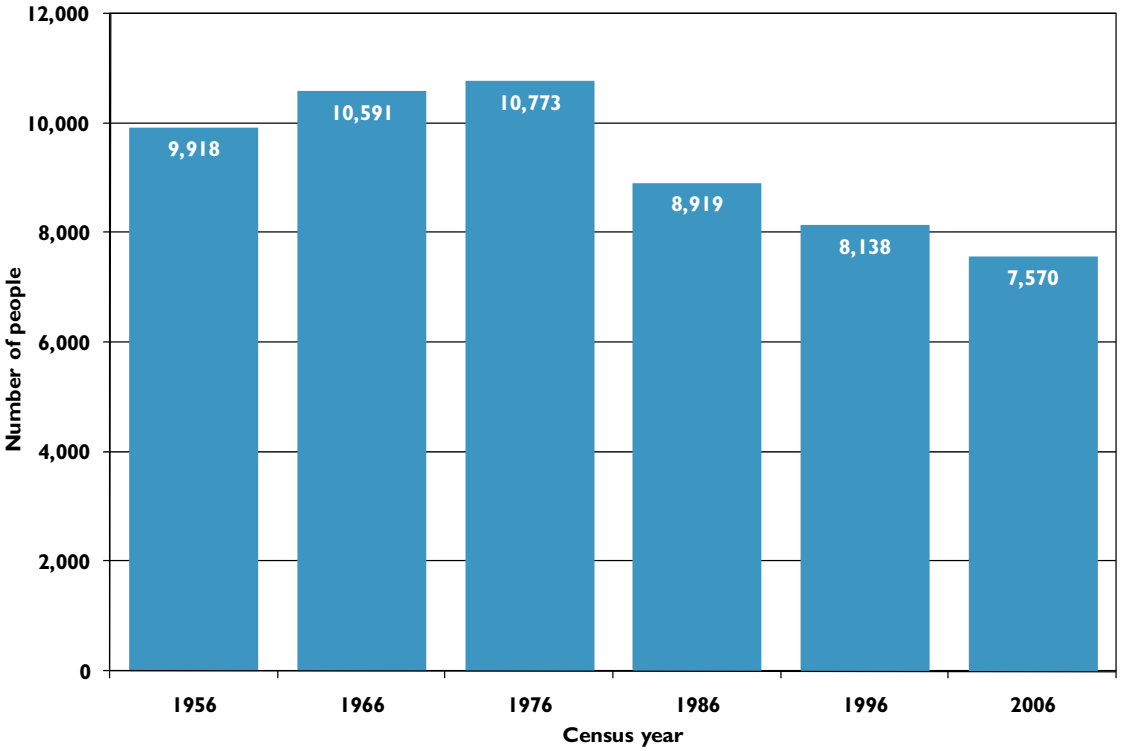
1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	1,112	1,067	2,179	0-4	1,144	964	2,108
5-9	1,103	942	2,045	5-9	1,095	959	2,054
10-14	1,134	997	2,131	10-14	1,028	971	1,999
15-19	855	788	1,643	15-19	794	766	1,559
20-24	605	544	1,149	20-24	550	569	1,119
25-29	585	553	1,138	25-29	450	446	897
30-34	469	482	951	30-34	446	470	917
35-39	357	375	732	35-39	483	466	950
40-44	325	361	686	40-44	389	390	780
45-49	280	320	600	45-49	310	317	627
50-54	299	281	580	50-54	273	298	571
55-59	233	258	491	55-59	239	259	498
60-64	231	214	445	60-64	194	203	397
65-69	181	169	350	65-69	179	176	355
70-74	149	124	273	70-74	158	142	300
75+	137	185	322	75+	164	210	374
Total	8,055	7,660	**15,715**	Total	7,897	7,608	**15,505**
Population by broad age groups (in numbers)							
0-14	3,349	3,006	6,355	**0-14**	3,266	2,894	6,160
15-24	1,460	1,332	2,792	**15-24**	1,344	1,334	2,678
25-59	2,548	2,630	5,178	**25-59**	2,592	2,648	5,240
25-64	2,779	2,844	5,623	**25-64**	2,786	2,852	5,637
60+	698	692	1,390	**60+**	695	732	1,427
65+	467	478	945	**65+**	501	528	1,030
Population by broad age groups (in percentages)							
0-14	42	39	40	**0-14**	41	38	40
15-24	18	17	18	**15-24**	17	18	17
25-59	32	34	33	**25-59**	33	35	34
25-64	35	37	36	**25-64**	35	37	36
60+	9	9	9	**60+**	9	10	9
65+	6	6	6	**65+**	6	7	7
Age dependency ratio							
15-59			**97**	**15-59**			**96**
15-64			**87**	**15-64**			**86**
Sex ratio (males per 100 females)							
			105				**104**
Median age (years)							
Total	**19.0**	**20.3**	**19.6**	**Total**	**19.3**	**21.3**	**20.2**

Population growth 1996-2006			
	Males	Females	**Total**
Total	-158	-52	**-210**
Average annual	-16	-5	**-21**
Percentage difference %	-2.0	-0.7	**-1.3**
Average annual growth rate	-0.2	-0.1	**-0.1**

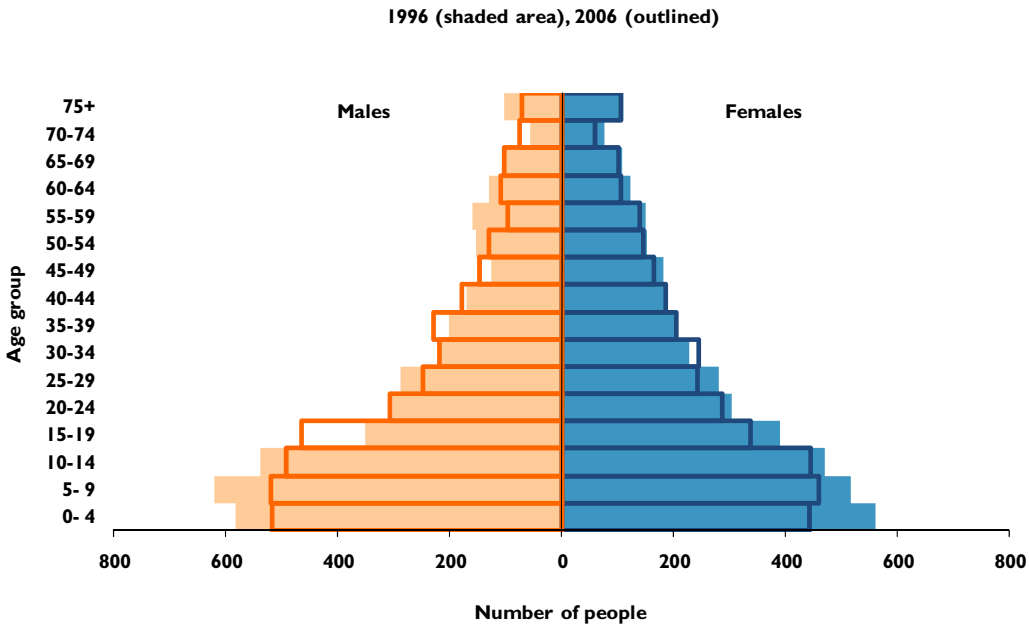
* 12 people who did not state their age were distributed proportionally by known ages in 2006.
This may cause some basic tables to differ slightly from numbers shown here.

HA'APAI

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



HA'APAI

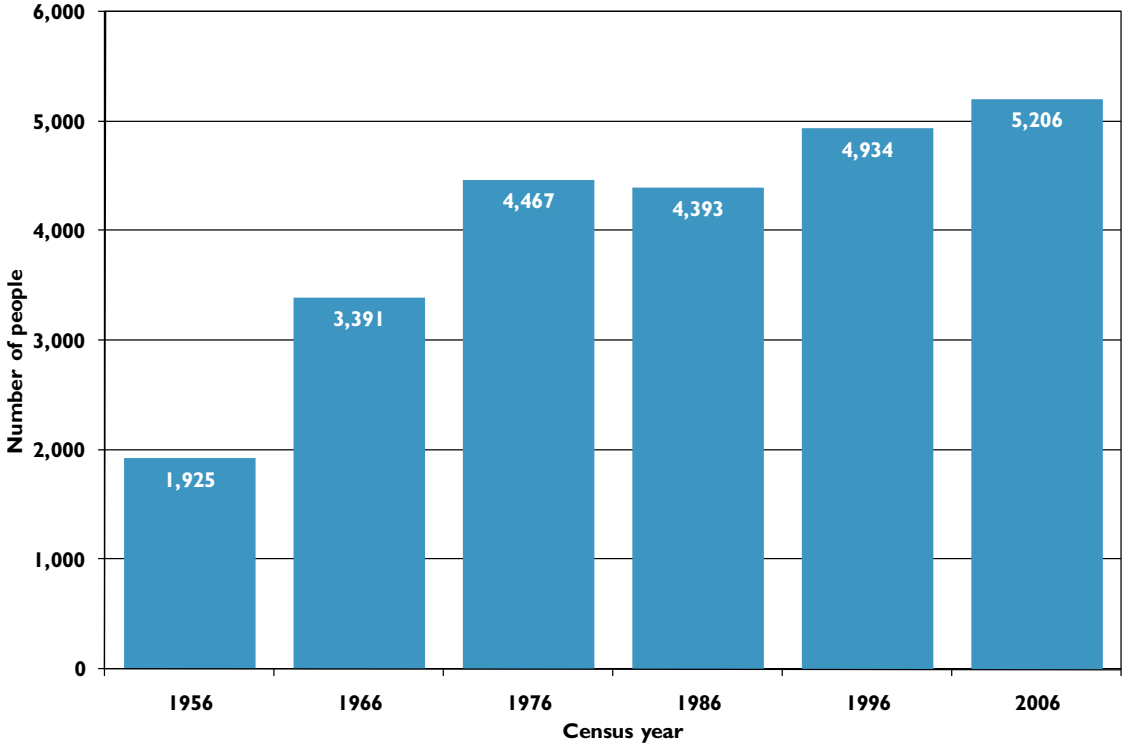
1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	584	559	1,143	0-4	517	442	959
5-9	621	515	1,136	5-9	519	459	978
10-14	538	470	1,008	10-14	492	445	937
15-19	352	390	742	15-19	466	337	803
20-24	304	303	607	20-24	307	285	592
25-29	289	280	569	25-29	248	242	490
30-34	218	227	445	30-34	219	243	463
35-39	203	205	408	35-39	228	203	432
40-44	170	183	353	40-44	179	184	364
45-49	126	181	307	45-49	148	163	312
50-54	154	151	305	50-54	131	145	277
55-59	161	150	311	55-59	97	139	236
60-64	131	123	254	60-64	109	105	214
65-69	99	107	206	65-69	102	101	203
70-74	56	75	131	70-74	76	58	134
75+	103	110	213	75+	71	106	177
Total	4,109	4,029	**8,138**	Total	3,911	3,659	**7,570**
Population by broad age groups (in numbers)							
0-14	1,743	1,544	3,287	**0-14**	1,528	1,345	2,873
15-24	656	693	1,349	**15-24**	773	622	1,395
25-59	1,321	1,377	2,698	**25-59**	1,252	1,321	2,573
25-64	1,452	1,500	2,952	**25-64**	1,361	1,426	2,787
60+	389	415	804	**60+**	359	371	729
65+	258	292	550	**65+**	250	265	515
Population by broad age groups (in percentages)							
0-14	42	38	40	**0-14**	39	37	38
15-24	16	17	17	**15-24**	20	17	18
25-59	32	34	33	**25-59**	32	36	34
25-64	35	37	36	**25-64**	35	39	37
60+	9	10	10	**60+**	9	10	10
65+	6	7	7	**65+**	6	7	7
Age dependency ratio							
15-59			**101**	**15-59**			**91**
15-64			**89**	**15-64**			**81**
Sex ratio (males per 100 females)							
			102				**107**
Median age (years)							
Total	**19.4**	**21.3**	**20.3**	**Total**	**19.6**	**22.6**	**20.9**

Population growth 1996-2006			
	Males	Females	**Total**
Total	-198	-370	**-568**
Average annual	-20	-37	**-57**
Percentage difference %	-4.8	-9.2	**-7.0**
Average annual growth rate	-0.5	-1.0	**-0.7**

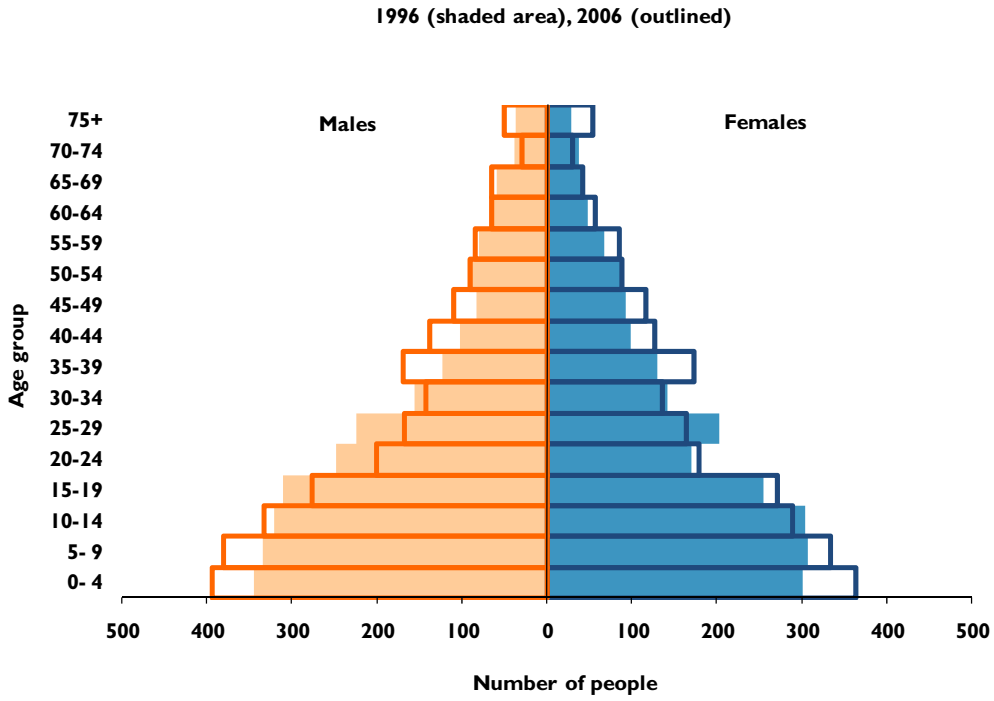
* 14 people who did not state their age were distributed proportionally by known ages in 2006. This may cause some basic tables to differ slightly from numbers shown here.

‘EUA

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



'EUA

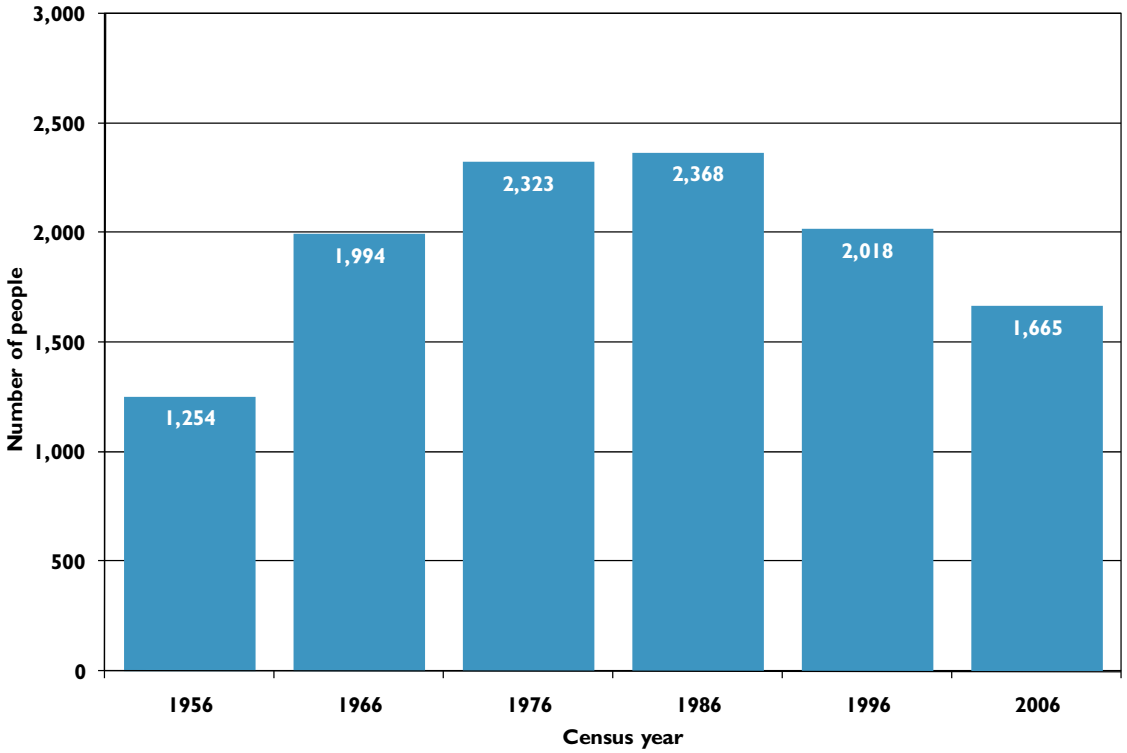
1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	345	300	645	0-4	395	363	758
5-9	335	307	642	5-9	381	333	714
10-14	322	304	626	10-14	333	288	622
15-19	311	255	566	15-19	276	270	547
20-24	248	169	417	20-24	200	179	379
25-29	224	203	427	25-29	168	163	331
30-34	156	142	298	30-34	142	135	277
35-39	124	129	253	35-39	170	173	343
40-44	102	98	200	40-44	138	127	265
45-49	83	92	175	45-49	110	116	226
50-54	94	89	183	50-54	91	88	179
55-59	81	67	148	55-59	85	85	170
60-64	65	48	113	60-64	65	57	122
65-69	59	41	100	65-69	66	42	108
70-74	38	37	75	70-74	30	30	60
75+	37	29	66	75+	50	54	104
Total	2,624	2,310	**4,934**	Total	2,702	2,504	**5,206**
Population by broad age groups (in numbers)							
0-14	1,002	911	1,913	**0-14**	1,109	984	2,093
15-24	559	424	983	**15-24**	477	449	926
25-59	864	820	1,684	**25-59**	905	887	1,793
25-64	929	868	1,797	**25-64**	970	944	1,915
60+	199	155	354	**60+**	211	183	394
65+	134	107	241	**65+**	146	126	272
Population by broad age groups (in percentages)							
0-14	38	39	39	**0-14**	41	39	40
15-24	21	18	20	**15-24**	18	18	18
25-59	33	35	34	**25-59**	34	35	34
25-64	35	38	36	**25-64**	36	38	37
60+	8	7	7	**60+**	8	7	8
65+	5	5	5	**65+**	5	5	5
Age dependency ratio							
15-59			**85**	**15-59**			**91**
15-64			**77**	**15-64**			**83**
Sex ratio (males per 100 females)							
			114				**108**
Median age (years)							
Total	**20.0**	**19.8**	**19.9**	**Total**	**19.4**	**20.0**	**19.7**

Population growth 1996-2006			
	Males	Females	**Total**
Total	78	194	**272**
Average annual	8	19	**27**
Percentage difference %	3.0	8.4	**5.5**
Average annual growth rate	0.3	0.8	**0.5**

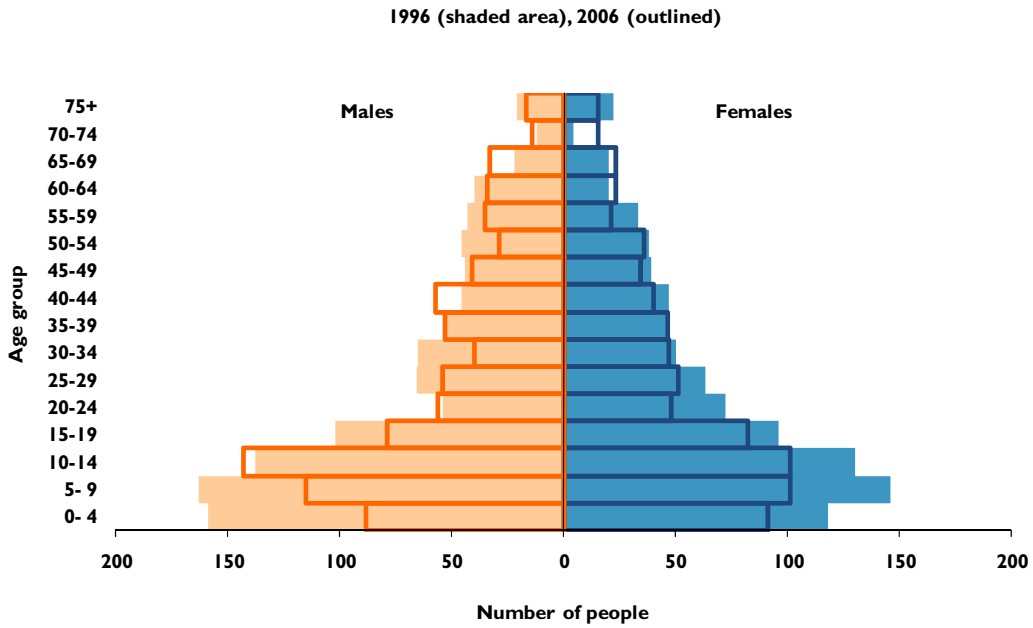
* 5 people who did not state their age were distributed proportionally by known ages in 2006. This may cause some basic tables to differ slightly from numbers shown here.

ONGO NIUA

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



ONGO NIUA

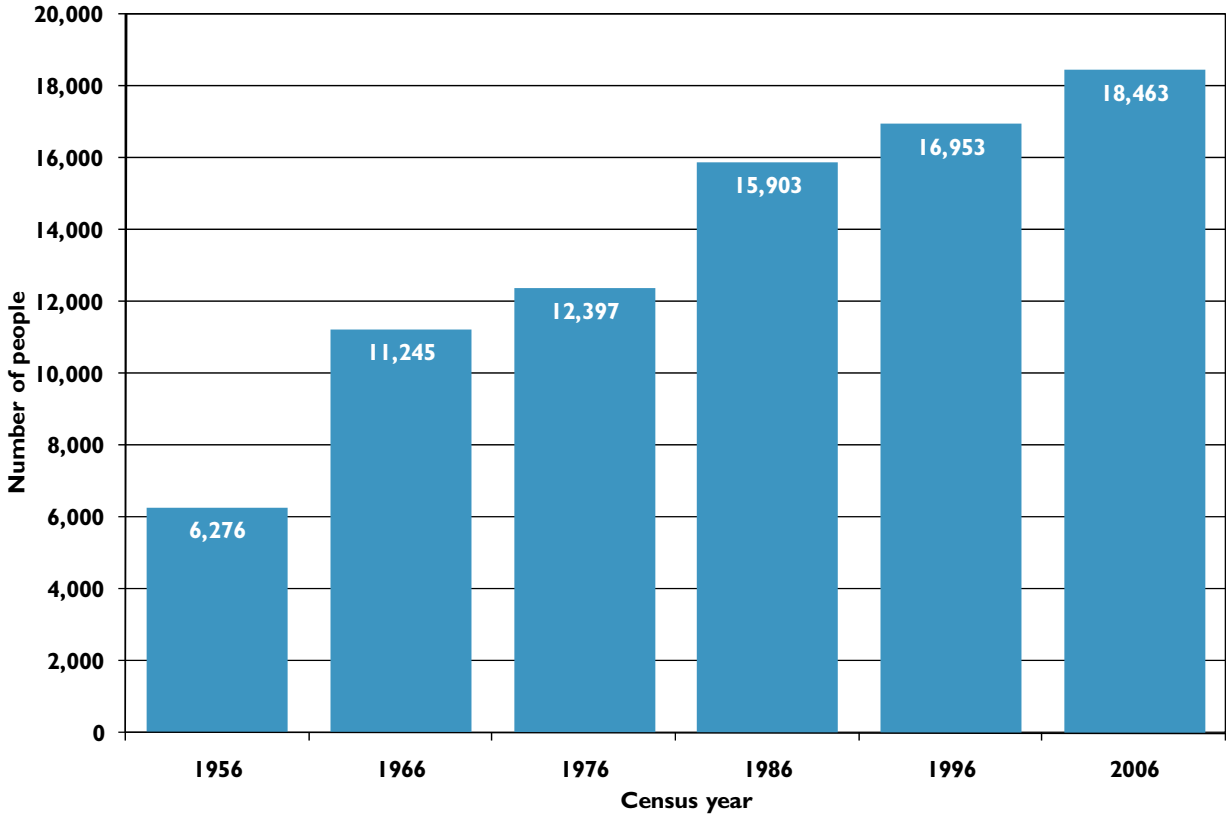
1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	159	118	277	0-4	88	91	179
5-9	163	146	309	5-9	115	101	216
10-14	138	130	268	10-14	143	101	244
15-19	102	96	198	15-19	79	82	161
20-24	54	72	126	20-24	56	48	104
25-29	66	63	129	25-29	54	51	105
30-34	65	50	115	30-34	40	47	87
35-39	53	46	99	35-39	53	46	99
40-44	46	47	93	40-44	57	40	97
45-49	44	39	83	45-49	41	34	75
50-54	46	38	84	50-54	29	36	65
55-59	43	33	76	55-59	35	21	56
60-64	40	20	60	60-64	34	23	57
65-69	22	20	42	65-69	33	23	56
70-74	12	4	16	70-74	14	15	29
75+	21	22	43	75+	17	15	32
Total	1,074	944	**2,018**	Total	890	775	**1,665**
Population by broad age groups (in numbers)							
0-14	460	394	854	**0-14**	347	293	640
15-24	156	168	324	**15-24**	135	130	265
25-59	363	316	679	**25-59**	310	275	585
25-64	403	336	739	**25-64**	344	298	642
60+	95	66	161	**60+**	98	76	174
65+	55	46	101	**65+**	64	53	117
Population by broad age groups (in percentages)							
0-14	43	42	42	**0-14**	39	38	38
15-24	15	18	16	**15-24**	15	17	16
25-59	34	33	34	**25-59**	35	36	35
25-64	38	36	37	**25-64**	39	39	39
60+	9	7	8	**60+**	11	10	10
65+	5	5	5	**65+**	7	7	7
Age dependency ratio							
15-59			**101**	**15-59**			**96**
15-64			**90**	**15-64**			**83**
Sex ratio (males per 100 females)							
			114				**115**
Median age (years)							
Total	**18.8**	**19.1**	**18.9**	**Total**	**21.7**	**21.3**	**21.5**

Population growth 1996-2006			
	Males	Females	**Total**
Total	-184	-169	**-353**
Average annual	-18	-17	**-35**
Percentage difference %	-17.1	-17.9	**-17.5**
Average annual growth rate	-1.9	-2.0	**-1.9**

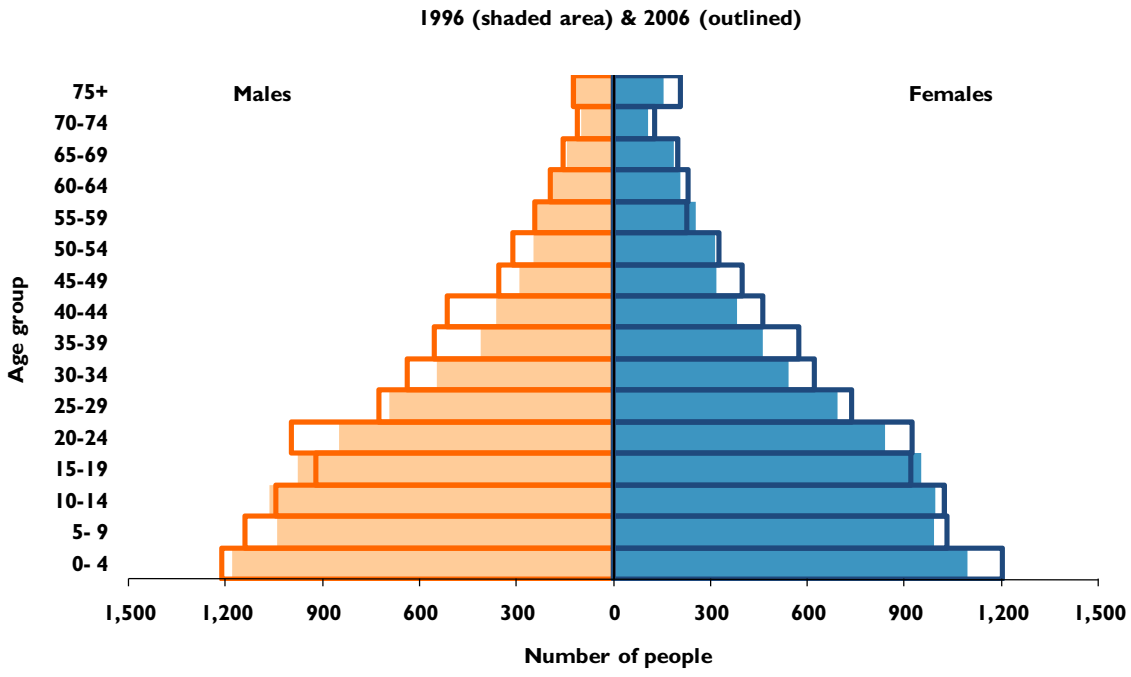
* 3 people who did not state their age were distributed proportionally by known ages in 2006. This may cause some basic tables to differ slightly from numbers shown here.

KOLOFO'OU

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



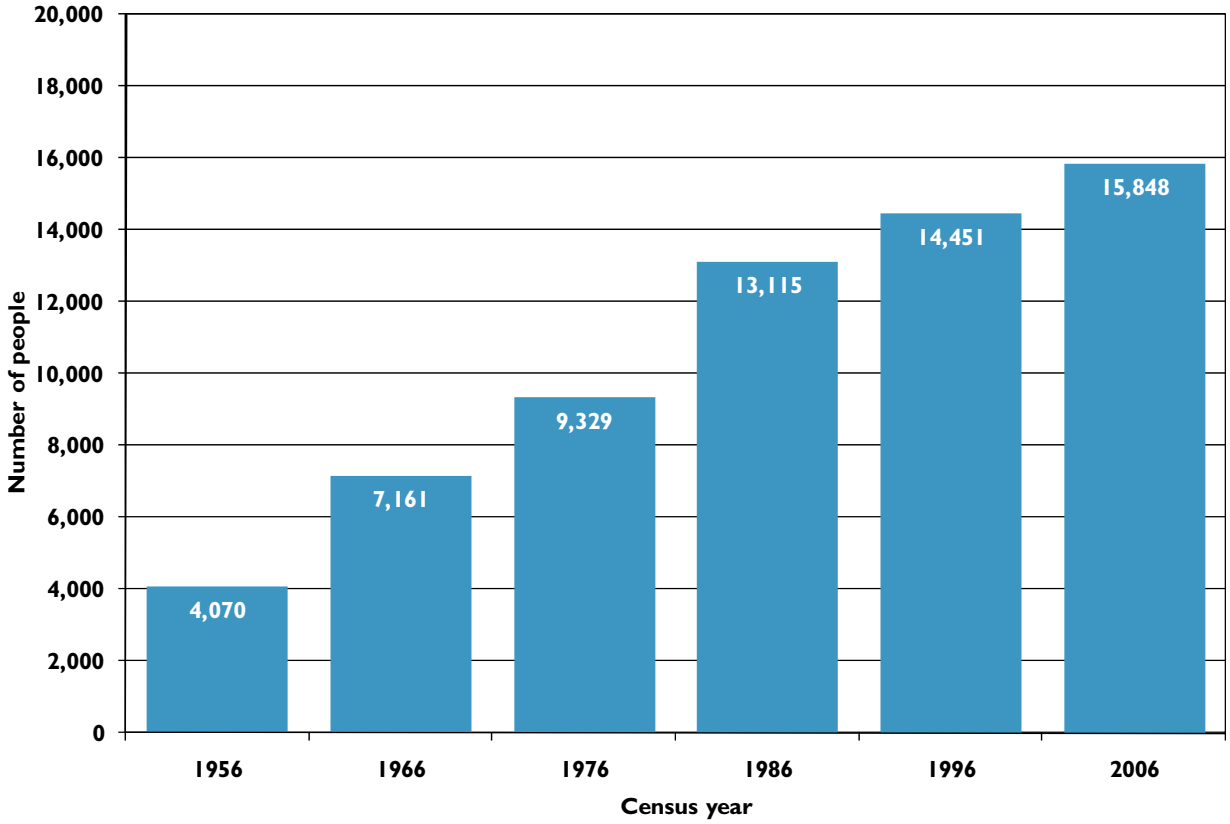
KOLOFO'OU

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	1,183	1,095	2,278	0-4	1,214	1,201	2,415
5-9	1,042	989	2,031	5-9	1,140	1,031	2,171
10-14	1,065	995	2,060	10-14	1,046	1,022	2,068
15-19	978	950	1,928	15-19	924	919	1,843
20-24	852	837	1,689	20-24	999	924	1,923
25-29	697	691	1,388	25-29	727	736	1,463
30-34	548	538	1,086	30-34	640	618	1,259
35-39	413	460	873	35-39	557	571	1,129
40-44	365	381	746	40-44	517	460	978
45-49	291	316	607	45-49	358	396	754
50-54	248	313	561	50-54	313	324	637
55-59	243	254	497	55-59	243	227	470
60-64	192	207	399	60-64	196	231	427
65-69	145	184	329	65-69	159	198	357
70-74	100	106	206	70-74	115	125	240
75+	120	155	275	75+	124	204	328
Total	8,482	8,471	**16,953**	Total	9,273	9,190	**18,463**
Population by broad age groups (in numbers)							
0-14	3,290	3,079	6,369	**0-14**	3,400	3,255	6,655
15-24	1,830	1,787	3,617	**15-24**	1,922	1,844	3,766
25-59	2,805	2,953	5,758	**25-59**	3,357	3,333	6,690
25-64	2,997	3,160	6,157	**25-64**	3,553	3,564	7,117
60+	557	652	1,209	**60+**	594	758	1,353
65+	365	445	810	**65+**	398	527	925
Population by broad age groups (in percentages)							
0-14	39	36	38	**0-14**	37	35	36
15-24	22	21	21	**15-24**	21	20	20
25-59	33	35	34	**25-59**	36	36	36
25-64	35	37	36	**25-64**	38	39	39
60+	7	8	7	**60+**	6	8	7
65+	4	5	5	**65+**	4	6	5
Age dependency ratio							
15-59			**81**	**15-59**			**77**
15-64			**73**	**15-64**			**70**
Sex ratio (males per 100 females)							
			100				**101**
Median age (years)							
Total	**19.9**	**21.2**	**20.5**	**Total**	**21.6**	**22.3**	**21.9**

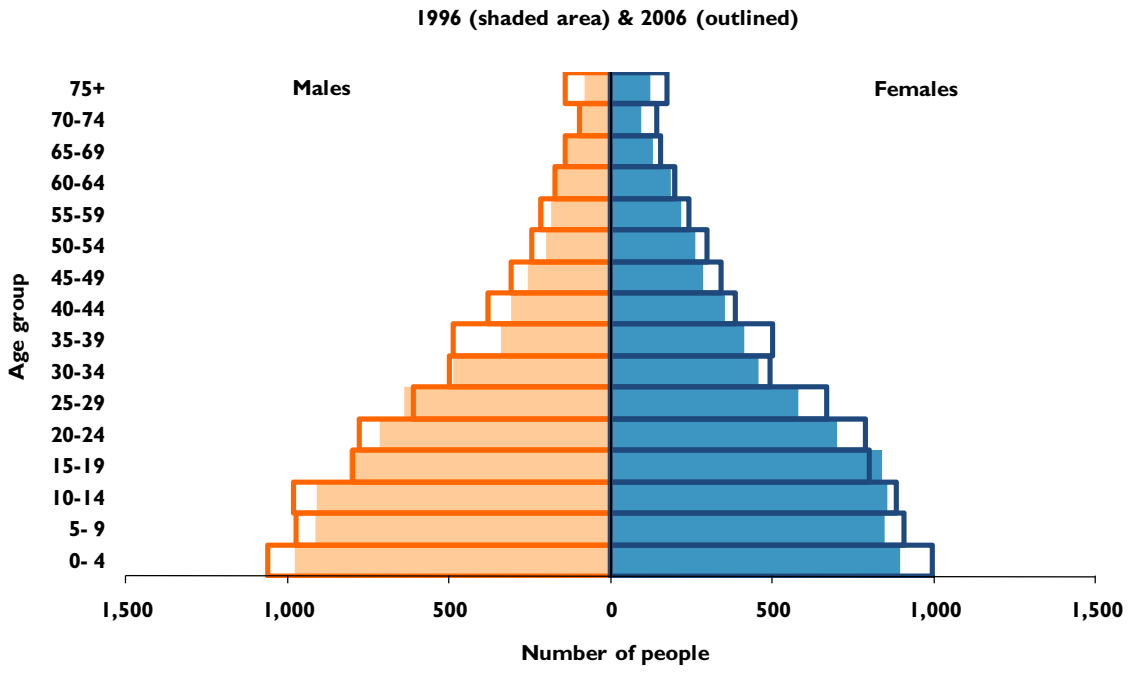
Population growth 1996-2006			
	Males	Females	**Total**
Total	791	719	**1,510**
Average annual	79	72	**151**
Percentage difference %	9.3	8.5	**8.9**
Average annual growth rate	0.9	0.8	**0.9**

KOLOMOTU'A

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



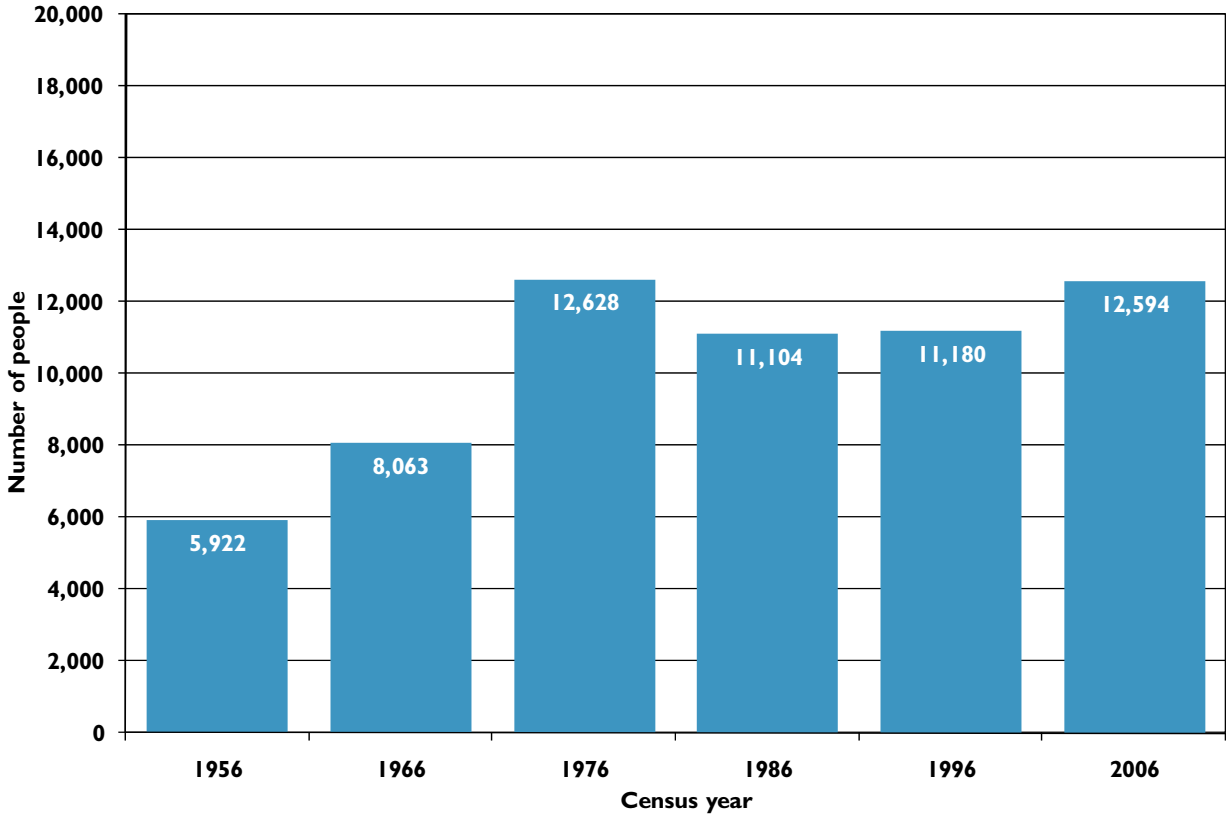
KOLOMOTU'A

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	979	893	1,872	0-4	1,062	992	2,054
5-9	914	845	1,759	5-9	973	908	1,881
10-14	912	854	1,766	10-14	983	883	1,866
15-19	811	840	1,651	15-19	797	797	1,594
20-24	717	698	1,415	20-24	778	785	1,563
25-29	639	579	1,218	25-29	610	669	1,279
30-34	489	456	945	30-34	498	491	989
35-39	339	414	753	35-39	487	499	986
40-44	310	351	661	40-44	382	386	768
45-49	255	284	539	45-49	307	340	647
50-54	200	260	460	50-54	247	295	542
55-59	186	216	402	55-59	218	239	457
60-64	174	187	361	60-64	172	197	370
65-69	133	131	264	65-69	140	155	296
70-74	89	92	181	70-74	99	143	242
75+	83	121	204	75+	141	173	315
Total	7,230	7,221	**14,451**	Total	7,894	7,954	**15,848**
Population by broad age groups (in numbers)							
0-14	2,805	2,592	5,397	**0-14**	3,017	2,784	5,801
15-24	1,528	1,538	3,066	**15-24**	1,575	1,582	3,157
25-59	2,418	2,560	4,978	**25-59**	2,748	2,919	5,667
25-64	2,592	2,747	5,339	**25-64**	2,921	3,116	6,037
60+	479	531	1,010	**60+**	553	669	1,222
65+	305	344	649	**65+**	381	472	853
Population by broad age groups (in percentages)							
0-14	39	36	37	**0-14**	38	35	37
15-24	21	21	21	**15-24**	20	20	20
25-59	33	35	34	**25-59**	35	37	36
25-64	36	38	37	**25-64**	37	39	38
60+	7	7	7	**60+**	7	8	8
65+	4	5	4	**65+**	5	6	5
Age dependency ratio							
15-59			**80**	**15-59**			**80**
15-64			**72**	**15-64**			**72**
Sex ratio (males per 100 females)							
			100				**99**
Median age (years)							
Total	**20.0**	**21.3**	**20.6**	**Total**	**20.9**	**22.5**	**21.7**

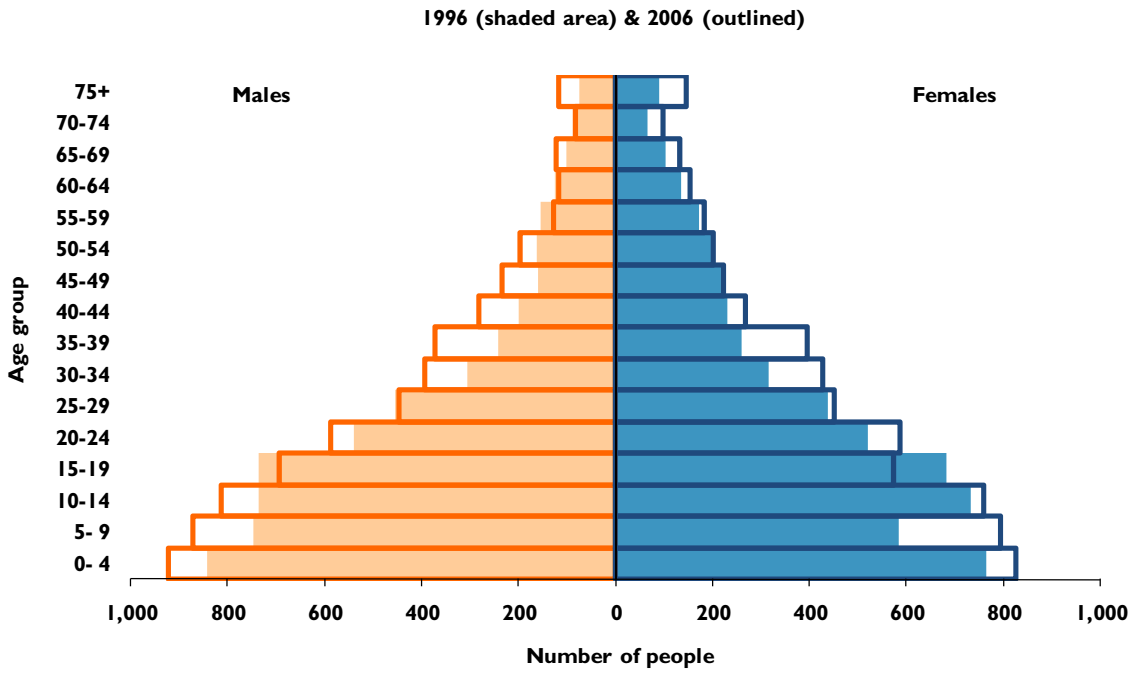
Population growth 1996-2006			
	Males	Females	**Total**
Total	664	733	**1,397**
Average annual	66	73	**140**
Percentage difference %	9.2	10.2	**9.7**
Average annual growth rate	0.9	1.0	**0.9**

VAINI

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



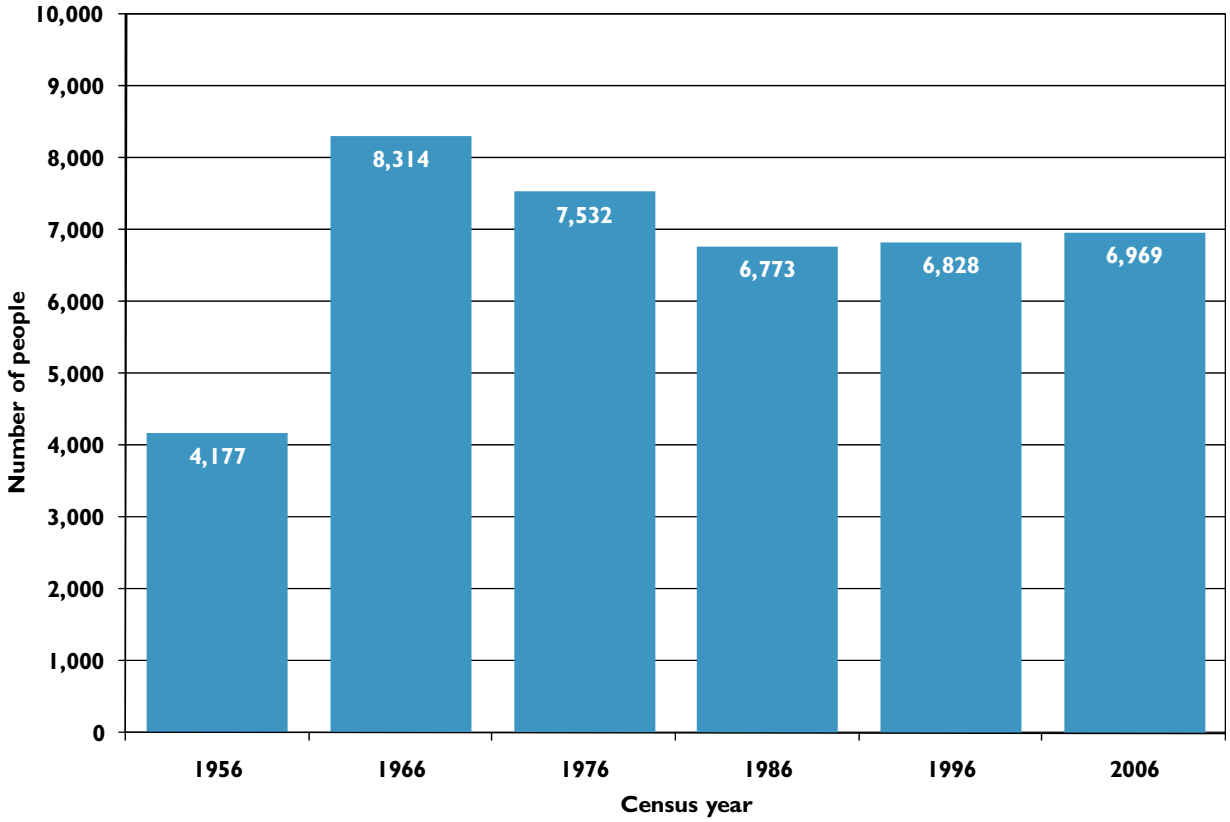
VAINI

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	844	764	1,608	0-4	922	824	1,746
5-9	749	582	1,331	5-9	872	792	1,664
10-14	737	731	1,468	10-14	815	757	1,572
15-19	737	681	1,418	15-19	696	572	1,268
20-24	540	518	1,058	20-24	589	585	1,175
25-29	456	438	894	25-29	448	449	897
30-34	308	315	623	30-34	394	426	820
35-39	243	258	501	35-39	374	395	769
40-44	200	231	431	40-44	283	267	550
45-49	160	216	376	45-49	235	222	457
50-54	163	202	365	50-54	198	200	398
55-59	156	172	328	55-59	129	181	310
60-64	125	134	259	60-64	118	153	271
65-69	102	103	205	65-69	123	131	254
70-74	86	65	151	70-74	83	97	180
75+	75	89	164	75+	117	145	262
Total	5,681	5,499	**11,180**	Total	6,397	6,197	**12,594**
Population by broad age groups (in numbers)							
0-14	2,330	2,077	4,407	**0-14**	2,608	2,373	4,981
15-24	1,277	1,199	2,476	**15-24**	1,285	1,157	2,442
25-59	1,686	1,832	3,518	**25-59**	2,063	2,140	4,203
25-64	1,811	1,966	3,777	**25-64**	2,181	2,293	4,474
60+	388	391	779	**60+**	441	526	967
65+	263	257	520	**65+**	323	373	696
Population by broad age groups (in percentages)							
0-14	41	38	39	**0-14**	41	38	40
15-24	22	22	22	**15-24**	20	19	19
25-59	30	33	31	**25-59**	32	35	33
25-64	32	36	34	**25-64**	34	37	36
60+	7	7	7	**60+**	7	8	8
65+	5	5	5	**65+**	5	6	6
Age dependency ratio							
15-59			**87**	**15-59**			**90**
15-64			**79**	**15-64**			**82**
Sex ratio (males per 100 females)							
			103				**103**
Median age (years)							
Total	**18.5**	**19.9**	**19.2**	**Total**	**19.2**	**21.3**	**20.2**

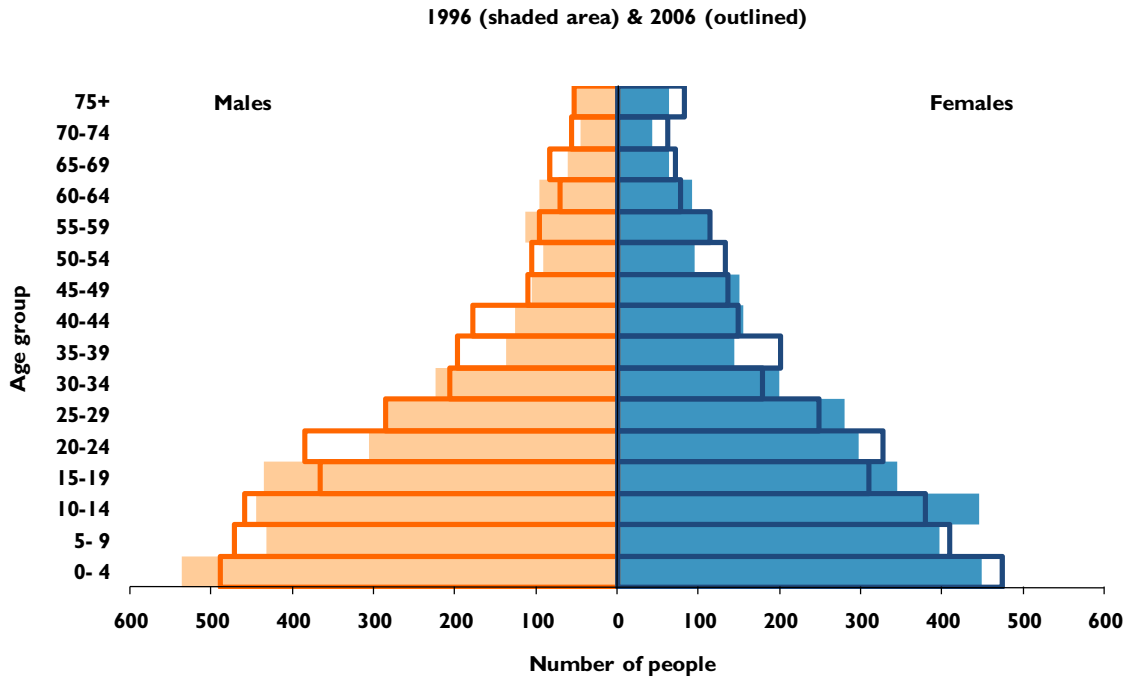
Population growth 1996-2006			
	Males	Females	**Total**
Total	716	698	**1,414**
Average annual	72	70	**141**
Percentage difference %	12.6	12.7	**12.6**
Average annual growth rate	1.2	1.2	**1.2**

TATAKAMOTONGA

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



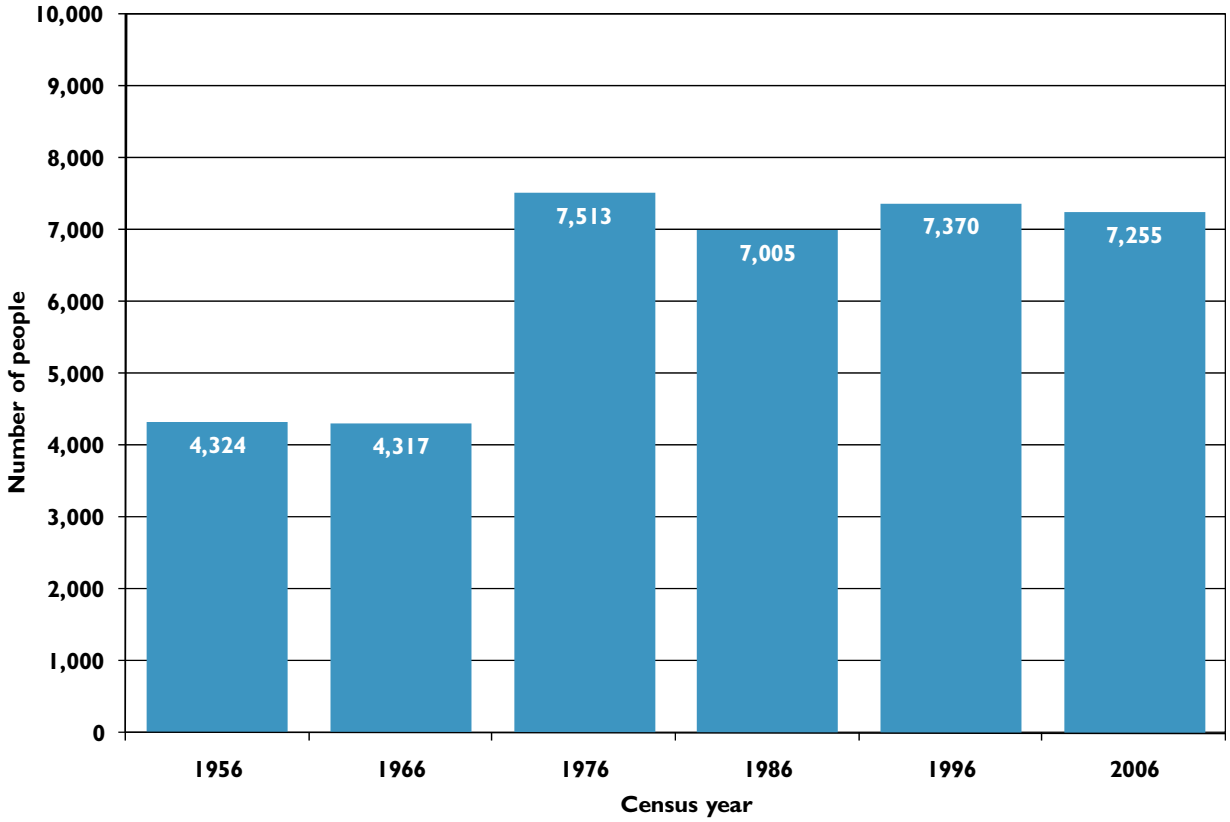
TATAKAMOTONGA

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	537	448	985	0-4	490	473	963
5-9	433	396	829	5-9	472	409	881
10-14	446	445	891	10-14	459	379	838
15-19	436	344	780	15-19	367	310	677
20-24	307	297	604	20-24	386	327	713
25-29	287	279	566	25-29	285	248	533
30-34	224	199	423	30-34	207	178	385
35-39	137	143	280	35-39	197	201	398
40-44	127	154	281	40-44	179	149	328
45-49	105	150	255	45-49	110	136	247
50-54	92	95	187	50-54	105	133	239
55-59	113	116	229	55-59	96	114	210
60-64	97	91	188	60-64	70	77	147
65-69	61	63	124	65-69	84	71	155
70-74	45	43	88	70-74	56	62	118
75+	55	63	118	75+	53	82	135
Total	3,502	3,326	**6,828**	Total	3,618	3,351	**6,969**
Population by broad age groups (in numbers)							
0-14	1,416	1,289	2,705	**0-14**	1,421	1,262	2,683
15-24	743	641	1,384	**15-24**	752	637	1,390
25-59	1,085	1,136	2,221	**25-59**	1,180	1,160	2,340
25-64	1,182	1,227	2,409	**25-64**	1,251	1,237	2,487
60+	258	260	518	**60+**	264	292	556
65+	161	169	330	**65+**	194	215	409
Population by broad age groups (in percentages)							
0-14	40	39	40	**0-14**	39	38	38
15-24	21	19	20	**15-24**	21	19	20
25-59	31	34	33	**25-59**	33	35	34
25-64	34	37	35	**25-64**	35	37	36
60+	7	8	8	**60+**	7	9	8
65+	5	5	5	**65+**	5	6	6
Age dependency ratio							
15-59			**89**	**15-59**			**87**
15-64			**80**	**15-64**			**80**
Sex ratio (males per 100 females)							
			105				**108**
Median age (years)							
Total	**18.8**	**20.5**	**19.5**	**Total**	**20.3**	**21.6**	**20.9**

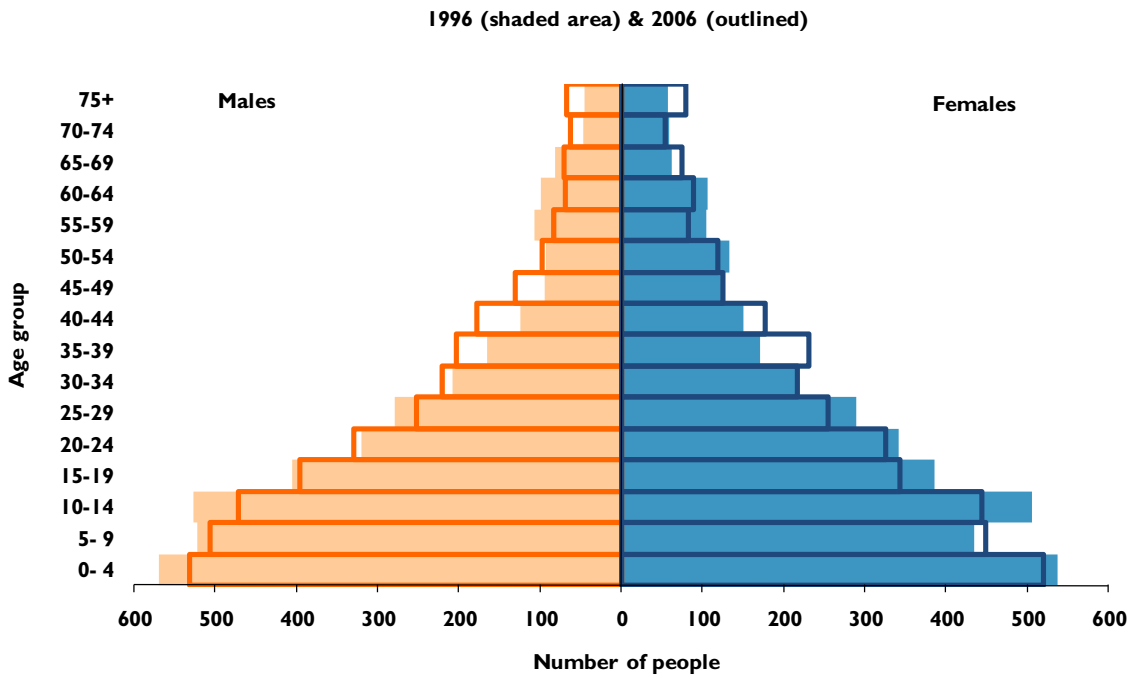
Population growth 1996-2006			
	Males	Females	**Total**
Total	116	25	**141**
Average annual	12	2	**14**
Percentage difference %	3.3	0.8	**2.1**
Average annual growth rate	0.3	0.1	**0.2**

LAPAHA

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



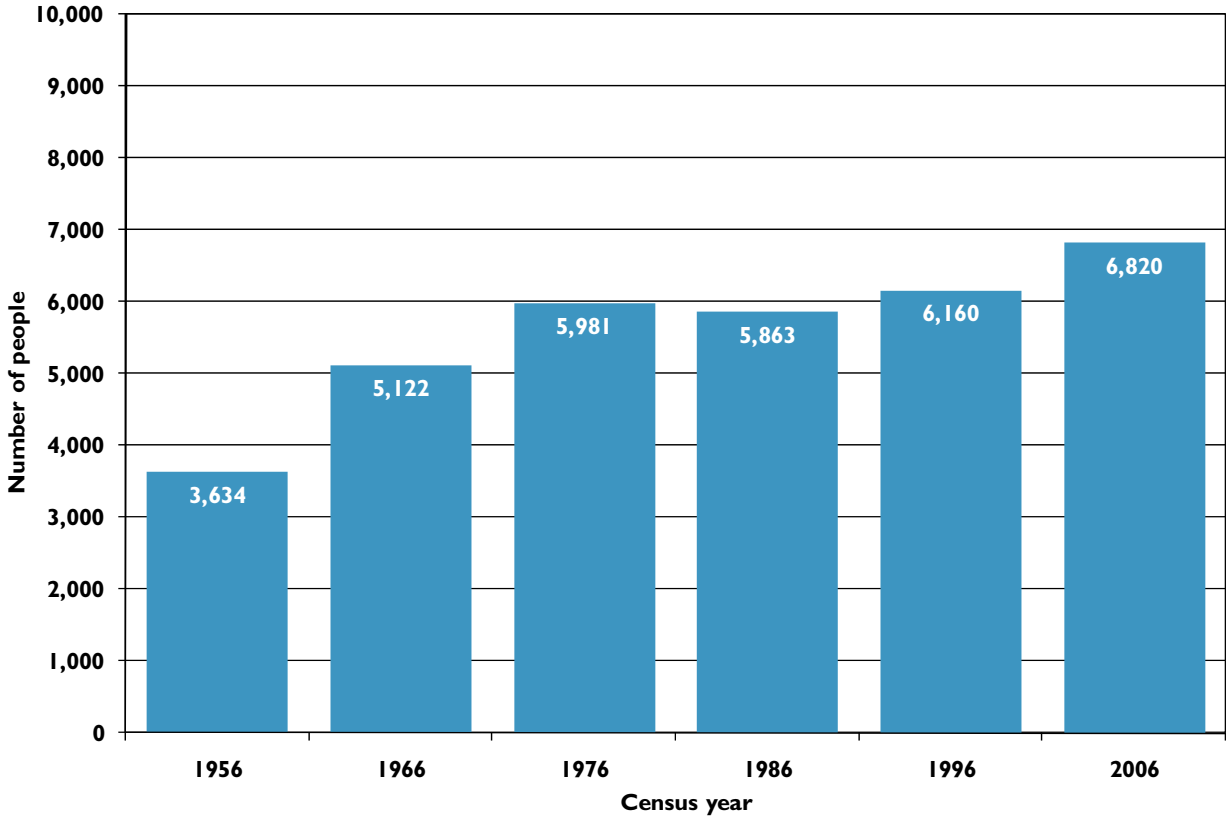
LAPAHA

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	570	537	1,107	0-4	532	519	1,051
5-9	523	434	957	5-9	506	449	955
10-14	528	505	1,033	10-14	472	444	916
15-19	406	386	792	15-19	396	343	739
20-24	320	341	661	20-24	330	325	655
25-29	280	289	569	25-29	252	254	506
30-34	209	217	426	30-34	221	217	438
35-39	165	171	336	35-39	203	230	433
40-44	125	150	275	40-44	178	177	355
45-49	94	123	217	45-49	131	125	256
50-54	93	133	226	50-54	98	118	216
55-59	108	104	212	55-59	84	82	166
60-64	100	106	206	60-64	70	88	158
65-69	82	62	144	65-69	71	74	145
70-74	48	59	107	70-74	63	54	117
75+	45	57	102	75+	68	79	147
Total	3,696	3,674	**7,370**	Total	3,676	3,579	**7,255**
Population by broad age groups (in numbers)							
0-14	1,621	1,476	3,097	**0-14**	1,510	1,412	2,923
15-24	726	727	1,453	**15-24**	726	668	1,394
25-59	1,074	1,187	2,261	**25-59**	1,167	1,203	2,371
25-64	1,174	1,293	2,467	**25-64**	1,237	1,291	2,529
60+	275	284	559	**60+**	272	295	567
65+	175	178	353	**65+**	202	207	409
Population by broad age groups (in percentages)							
0-14	44	40	42	**0-14**	41	39	40
15-24	20	20	20	**15-24**	20	19	19
25-59	29	32	31	**25-59**	32	34	33
25-64	32	35	33	**25-64**	34	36	35
60+	7	8	8	**60+**	7	8	8
65+	5	5	5	**65+**	5	6	6
Age dependency ratio							
15-59			**98**	**15-59**			**93**
15-64			**88**	**15-64**			**85**
Sex ratio (males per 100 females)							
			101				**103**
Median age (years)							
Total	**17.8**	**19.7**	**18.7**	**Total**	**19.1**	**20.5**	**19.8**

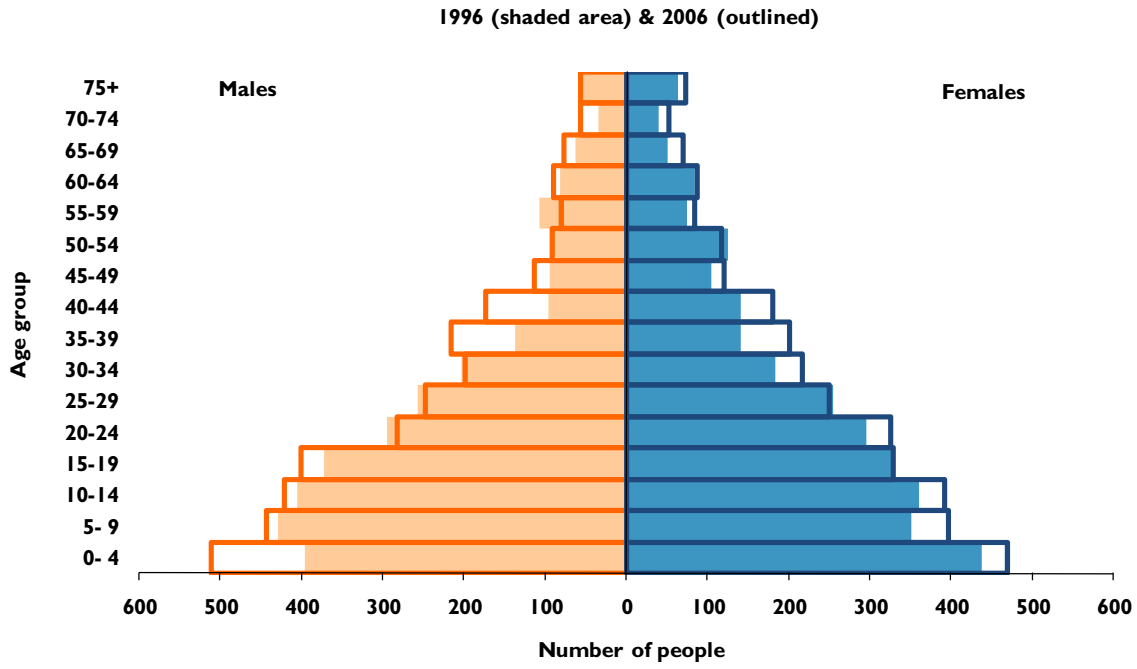
Population growth 1996-2006			
	Males	Females	**Total**
Total	-20	-95	**-115**
Average annual	-2	-10	**-12**
Percentage difference %	-0.5	-2.6	**-1.6**
Average annual growth rate	-0.1	-0.3	**-0.2**

NUKUNUKU

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



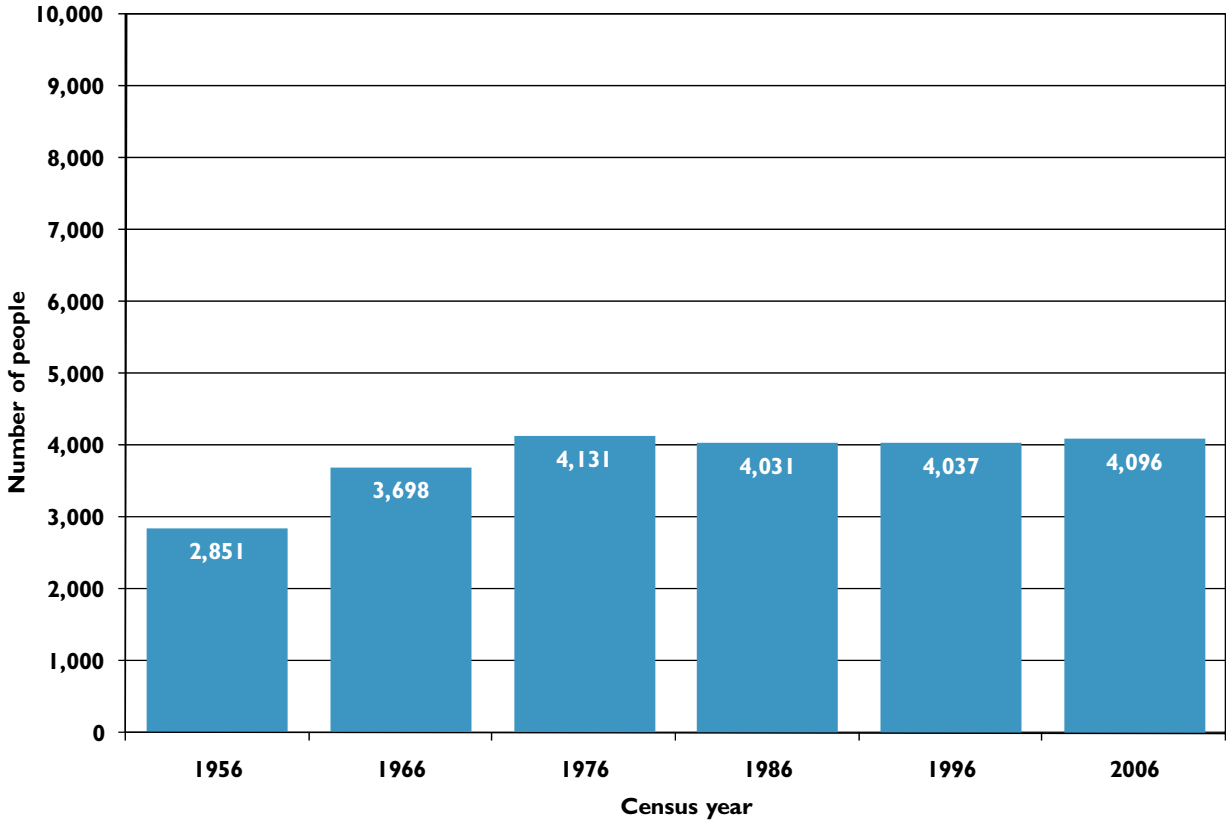
NUKUNUKU

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	397	437	834	0-4	512	469	981
5-9	430	351	781	5-9	444	396	840
10-14	405	360	765	10-14	422	392	814
15-19	373	329	702	15-19	401	328	729
20-24	296	296	592	20-24	283	325	608
25-29	257	254	511	25-29	248	249	497
30-34	203	183	386	30-34	199	216	415
35-39	138	141	279	35-39	216	201	417
40-44	97	140	237	40-44	174	180	354
45-49	95	105	200	45-49	113	120	234
50-54	94	124	218	50-54	91	117	208
55-59	108	75	183	55-59	80	83	163
60-64	82	83	165	60-64	89	87	176
65-69	63	51	114	65-69	77	69	146
70-74	35	40	75	70-74	56	52	108
75+	55	63	118	75+	56	72	128
Total	3,128	3,032	**6,160**	Total	3,462	3,358	**6,820**
Population by broad age groups (in numbers)							
0-14	1,232	1,148	2,380	**0-14**	1,378	1,258	2,635
15-24	669	625	1,294	**15-24**	684	653	1,337
25-59	992	1,022	2,014	**25-59**	1,122	1,167	2,288
25-64	1,074	1,105	2,179	**25-64**	1,211	1,254	2,465
60+	235	237	472	**60+**	279	280	559
65+	153	154	307	**65+**	190	193	383
Population by broad age groups (in percentages)							
0-14	39	38	39	**0-14**	40	37	39
15-24	21	21	21	**15-24**	20	19	20
25-59	32	34	33	**25-59**	32	35	34
25-64	34	36	35	**25-64**	35	37	36
60+	8	8	8	**60+**	8	8	8
65+	5	5	5	**65+**	5	6	6
Age dependency ratio							
15-59			**86**	**15-59**			**88**
15-64			**77**	**15-64**			**79**
Sex ratio (males per 100 females)							
			103				**103**
Median age (years)							
Total	**19.5**	**20.7**	**20.0**	**Total**	**19.4**	**21.4**	**20.4**

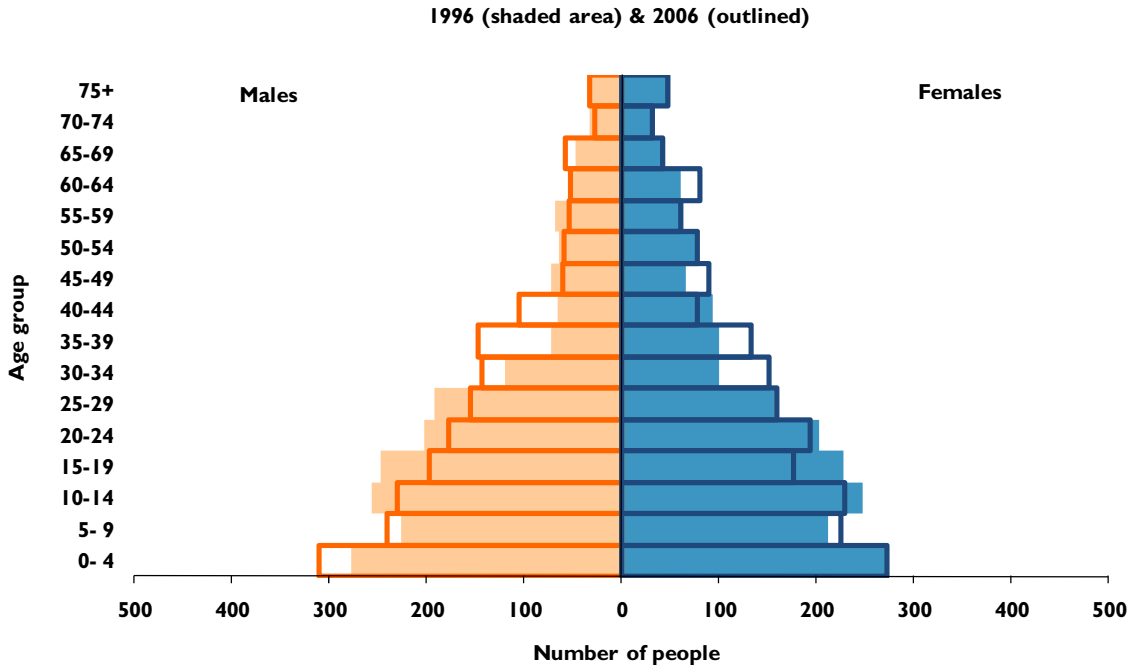
Population growth 1996-2006			
	Males	Females	**Total**
Total	334	326	**660**
Average annual	33	33	**66**
Percentage difference %	10.7	10.8	**10.7**
Average annual growth rate	1.0	1.0	**1.0**

KOLOVAI

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



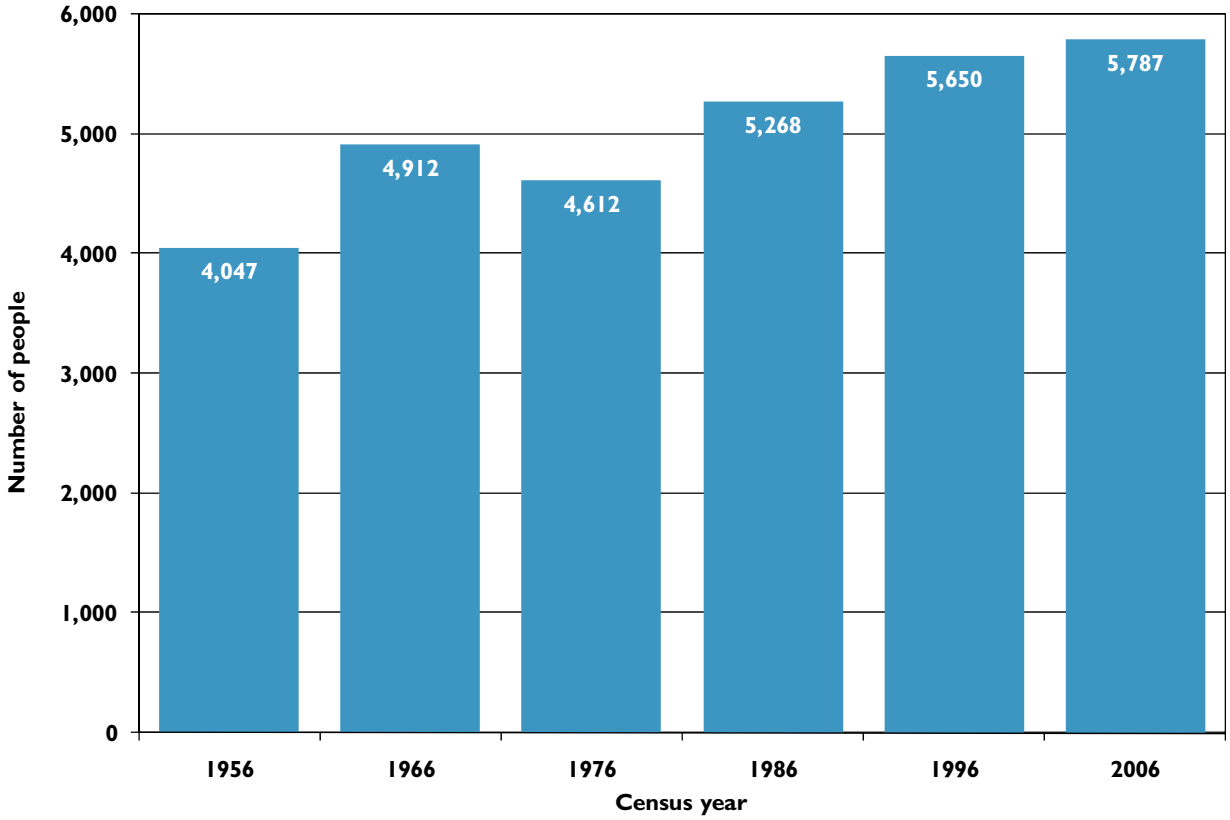
KOLOVAI

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	277	274	551	0-4	311	273	584
5-9	226	212	438	5-9	240	225	465
10-14	257	248	505	10-14	230	229	459
15-19	248	227	475	15-19	197	176	373
20-24	202	202	404	20-24	177	193	370
25-29	192	156	348	25-29	155	159	314
30-34	120	100	220	30-34	143	151	294
35-39	72	100	172	35-39	147	133	280
40-44	66	93	159	40-44	105	77	182
45-49	73	66	139	45-49	61	90	151
50-54	65	76	141	50-54	59	77	136
55-59	68	63	131	55-59	54	60	114
60-64	52	60	112	60-64	52	80	132
65-69	48	45	93	65-69	58	42	100
70-74	33	34	67	70-74	27	31	58
75+	35	47	82	75+	33	48	81
Total	2,034	2,003	**4,037**	Total	2,052	2,044	**4,096**
Population by broad age groups (in numbers)							
0-14	760	734	1,494	**0-14**	782	727	1,509
15-24	450	429	879	**15-24**	375	369	744
25-59	656	654	1,310	**25-59**	725	747	1,472
25-64	708	714	1,422	**25-64**	778	827	1,605
60+	168	186	354	**60+**	170	201	371
65+	116	126	242	**65+**	118	121	239
Population by broad age groups (in percentages)							
0-14	37	37	37	**0-14**	38	36	37
15-24	22	21	22	**15-24**	18	18	18
25-59	32	33	32	**25-59**	35	37	36
25-64	35	36	35	**25-64**	38	40	39
60+	8	9	9	**60+**	8	10	9
65+	6	6	6	**65+**	6	6	6
Age dependency ratio							
15-59			**84**	**15-59**			**85**
15-64			**75**	**15-64**			**74**
Sex ratio (males per 100 females)							
			102				**100**
Median age (years)							
Total	**20.2**	**21.0**	**20.6**	**Total**	**21.3**	**23.1**	**22.2**

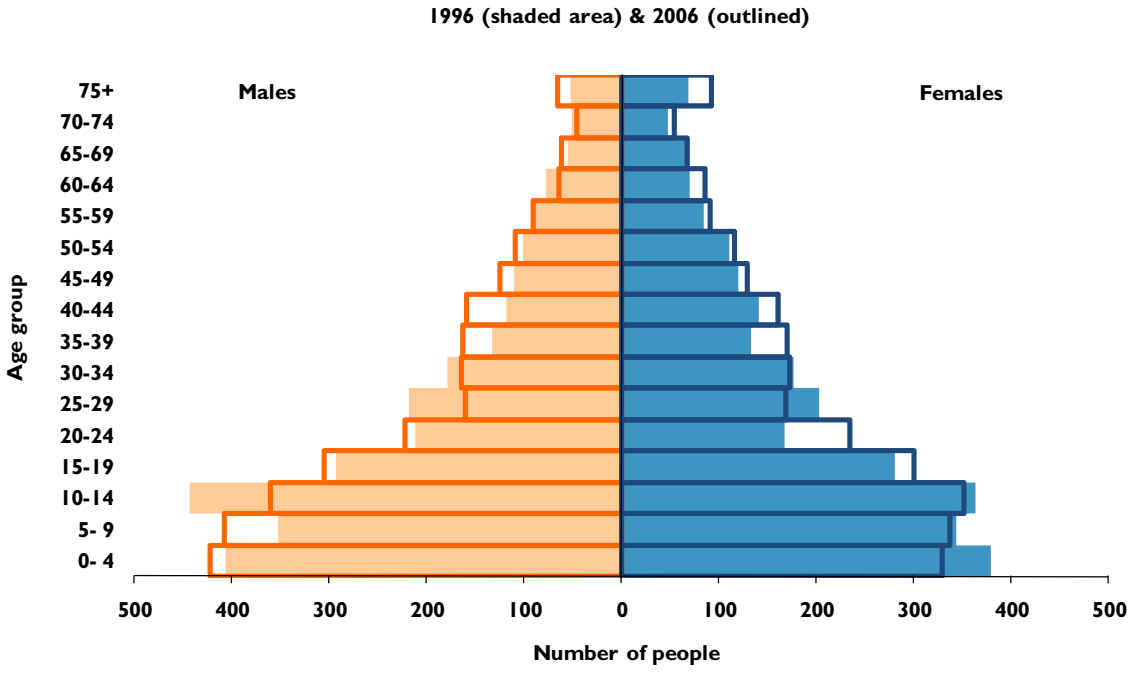
Population growth 1996-2006			
	Males	Females	**Total**
Total	18	41	**59**
Average annual	2	4	**6**
Percentage difference %	0.9	2.0	**1.5**
Average annual growth rate	0.1	0.2	**0.1**

NEIAFU

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



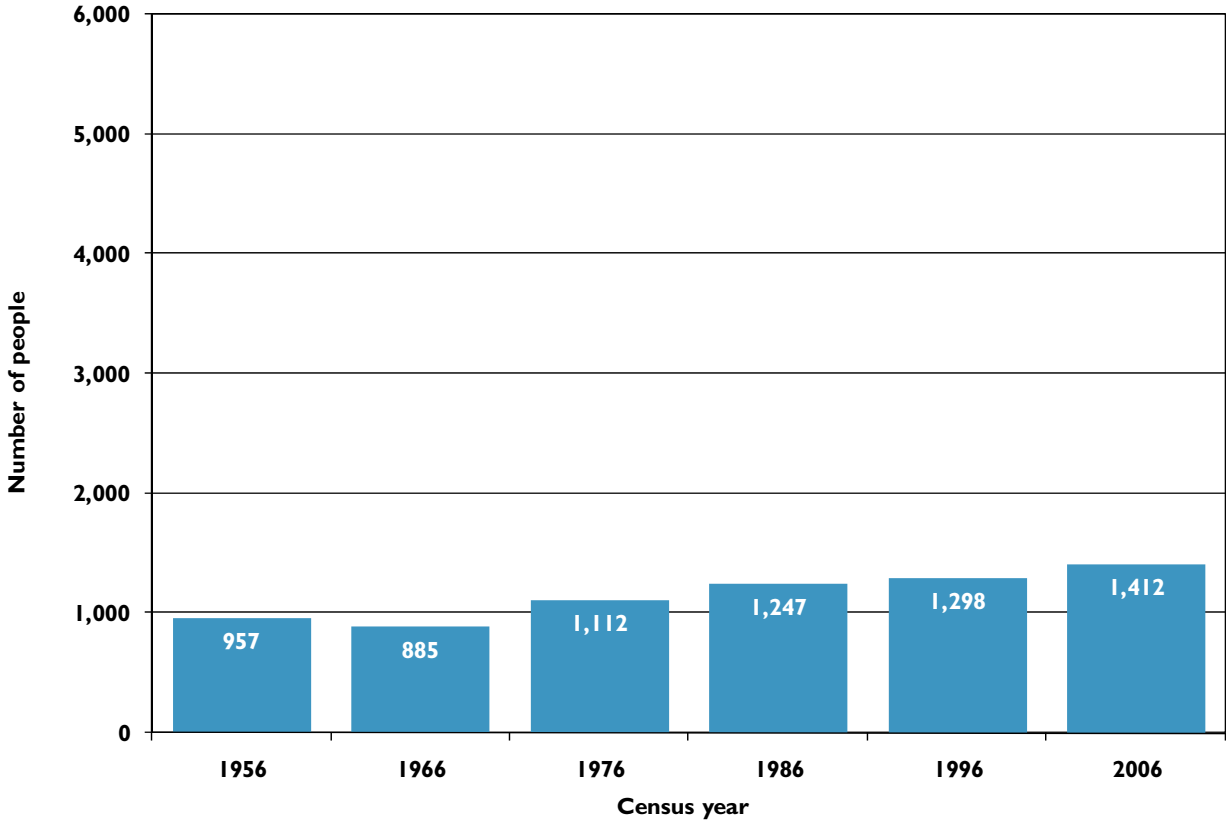
NEIAFU

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	406	379	785	0-4	422	329	751
5-9	353	343	696	5-9	408	337	745
10-14	444	363	807	10-14	361	351	712
15-19	294	280	574	15-19	305	300	605
20-24	212	167	379	20-24	222	234	456
25-29	218	202	420	25-29	161	168	329
30-34	179	176	355	30-34	164	172	336
35-39	133	133	266	35-39	163	170	333
40-44	119	141	260	40-44	159	161	320
45-49	111	120	231	45-49	125	129	254
50-54	101	111	212	50-54	109	116	225
55-59	89	84	173	55-59	91	91	182
60-64	78	70	148	60-64	65	85	150
65-69	55	70	125	65-69	62	67	129
70-74	51	47	98	70-74	46	54	100
75+	53	68	121	75+	66	92	158
Total	2,896	2,754	**5,650**	Total	2,929	2,858	**5,787**
Population by broad age groups (in numbers)							
0-14	1,203	1,085	2,288	**0-14**	1,191	1,018	2,209
15-24	506	447	953	**15-24**	527	534	1,061
25-59	950	967	1,917	**25-59**	972	1,008	1,980
25-64	1,028	1,037	2,065	**25-64**	1,037	1,093	2,130
60+	237	255	492	**60+**	239	298	537
65+	159	185	344	**65+**	174	213	387
Population by broad age groups (in percentages)							
0-14	42	39	40	**0-14**	41	36	38
15-24	17	16	17	**15-24**	18	19	18
25-59	33	35	34	**25-59**	33	35	34
25-64	35	38	37	**25-64**	35	38	37
60+	8	9	9	**60+**	8	10	9
65+	5	7	6	**65+**	6	7	7
Age dependency ratio							
15-59			**97**	**15-59**			**90**
15-64			**87**	**15-64**			**81**
Sex ratio (males per 100 females)							
			105				**102**
Median age (years)							
Total	**19.2**	**20.4**	**19.7**	**Total**	**19.5**	**22.4**	**20.9**

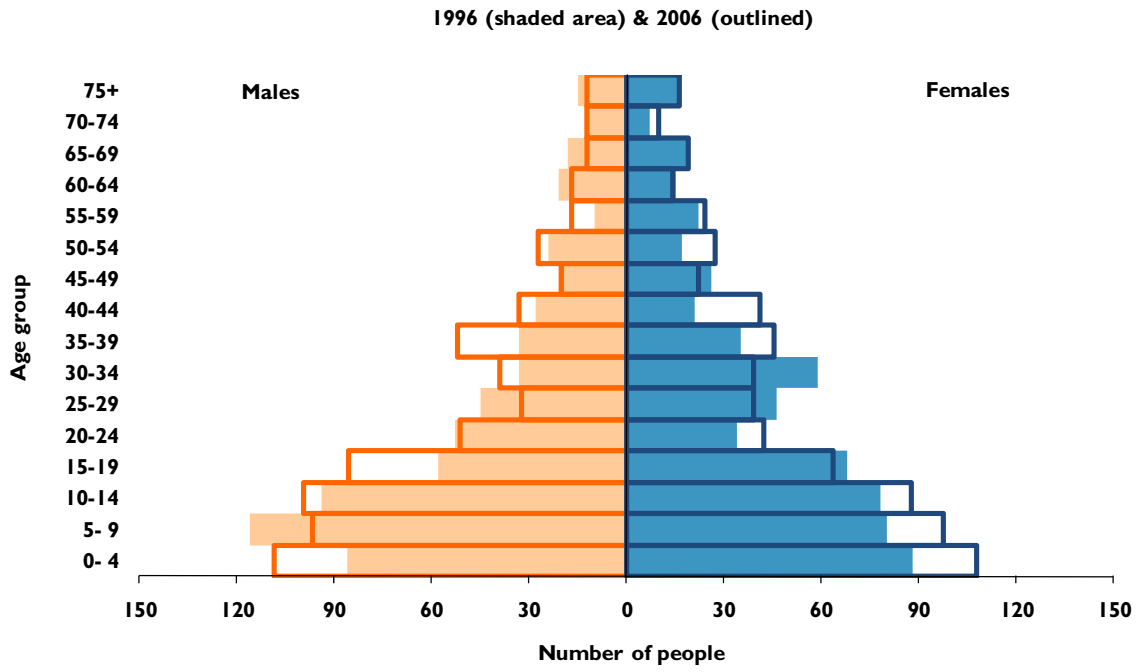
Population growth 1996-2006			
	Males	Females	**Total**
Total	33	104	**137**
Average annual	3	10	**14**
Percentage difference %	1.1	3.8	**2.4**
Average annual growth rate	0.1	0.4	**0.2**

PANGAIMOTU

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



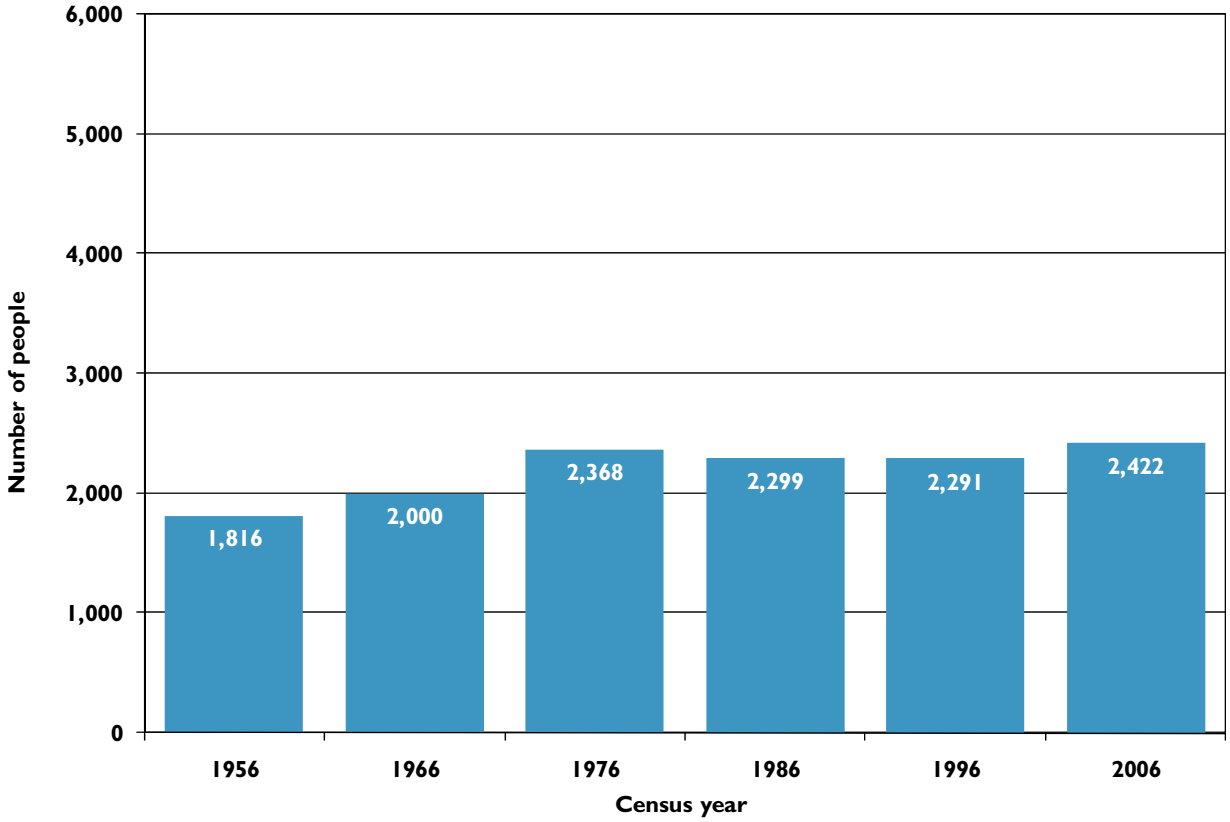
PANGAIMOTU

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	86	88	174	0-4	109	108	216
5-9	116	80	196	5-9	97	98	194
10-14	94	78	172	10-14	100	88	187
15-19	58	68	126	15-19	85	63	149
20-24	53	34	87	20-24	51	42	94
25-29	45	46	91	25-29	32	39	71
30-34	33	59	92	30-34	39	39	78
35-39	33	35	68	35-39	52	45	98
40-44	28	21	49	40-44	33	41	74
45-49	20	26	46	45-49	20	22	42
50-54	24	17	41	50-54	27	27	54
55-59	10	22	32	55-59	17	24	41
60-64	21	15	36	60-64	17	14	31
65-69	18	19	37	65-69	12	19	31
70-74	13	7	20	70-74	12	10	22
75+	15	16	31	75+	12	16	28
Total	667	631	**1,298**	Total	716	696	**1,412**
Population by broad age groups (in numbers)							
0-14	296	246	542	**0-14**	305	293	597
15-24	111	102	213	**15-24**	137	106	242
25-59	193	226	419	**25-59**	221	238	460
25-64	214	241	455	**25-64**	238	252	491
60+	67	57	124	**60+**	53	59	113
65+	46	42	88	**65+**	36	45	81
Population by broad age groups (in percentages)							
0-14	44	39	42	**0-14**	43	42	42
15-24	17	16	16	**15-24**	19	15	17
25-59	29	36	32	**25-59**	31	34	33
25-64	32	38	35	**25-64**	33	36	35
60+	10	9	10	**60+**	7	9	8
65+	7	7	7	**65+**	5	7	6
Age dependency ratio							
15-59			**105**	**15-59**			**101**
15-64			**94**	**15-64**			**93**
Sex ratio (males per 100 females)							
			106				**103**
Median age (years)							
Total	**18.3**	**20.3**	**19.3**	**Total**	**18.1**	**19.4**	**18.7**

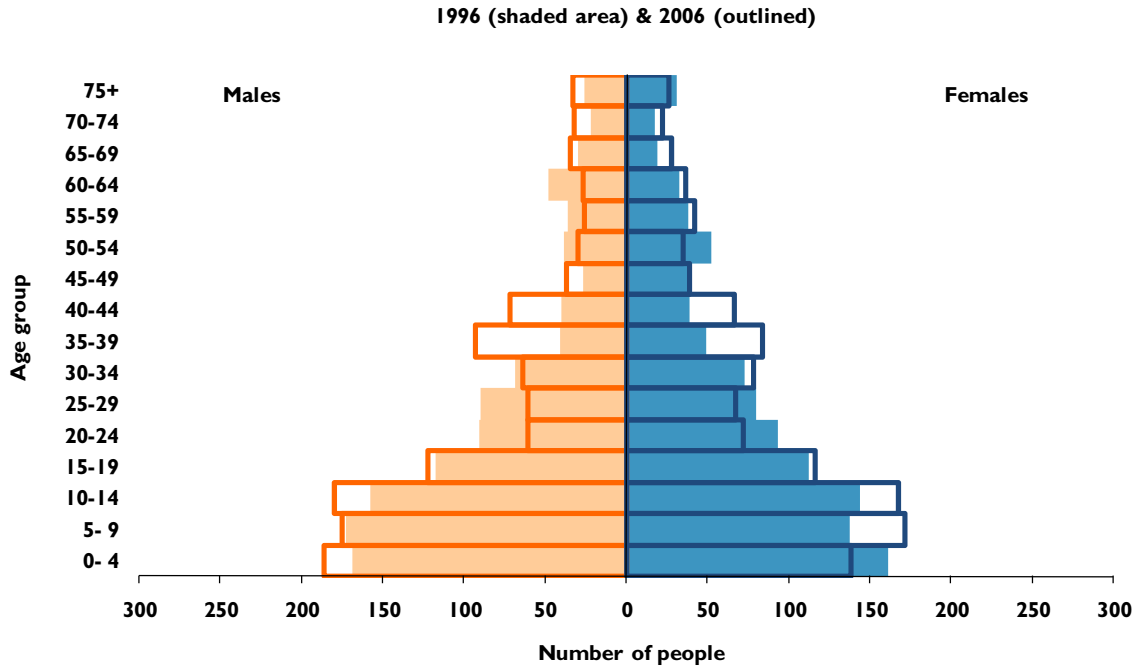
Population growth 1996-2006			
	Males	Females	**Total**
Total	49	65	**114**
Average annual	5	7	**11**
Percentage difference %	7.3	10.3	**8.8**
Average annual growth rate	0.7	1.0	**0.8**

HAHAKE

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



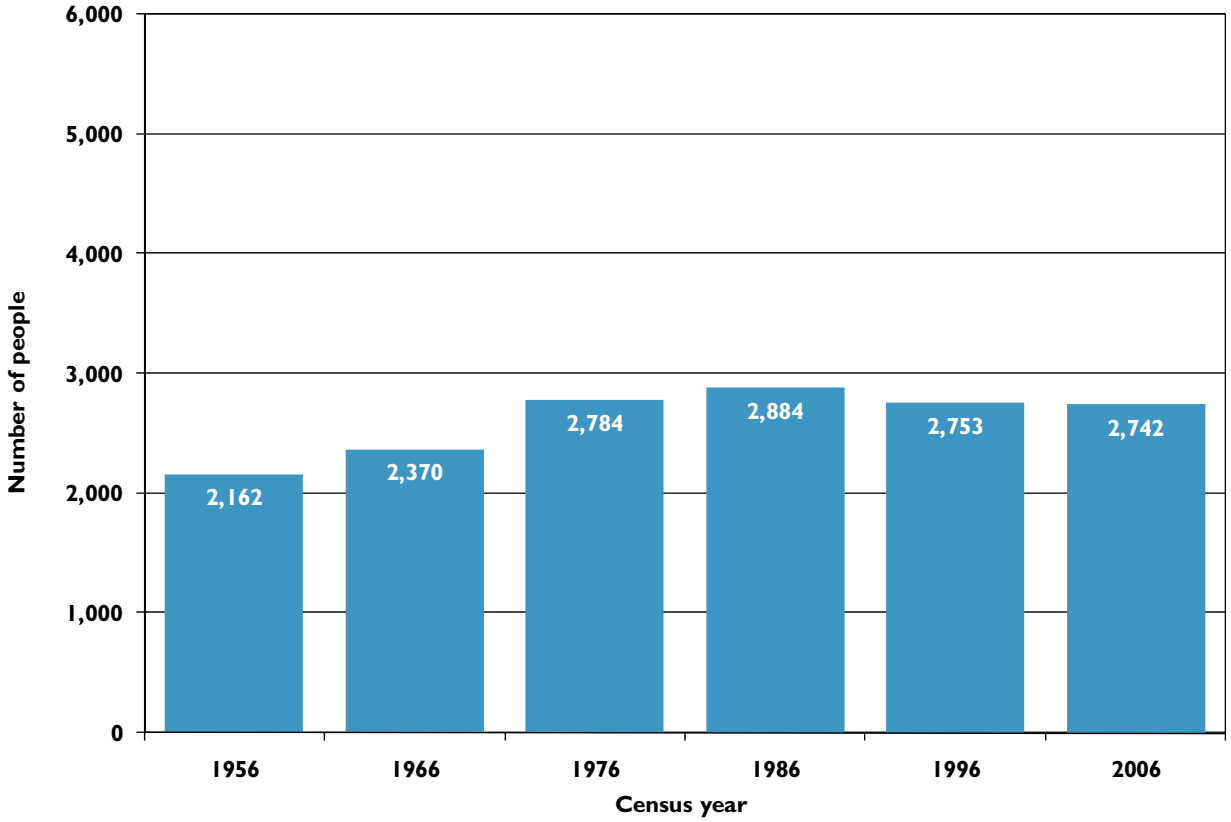
HAHAKE

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	169	161	330	0-4	186	138	324
5-9	173	137	310	5-9	175	171	346
10-14	158	144	302	10-14	180	167	347
15-19	118	112	230	15-19	122	116	238
20-24	91	93	184	20-24	61	72	133
25-29	90	80	170	25-29	61	67	128
30-34	69	73	142	30-34	64	78	142
35-39	41	49	90	35-39	93	84	177
40-44	40	39	79	40-44	72	66	138
45-49	27	37	64	45-49	37	39	76
50-54	39	52	91	50-54	30	35	65
55-59	36	38	74	55-59	26	42	68
60-64	48	32	80	60-64	27	36	63
65-69	30	19	49	65-69	35	28	63
70-74	22	17	39	70-74	32	22	54
75+	26	31	57	75+	33	26	59
Total	1,177	1,114	**2,291**	Total	1,234	1,188	**2,422**
Population by broad age groups (in numbers)							
0-14	500	442	942	**0-14**	541	476	1,017
15-24	209	205	414	**15-24**	183	188	371
25-59	342	368	710	**25-59**	383	411	794
25-64	390	400	790	**25-64**	410	447	857
60+	126	99	225	**60+**	127	112	239
65+	78	67	145	**65+**	100	76	176
Population by broad age groups (in percentages)							
0-14	42	40	41	**0-14**	44	40	42
15-24	18	18	18	**15-24**	15	16	15
25-59	29	33	31	**25-59**	31	35	33
25-64	33	36	34	**25-64**	33	38	35
60+	11	9	10	**60+**	10	9	10
65+	7	6	6	**65+**	8	6	7
Age dependency ratio							
15-59			**104**	**15-59**			**108**
15-64			**90**	**15-64**			**97**
Sex ratio (males per 100 females)							
			106				**104**
Median age (years)							
Total	**18.8**	**20.2**	**19.4**	**Total**	**18.1**	**20.1**	**19.1**

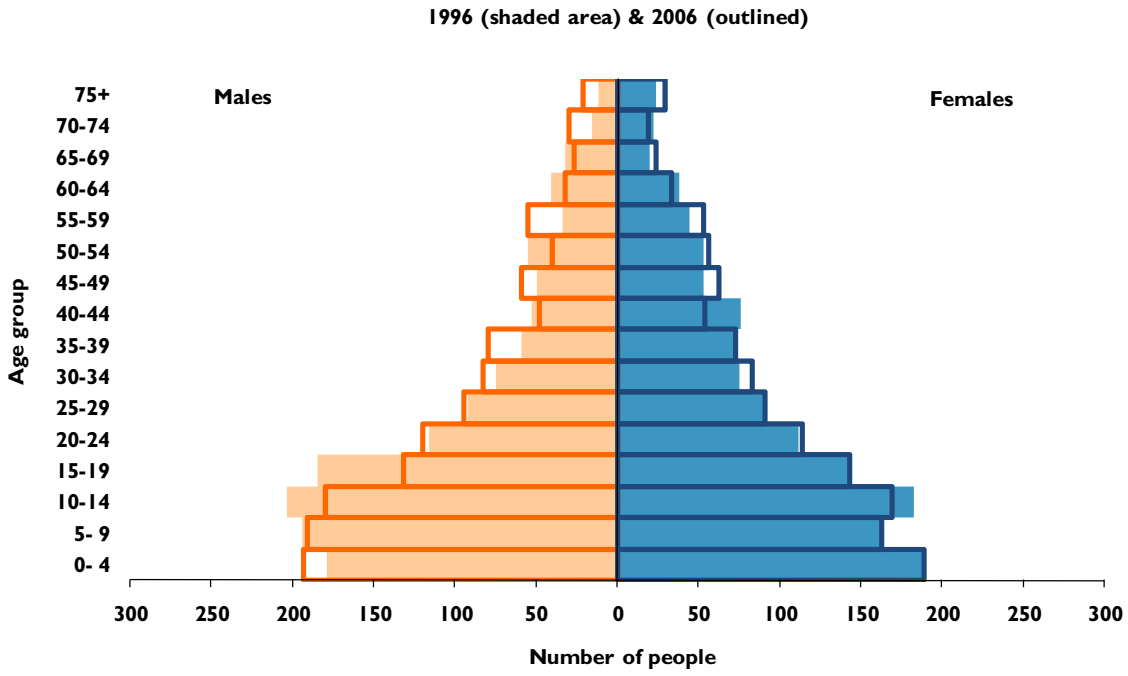
Population growth 1996-2006			
	Males	Females	**Total**
Total	57	74	**131**
Average annual	6	7	**13**
Percentage difference %	4.8	6.6	**5.7**
Average annual growth rate	0.5	0.6	**0.6**

LEIMATU'A

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



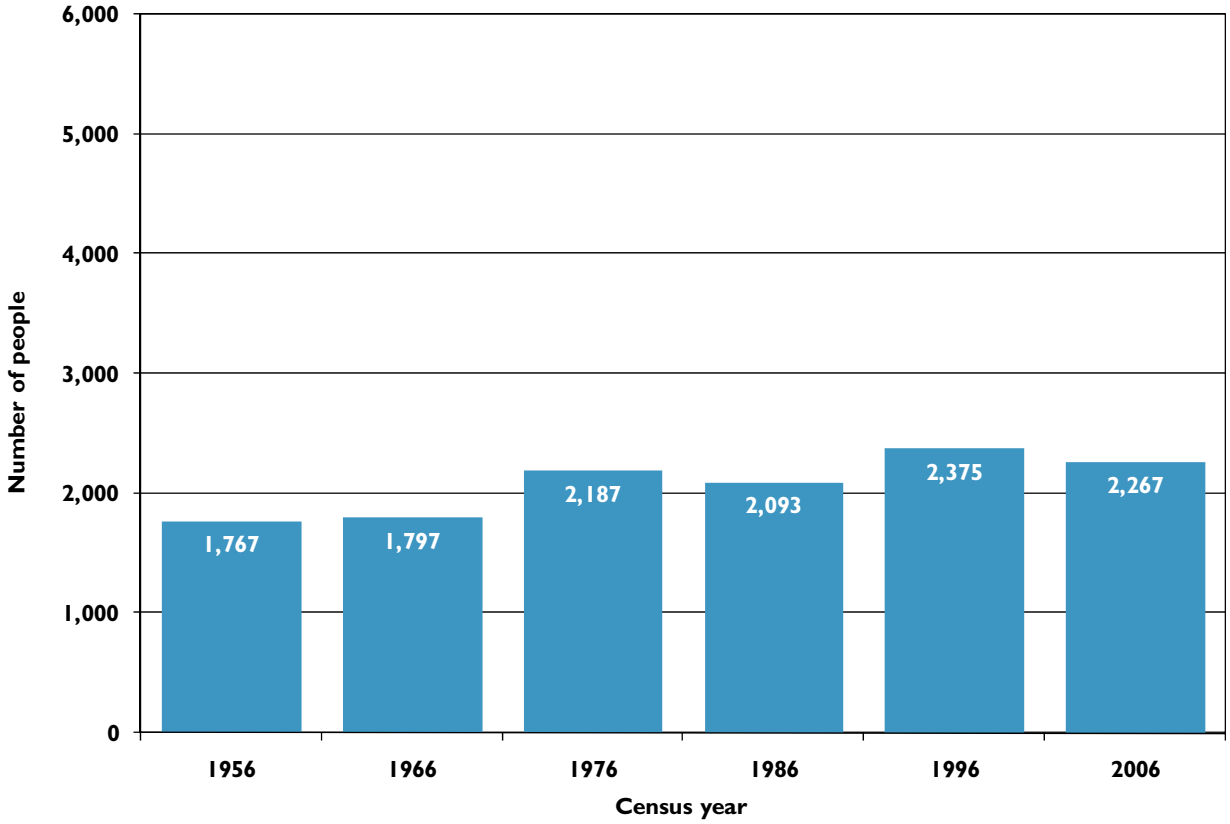
LEIMATU'A

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	179	189	368	0-4	193	189	382
5-9	194	163	357	5-9	191	163	354
10-14	204	182	386	10-14	180	169	349
15-19	185	143	328	15-19	132	143	275
20-24	116	111	227	20-24	120	114	234
25-29	92	90	182	25-29	95	91	186
30-34	75	75	150	30-34	83	83	166
35-39	59	73	132	35-39	80	73	153
40-44	53	76	129	40-44	48	54	102
45-49	50	53	103	45-49	59	62	121
50-54	55	53	108	50-54	40	56	96
55-59	34	44	78	55-59	55	53	108
60-64	41	38	79	60-64	32	33	65
65-69	32	20	52	65-69	27	24	51
70-74	16	22	38	70-74	30	19	49
75+	12	24	36	75+	21	29	50
Total	1,397	1,356	**2,753**	Total	1,387	1,355	**2,742**
Population by broad age groups (in numbers)							
0-14	577	534	1,111	**0-14**	564	521	1,085
15-24	301	254	555	**15-24**	252	257	509
25-59	418	464	882	**25-59**	460	472	932
25-64	459	502	961	**25-64**	492	505	997
60+	101	104	205	**60+**	110	105	215
65+	60	66	126	**65+**	78	72	150
Population by broad age groups (in percentages)							
0-14	41	39	40	**0-14**	41	38	40
15-24	22	19	20	**15-24**	18	19	19
25-59	30	34	32	**25-59**	33	35	34
25-64	33	37	35	**25-64**	35	37	36
60+	7	8	7	**60+**	8	8	8
65+	4	5	5	**65+**	6	5	5
Age dependency ratio							
15-59			**92**	**15-59**			**90**
15-64			**82**	**15-64**			**82**
Sex ratio (males per 100 females)							
			103				**102**
Median age (years)							
Total	**18.3**	**20.1**	**19.1**	**Total**	**19.9**	**20.6**	**20.2**

Population growth 1996-2006			
	Males	Females	**Total**
Total	-10	-1	**-11**
Average annual	-1	0	**-1**
Percentage difference %	-0.7	-0.1	**-0.4**
Average annual growth rate	-0.1	0.0	**0.0**

HIHIFO

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006

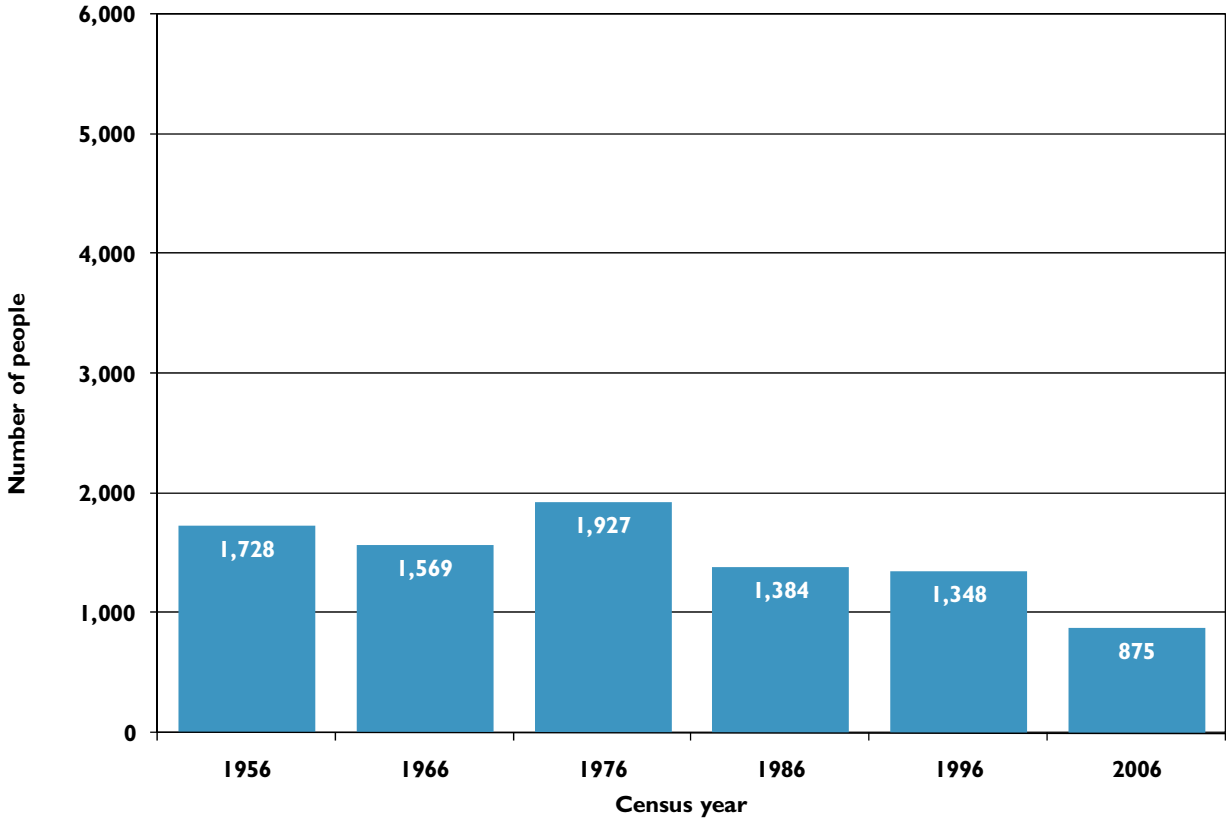
HIHIFO

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	182	164	346	0-4	175	144	319
5-9	164	136	300	5-9	161	141	302
10-14	149	154	303	10-14	153	148	301
15-19	146	125	271	15-19	122	111	233
20-24	97	88	185	20-24	71	81	152
25-29	88	83	171	25-29	75	55	130
30-34	66	58	124	30-34	69	74	143
35-39	57	53	110	35-39	73	67	140
40-44	48	54	102	40-44	44	48	92
45-49	41	61	102	45-49	43	42	85
50-54	58	31	89	50-54	39	44	83
55-59	39	46	85	55-59	30	35	65
60-64	25	36	61	60-64	44	24	68
65-69	30	14	44	65-69	27	28	55
70-74	27	12	39	70-74	28	25	53
75+	13	30	43	75+	21	25	46
Total	1,230	1,145	**2,375**	Total	1,175	1,092	**2,267**
Population by broad age groups (in numbers)							
0-14	495	454	949	**0-14**	489	433	922
15-24	243	213	456	**15-24**	193	192	385
25-59	397	386	783	**25-59**	373	365	738
25-64	422	422	844	**25-64**	417	389	806
60+	95	92	187	**60+**	120	102	222
65+	70	56	126	**65+**	76	78	154
Population by broad age groups (in percentages)							
0-14	40	40	40	**0-14**	42	40	41
15-24	20	19	19	**15-24**	16	18	17
25-59	32	34	33	**25-59**	32	33	33
25-64	34	37	36	**25-64**	35	36	36
60+	8	8	8	**60+**	10	9	10
65+	6	5	5	**65+**	6	7	7
Age dependency ratio							
15-59			**92**	**15-59**			**102**
15-64			**83**	**15-64**			**90**
Sex ratio (males per 100 females)							
			107				**108**
Median age (years)							
Total	**19.1**	**19.8**	**19.4**	**Total**	**19.1**	**20.2**	**19.5**

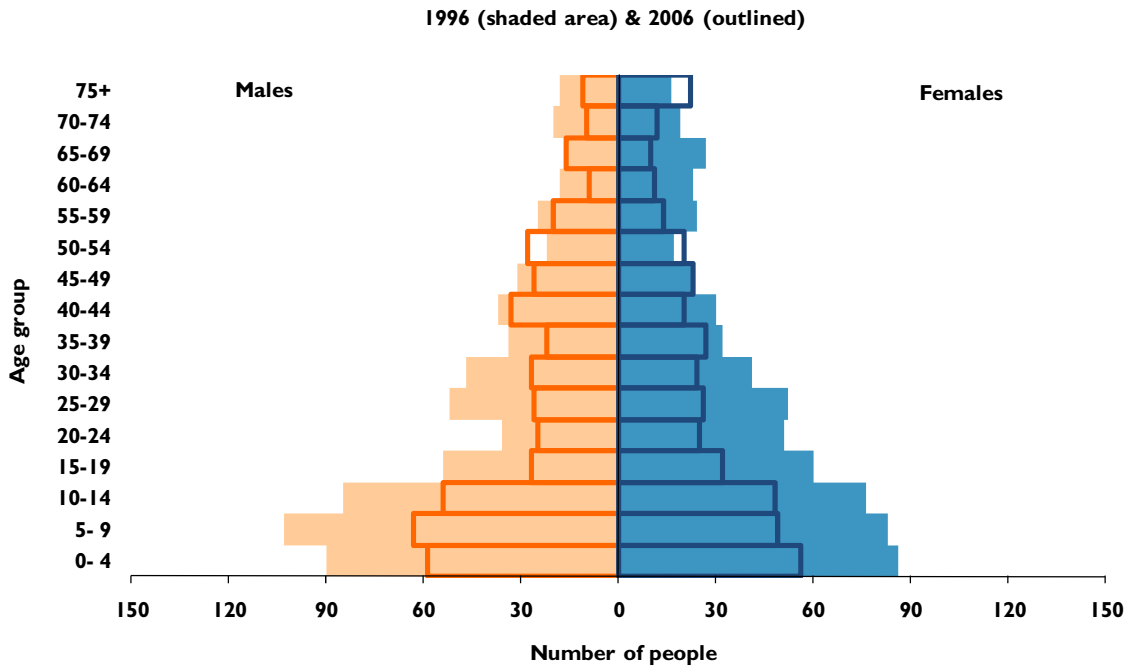
Population growth 1996-2006			
	Males	Females	**Total**
Total	-55	-53	**-108**
Average annual	-6	-5	**-11**
Percentage difference %	-4.5	-4.6	**-4.5**
Average annual growth rate	-0.5	-0.5	**-0.5**

MOTU

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



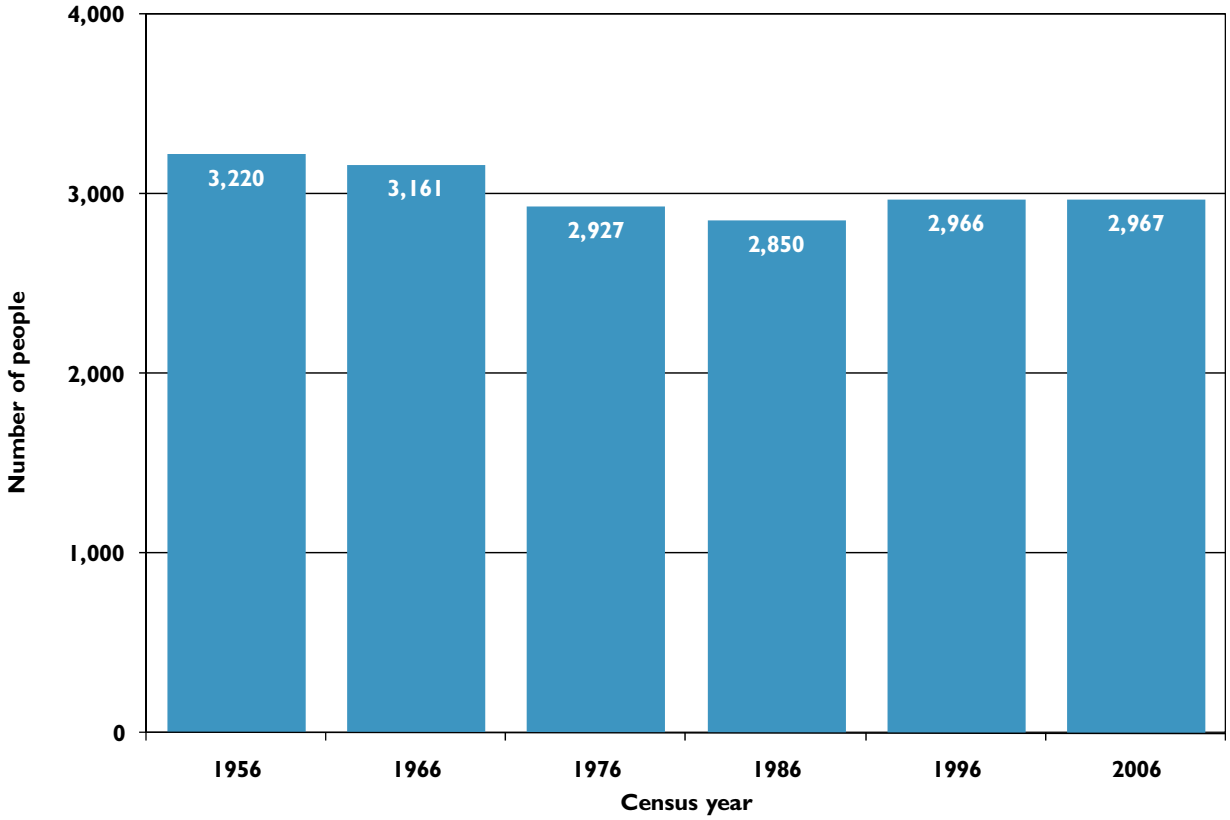
MOTU

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	90	86	176	0-4	59	56	115
5-9	103	83	186	5-9	63	49	112
10-14	85	76	161	10-14	54	48	102
15-19	54	60	114	15-19	27	32	59
20-24	36	51	87	20-24	25	25	50
25-29	52	52	104	25-29	26	26	52
30-34	47	41	88	30-34	27	24	51
35-39	34	32	66	35-39	22	27	49
40-44	37	30	67	40-44	33	20	53
45-49	31	23	54	45-49	26	23	49
50-54	22	17	39	50-54	28	20	48
55-59	25	24	49	55-59	20	14	34
60-64	18	23	41	60-64	9	11	20
65-69	16	27	43	65-69	16	10	26
70-74	20	19	39	70-74	10	12	22
75+	18	16	34	75+	11	22	33
Total	688	660	**1,348**	Total	456	419	**875**
Population by broad age groups (in numbers)							
0-14	278	245	523	**0-14**	176	153	329
15-24	90	111	201	**15-24**	52	57	109
25-59	248	219	467	**25-59**	182	154	336
25-64	266	242	508	**25-64**	191	165	356
60+	72	85	157	**60+**	46	55	101
65+	54	62	116	**65+**	37	44	81
Population by broad age groups (in percentages)							
0-14	40	37	39	**0-14**	39	37	38
15-24	13	17	15	**15-24**	11	14	12
25-59	36	33	35	**25-59**	40	37	38
25-64	39	37	38	**25-64**	42	39	41
60+	10	13	12	**60+**	10	13	12
65+	8	9	9	**65+**	8	11	9
Age dependency ratio							
15-59			**102**	**15-59**			**97**
15-64			**90**	**15-64**			**88**
Sex ratio (males per 100 females)							
			104				**109**
Median age (years)							
Total	**21.7**	**22.5**	**22.2**	**Total**	**25.1**	**25.0**	**25.0**

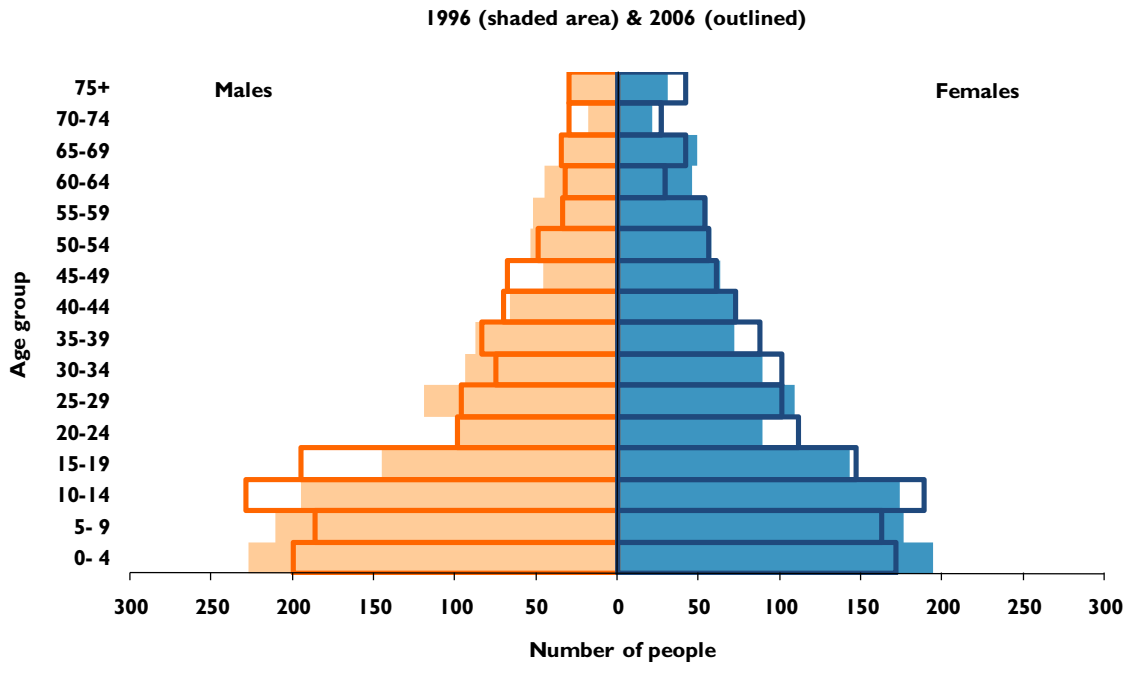
Population growth 1996-2006			
	Males	Females	**Total**
Total	-232	-241	**-473**
Average annual	-23	-24	**-47**
Percentage difference %	-33.7	-36.5	**-35.1**
Average annual growth rate	-4.1	-4.5	**-4.3**

PANGAI HP

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



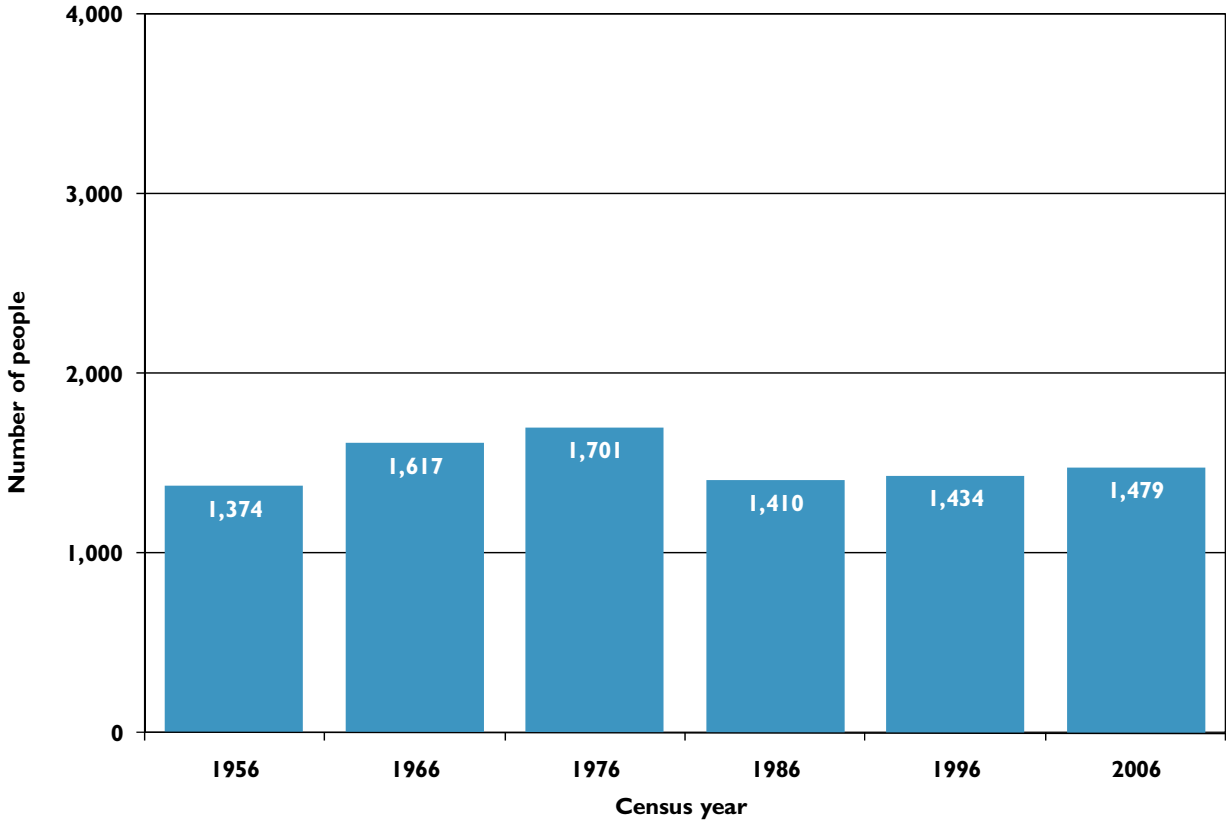
PANGAI HP

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	227	194	421	0-4	200	171	371
5-9	211	176	387	5-9	186	163	349
10-14	195	174	369	10-14	229	189	418
15-19	145	143	288	15-19	195	147	342
20-24	100	89	189	20-24	99	111	210
25-29	119	109	228	25-29	96	101	197
30-34	94	89	183	30-34	75	101	176
35-39	88	72	160	35-39	84	88	172
40-44	66	73	139	40-44	70	73	143
45-49	46	63	109	45-49	68	61	129
50-54	54	58	112	50-54	49	56	105
55-59	52	55	107	55-59	34	54	88
60-64	45	46	91	60-64	32	29	61
65-69	33	49	82	65-69	35	42	77
70-74	18	21	39	70-74	30	27	57
75+	31	31	62	75+	30	42	72
Total	1,524	1,442	**2,966**	Total	1,512	1,455	**2,967**
Population by broad age groups (in numbers)							
0-14	633	544	1,177	**0-14**	615	523	1,138
15-24	245	232	477	**15-24**	294	258	552
25-59	519	519	1,038	**25-59**	476	534	1,010
25-64	564	565	1,129	**25-64**	508	563	1,071
60+	127	147	274	**60+**	127	140	267
65+	82	101	183	**65+**	95	111	206
Population by broad age groups (in percentages)							
0-14	42	38	40	**0-14**	41	36	38
15-24	16	16	16	**15-24**	19	18	19
25-59	34	36	35	**25-59**	31	37	34
25-64	37	39	38	**25-64**	34	39	36
60+	8	10	9	**60+**	8	10	9
65+	5	7	6	**65+**	6	8	7
Age dependency ratio							
15-59			**96**	**15-59**			**90**
15-64			**85**	**15-64**			**83**
Sex ratio (males per 100 females)							
			106				**104**
Median age (years)							
Total	**19.5**	**21.9**	**20.5**	**Total**	**18.6**	**22.6**	**20.1**

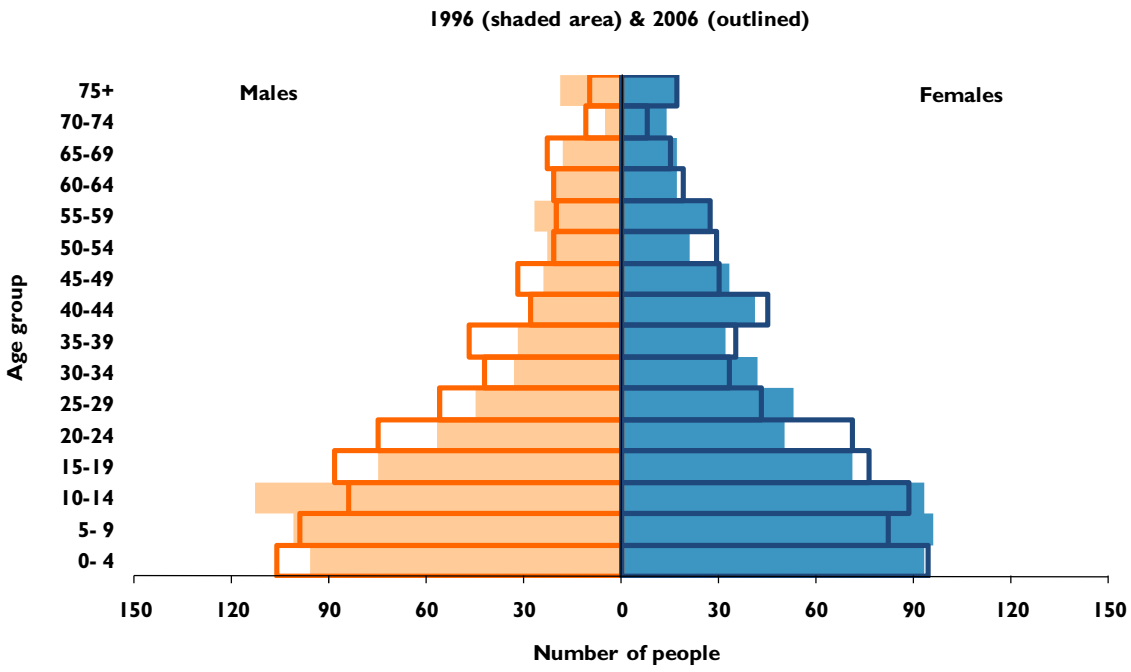
Population growth 1996-2006			
	Males	Females	**Total**
Total	-12	13	**1**
Average annual	-1	1	**0**
Percentage difference %	-0.8	0.9	**0.0**
Average annual growth rate	-0.1	0.1	**0.0**

FOA

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



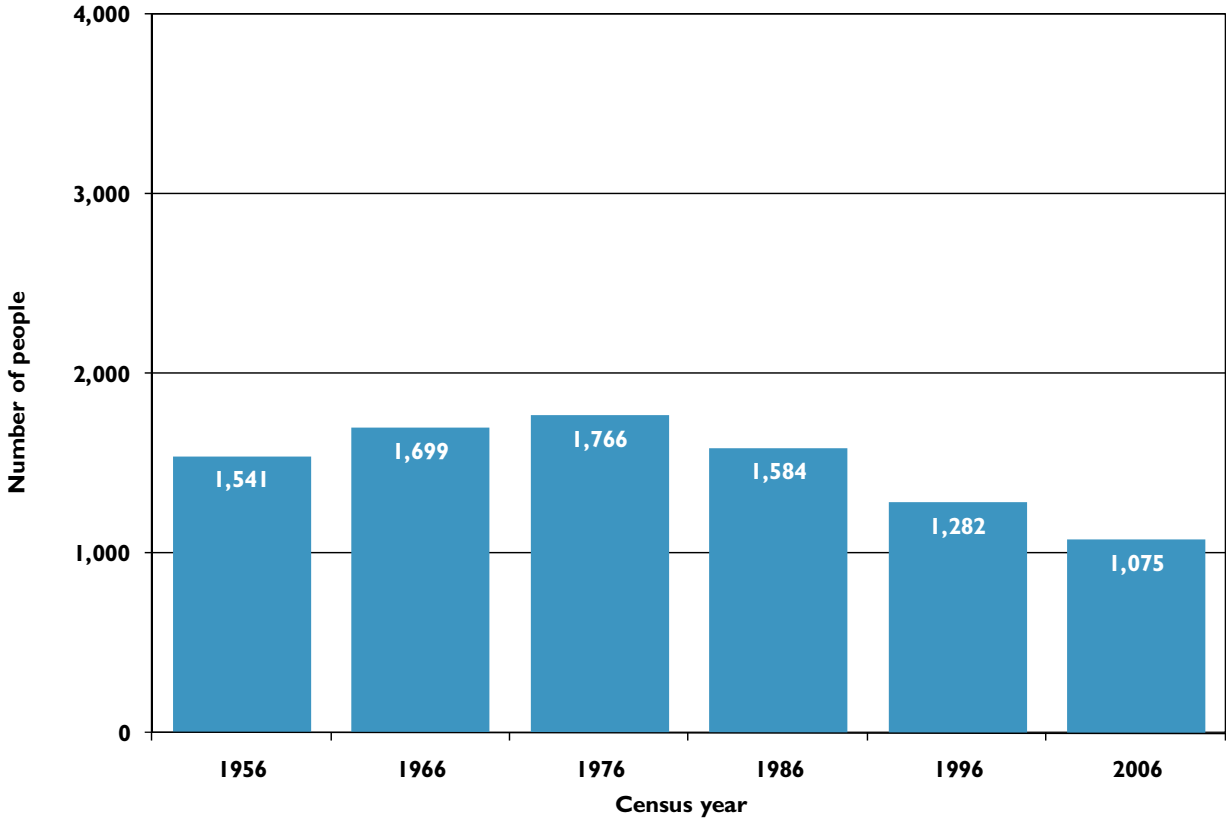
FOA

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	96	93	189	0-4	106	94	201
5-9	101	96	197	5-9	99	82	181
10-14	113	93	206	10-14	84	88	172
15-19	75	71	146	15-19	88	76	164
20-24	57	50	107	20-24	75	71	146
25-29	45	53	98	25-29	56	43	99
30-34	33	42	75	30-34	42	33	75
35-39	32	32	64	35-39	47	35	82
40-44	29	41	70	40-44	28	45	73
45-49	24	33	57	45-49	32	30	62
50-54	23	21	44	50-54	21	29	50
55-59	27	27	54	55-59	20	27	47
60-64	20	17	37	60-64	21	19	40
65-69	18	17	35	65-69	23	15	38
70-74	5	14	19	70-74	11	8	19
75+	19	17	36	75+	10	17	27
Total	717	717	**1,434**	Total	765	714	**1,479**
Population by broad age groups (in numbers)							
0-14	310	282	592	**0-14**	290	265	554
15-24	132	121	253	**15-24**	163	147	311
25-59	213	249	462	**25-59**	247	243	489
25-64	233	266	499	**25-64**	268	262	529
60+	62	65	127	**60+**	65	59	124
65+	42	48	90	**65+**	44	40	84
Population by broad age groups (in percentages)							
0-14	43	39	41	**0-14**	38	37	37
15-24	18	17	18	**15-24**	21	21	21
25-59	30	35	32	**25-59**	32	34	33
25-64	32	37	35	**25-64**	35	37	36
60+	9	9	9	**60+**	9	8	8
65+	6	7	6	**65+**	6	6	6
Age dependency ratio							
15-59			**101**	**15-59**			**85**
15-64			**91**	**15-64**			**76**
Sex ratio (males per 100 females)							
			100				**107**
Median age (years)							
Total	**18.3**	**20.6**	**19.3**	**Total**	**20.3**	**21.2**	**20.7**

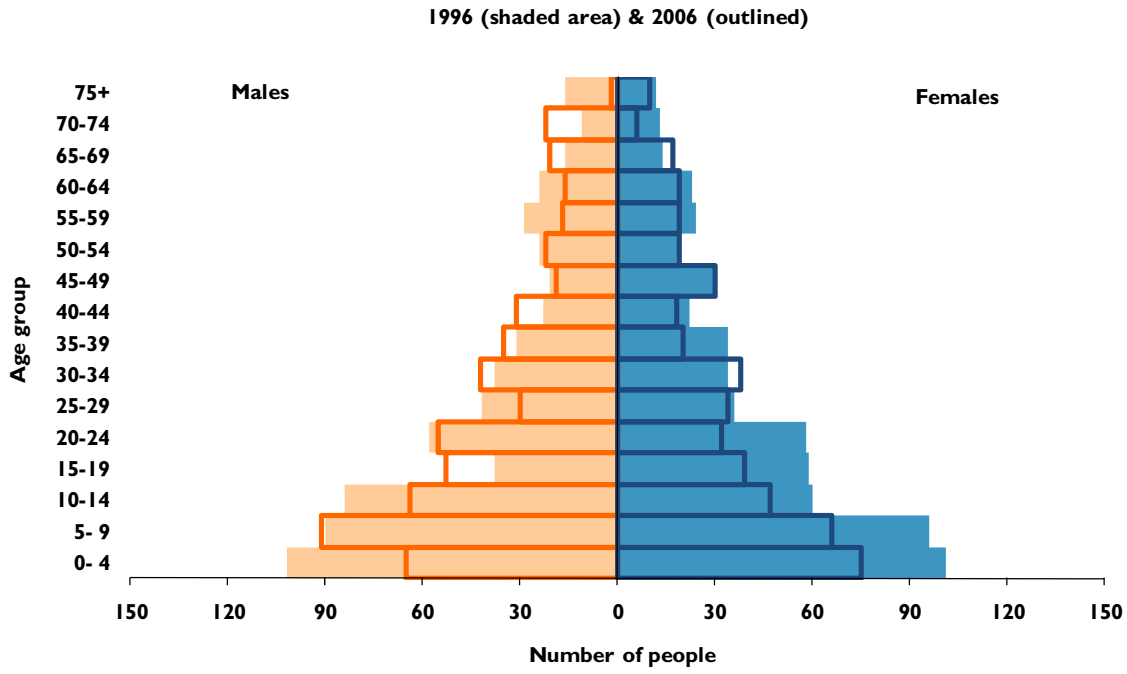
Population growth 1996-2006			
	Males	Females	**Total**
Total	48	-3	**45**
Average annual	5	0	**4**
Percentage difference %	6.7	-0.4	**3.1**
Average annual growth rate	0.6	0.0	**0.3**

LULUNGA

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



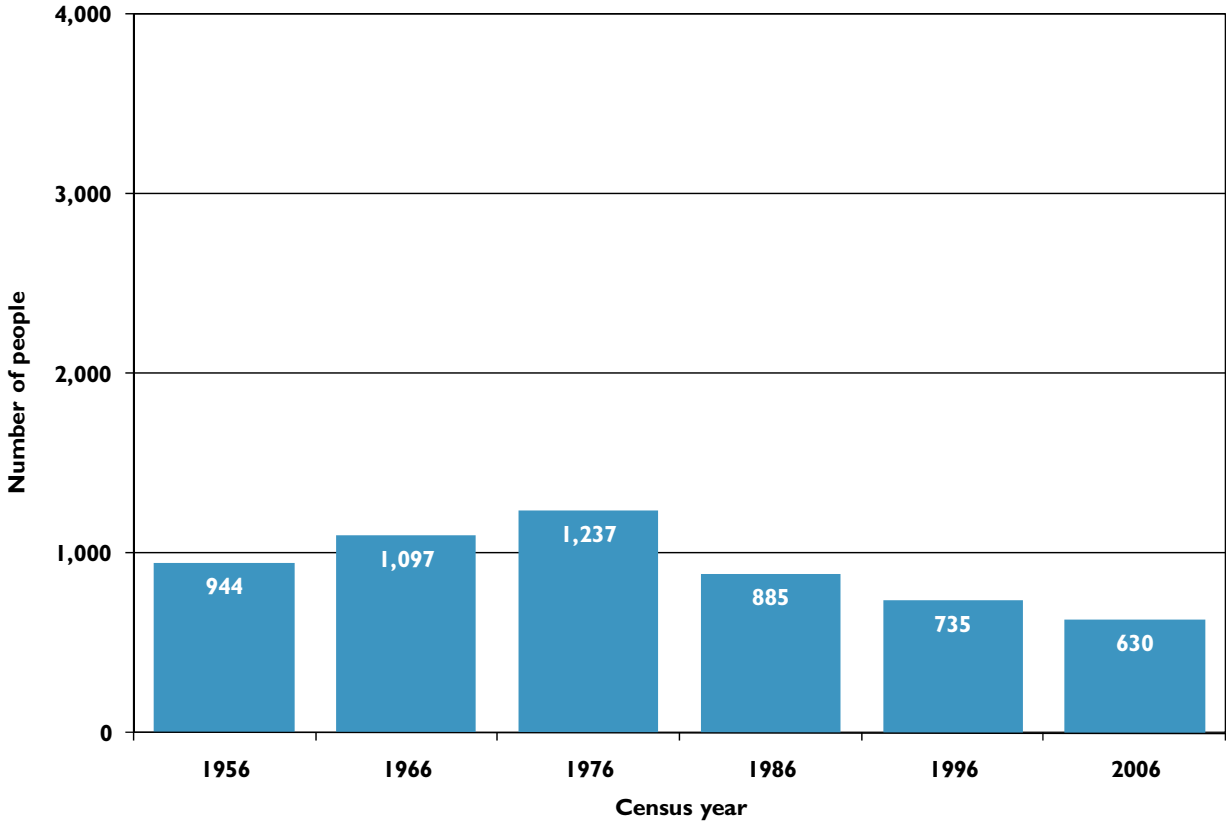
LULUNGA

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	102	101	203	0-4	65	75	140
5-9	90	96	186	5-9	91	66	157
10-14	84	60	144	10-14	64	47	111
15-19	38	59	97	15-19	53	39	92
20-24	58	58	116	20-24	55	32	87
25-29	42	36	78	25-29	30	34	64
30-34	38	34	72	30-34	42	38	80
35-39	31	34	65	35-39	35	20	55
40-44	23	22	45	40-44	31	18	49
45-49	21	30	51	45-49	19	30	49
50-54	24	19	43	50-54	22	19	41
55-59	29	24	53	55-59	17	19	36
60-64	24	23	47	60-64	16	19	35
65-69	16	14	30	65-69	21	17	38
70-74	11	13	24	70-74	22	6	28
75+	16	12	28	75+	2	10	12
Total	647	635	**1,282**	Total	586	489	**1,075**
Population by broad age groups (in numbers)							
0-14	276	257	533	**0-14**	220	188	408
15-24	96	117	213	**15-24**	108	71	179
25-59	208	199	407	**25-59**	196	178	374
25-64	232	222	454	**25-64**	212	197	409
60+	67	62	129	**60+**	61	52	113
65+	43	39	82	**65+**	45	33	78
Population by broad age groups (in percentages)							
0-14	43	40	42	**0-14**	38	38	38
15-24	15	18	17	**15-24**	18	15	17
25-59	32	31	32	**25-59**	34	36	35
25-64	36	35	35	**25-64**	36	40	38
60+	10	10	10	**60+**	10	11	11
65+	7	6	6	**65+**	8	7	7
Age dependency ratio							
15-59			**107**	**15-59**			**94**
15-64			**92**	**15-64**			**83**
Sex ratio (males per 100 females)							
			102				**120**
Median age (years)							
Total	**20.9**	**20.2**	**20.5**	**Total**	**21.8**	**22.8**	**22.2**

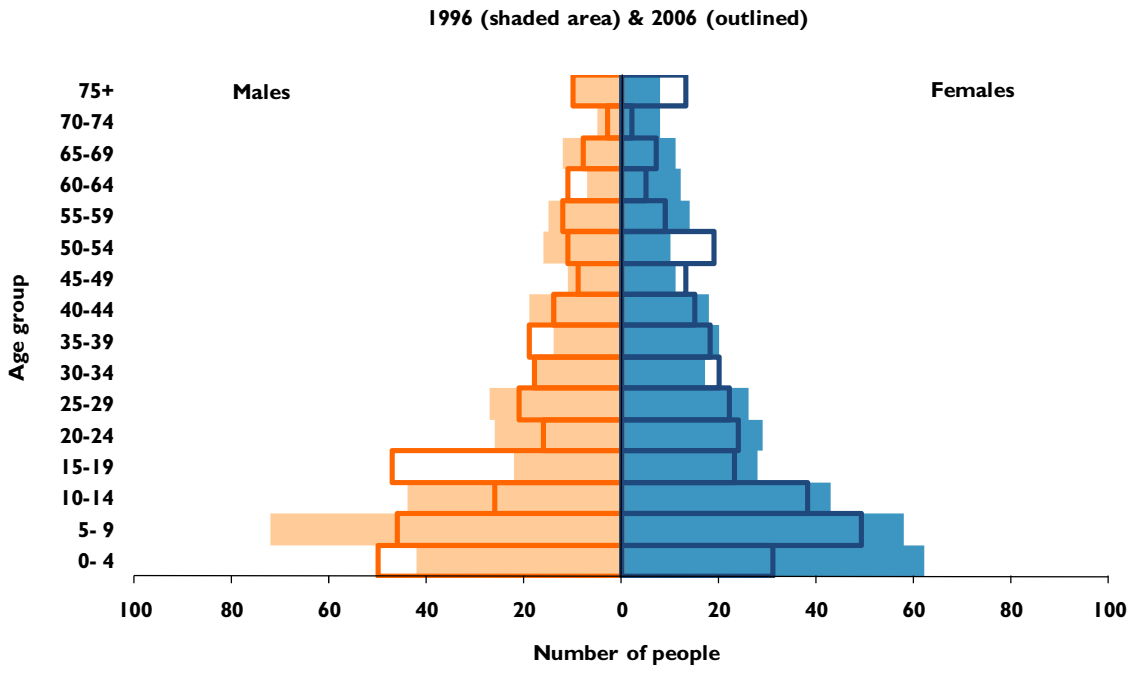
Population growth 1996-2006			
	Males	Females	**Total**
Total	-61	-146	**-207**
Average annual	-6	-15	**-21**
Percentage difference %	-9.4	-23.0	**-16.1**
Average annual growth rate	-1.0	-2.6	**-1.8**

MU'OMU'A

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



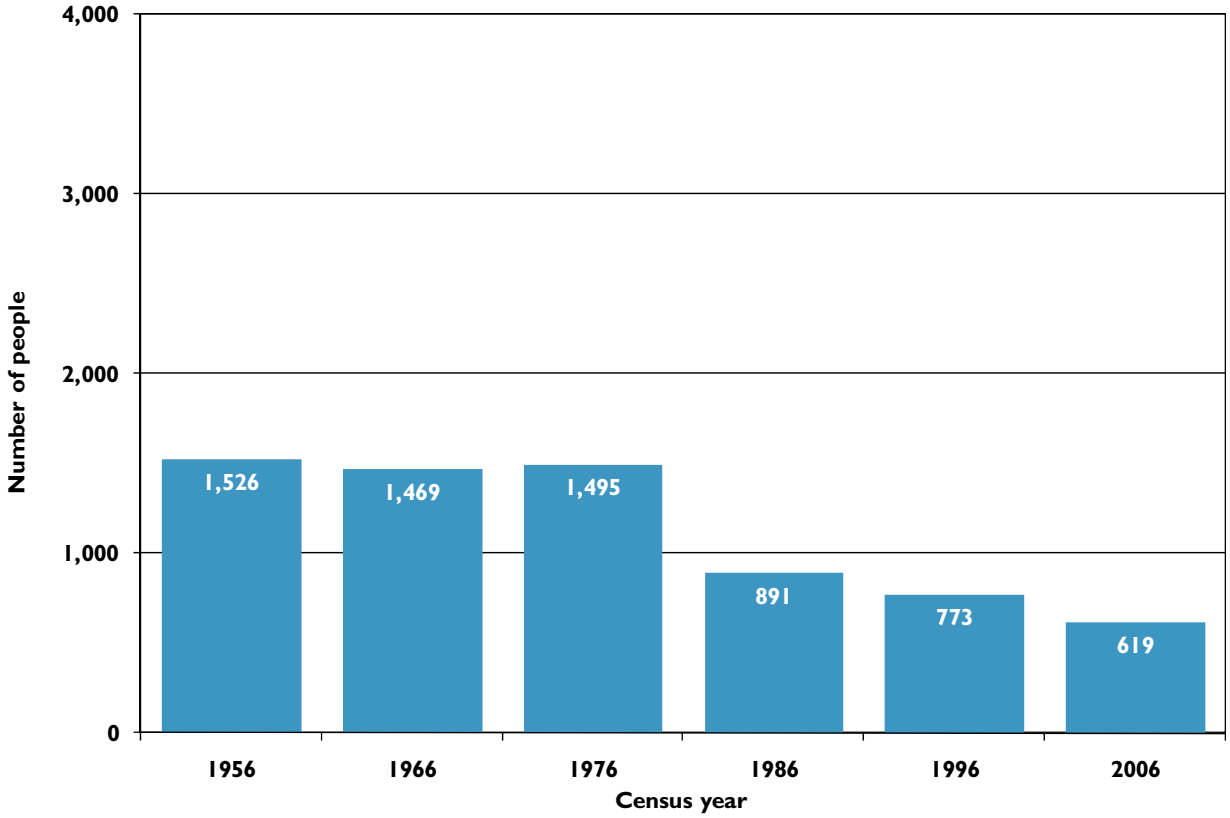
MU'OMU'A

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	42	62	104	0-4	50	31	81
5-9	72	58	130	5-9	46	49	95
10-14	44	43	87	10-14	26	38	64
15-19	22	28	50	15-19	47	23	70
20-24	26	29	55	20-24	16	24	40
25-29	27	26	53	25-29	21	22	43
30-34	18	17	35	30-34	18	20	38
35-39	14	20	34	35-39	19	18	37
40-44	19	18	37	40-44	14	15	29
45-49	11	11	22	45-49	9	13	22
50-54	16	10	26	50-54	11	19	30
55-59	15	14	29	55-59	12	9	21
60-64	7	12	19	60-64	11	5	16
65-69	12	11	23	65-69	8	7	15
70-74	5	8	13	70-74	3	2	5
75+	10	8	18	75+	10	13	23
Total	360	375	**735**	Total	321	309	**630**
Population by broad age groups (in numbers)							
0-14	158	163	321	**0-14**	122	118	240
15-24	48	57	105	**15-24**	63	47	110
25-59	120	116	236	**25-59**	104	116	220
25-64	127	128	255	**25-64**	115	121	236
60+	34	39	73	**60+**	32	27	59
65+	27	27	54	**65+**	21	22	43
Population by broad age groups (in percentages)							
0-14	44	43	44	**0-14**	38	38	38
15-24	13	15	14	**15-24**	20	15	17
25-59	33	31	32	**25-59**	32	38	35
25-64	35	34	35	**25-64**	36	39	38
60+	9	10	10	**60+**	10	9	9
65+	8	7	7	**65+**	7	7	7
Age dependency ratio							
15-59			**116**	**15-59**			**91**
15-64			**104**	**15-64**			**82**
Sex ratio (males per 100 females)							
			96				**104**
Median age (years)							
Total	**20.1**	**19.5**	**19.7**	**Total**	**19.1**	**22.8**	**20.6**

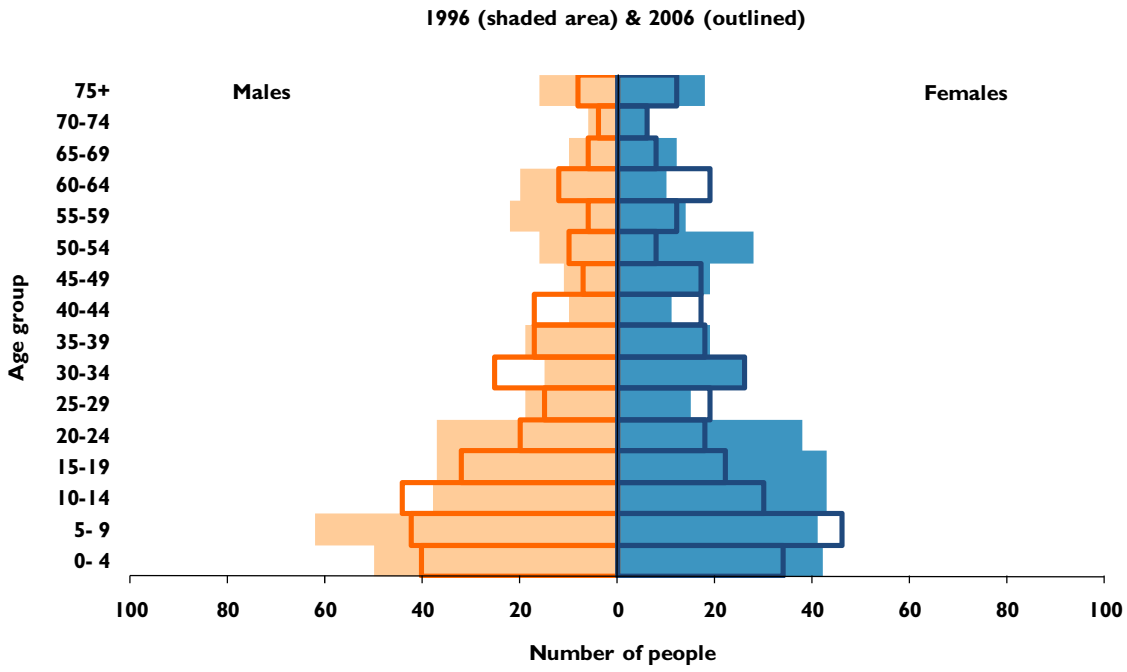
Population growth 1996-2006			
	Males	Females	**Total**
Total	-39	-66	**-105**
Average annual	-4	-7	**-11**
Percentage difference %	-10.8	-17.6	**-14.3**
Average annual growth rate	-1.1	-1.9	**-1.5**

HA'ANO

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



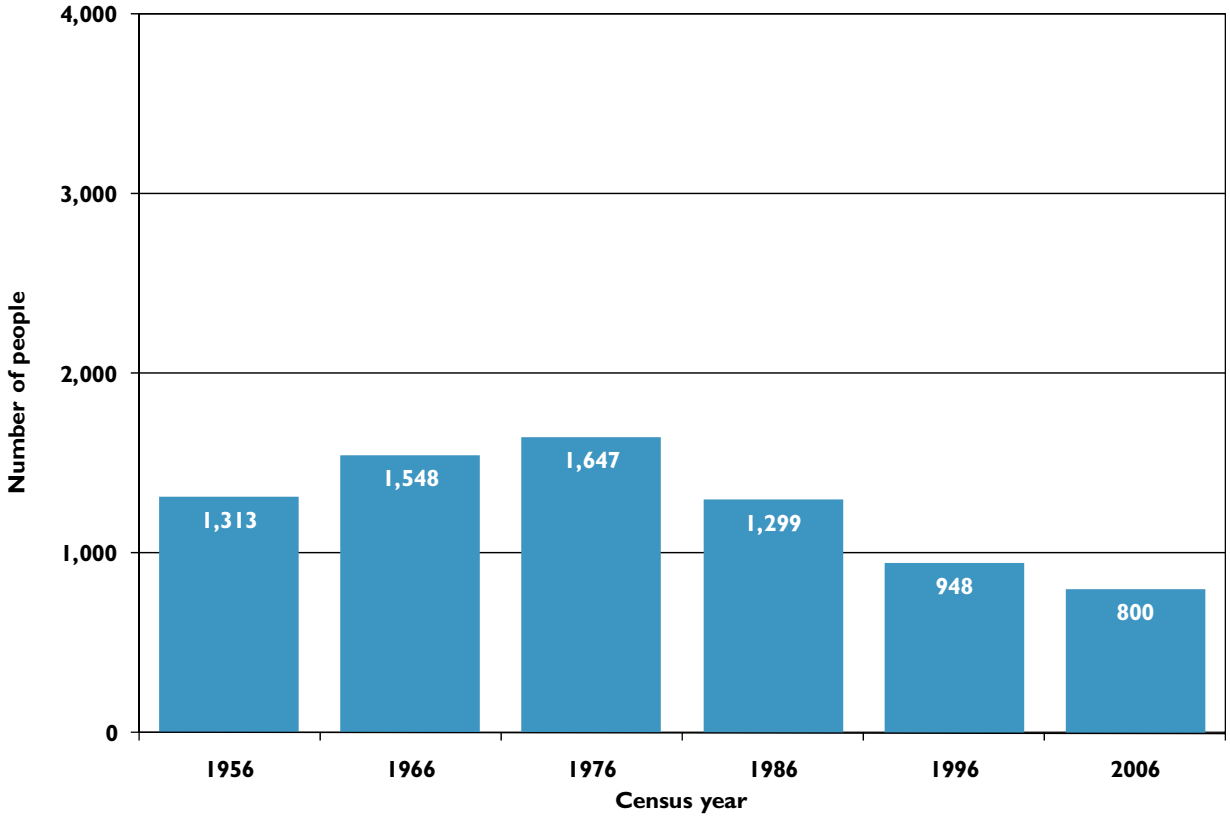
HA'ANO

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	50	42	92	0-4	40	34	74
5-9	62	41	103	5-9	42	46	88
10-14	38	43	81	10-14	44	30	74
15-19	37	43	80	15-19	32	22	54
20-24	37	38	75	20-24	20	18	38
25-29	19	15	34	25-29	15	19	34
30-34	15	26	41	30-34	25	26	51
35-39	19	19	38	35-39	17	18	35
40-44	10	11	21	40-44	17	17	34
45-49	11	19	30	45-49	7	17	24
50-54	16	28	44	50-54	10	8	18
55-59	22	14	36	55-59	6	12	18
60-64	20	10	30	60-64	12	19	31
65-69	10	12	22	65-69	6	8	14
70-74	6	6	12	70-74	4	6	10
75+	16	18	34	75+	8	12	20
Total	388	385	**773**	Total	307	312	**619**
Population by broad age groups (in numbers)							
0-14	150	126	276	**0-14**	127	110	237
15-24	74	81	155	**15-24**	52	40	92
25-59	112	132	244	**25-59**	98	117	215
25-64	132	142	274	**25-64**	110	136	246
60+	52	46	98	**60+**	30	45	75
65+	32	36	68	**65+**	18	26	44
Population by broad age groups (in percentages)							
0-14	39	33	36	**0-14**	41	35	38
15-24	19	21	20	**15-24**	17	13	15
25-59	29	34	32	**25-59**	32	38	35
25-64	34	37	35	**25-64**	36	44	40
60+	13	12	13	**60+**	10	14	12
65+	8	9	9	**65+**	6	8	7
Age dependency ratio							
15-59			**94**	**15-59**			**102**
15-64			**80**	**15-64**			**83**
Sex ratio (males per 100 females)							
			101				**98**
Median age (years)							
Total	**21.0**	**23.2**	**22.1**	**Total**	**19.2**	**26.7**	**22.5**

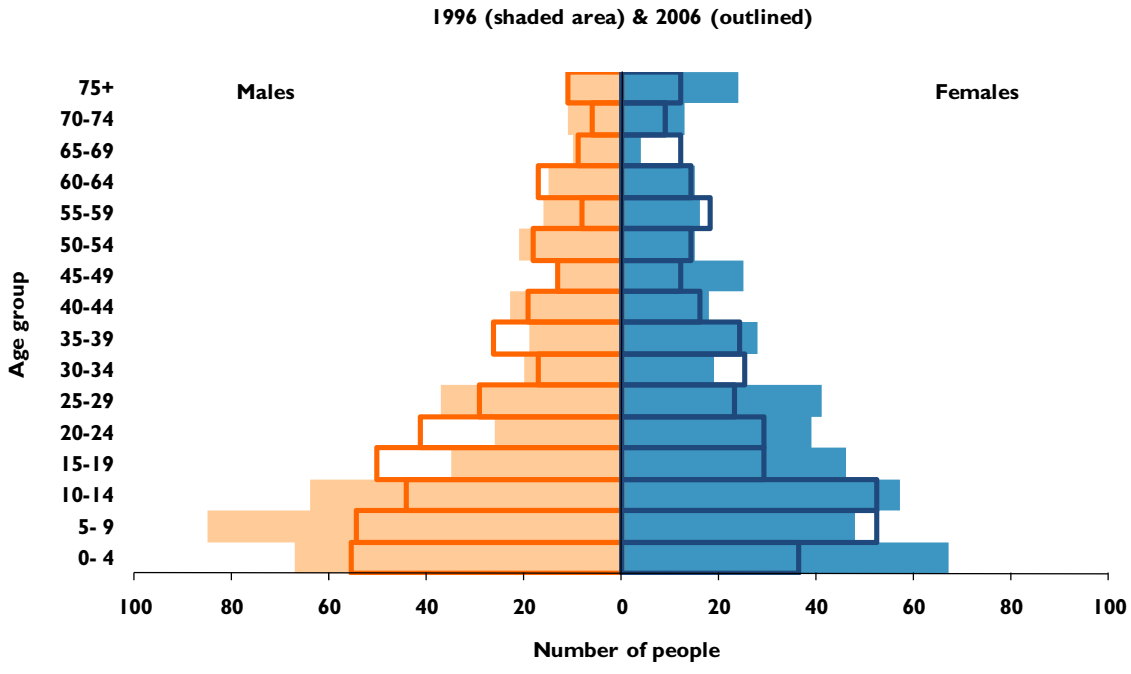
Population growth 1996-2006			
	Males	Females	**Total**
Total	-81	-73	**-154**
Average annual	-8	-7	**-15**
Percentage difference %	-20.9	-19.0	**-19.9**
Average annual growth rate	-2.3	-2.1	**-2.2**

UIHA

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



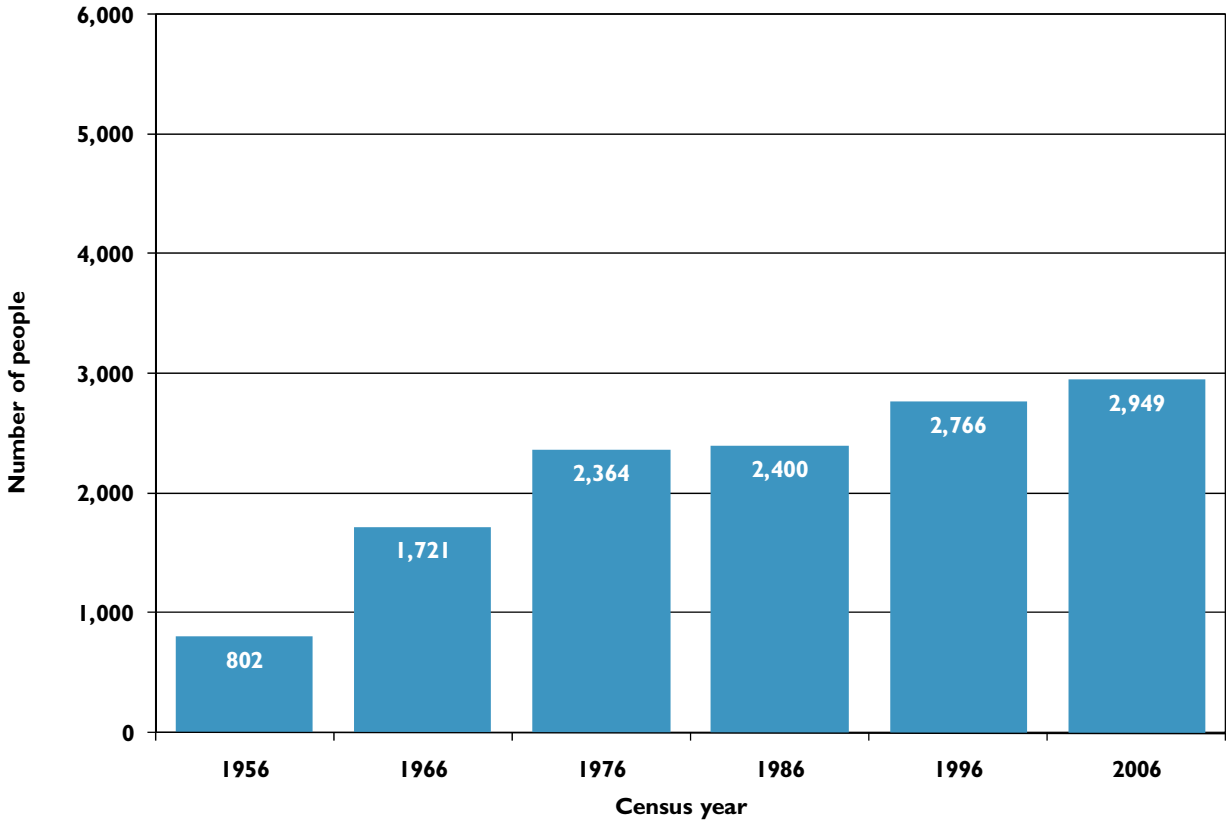
UIHA

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	67	67	134	0-4	55	36	92
5-9	85	48	133	5-9	54	52	107
10-14	64	57	121	10-14	44	52	97
15-19	35	46	81	15-19	50	29	80
20-24	26	39	65	20-24	41	29	71
25-29	37	41	78	25-29	29	23	52
30-34	20	19	39	30-34	17	25	42
35-39	19	28	47	35-39	26	24	50
40-44	23	18	41	40-44	19	16	35
45-49	13	25	38	45-49	13	12	25
50-54	21	15	36	50-54	18	14	32
55-59	16	16	32	55-59	8	18	26
60-64	15	15	30	60-64	17	14	31
65-69	10	4	14	65-69	9	12	21
70-74	11	13	24	70-74	6	9	15
75+	11	24	35	75+	11	12	23
Total	473	475	**948**	Total	420	380	**800**
Population by broad age groups (in numbers)							
0-14	216	172	388	**0-14**	154	141	295
15-24	61	85	146	**15-24**	92	58	150
25-59	149	162	311	**25-59**	131	133	264
25-64	164	177	341	**25-64**	148	147	295
60+	47	56	103	**60+**	43	47	91
65+	32	41	73	**65+**	26	33	59
Population by broad age groups (in percentages)							
0-14	46	36	41	**0-14**	37	37	37
15-24	13	18	15	**15-24**	22	15	19
25-59	32	34	33	**25-59**	31	35	33
25-64	35	37	36	**25-64**	35	39	37
60+	10	12	11	**60+**	10	12	11
65+	7	9	8	**65+**	6	9	7
Age dependency ratio							
15-59			**107**	**15-59**			**93**
15-64			**95**	**15-64**			**80**
Sex ratio (males per 100 females)							
			100				**111**
Median age (years)							
Total	**18.0**	**22.6**	**20.4**	**Total**	**20.7**	**23.4**	**21.8**

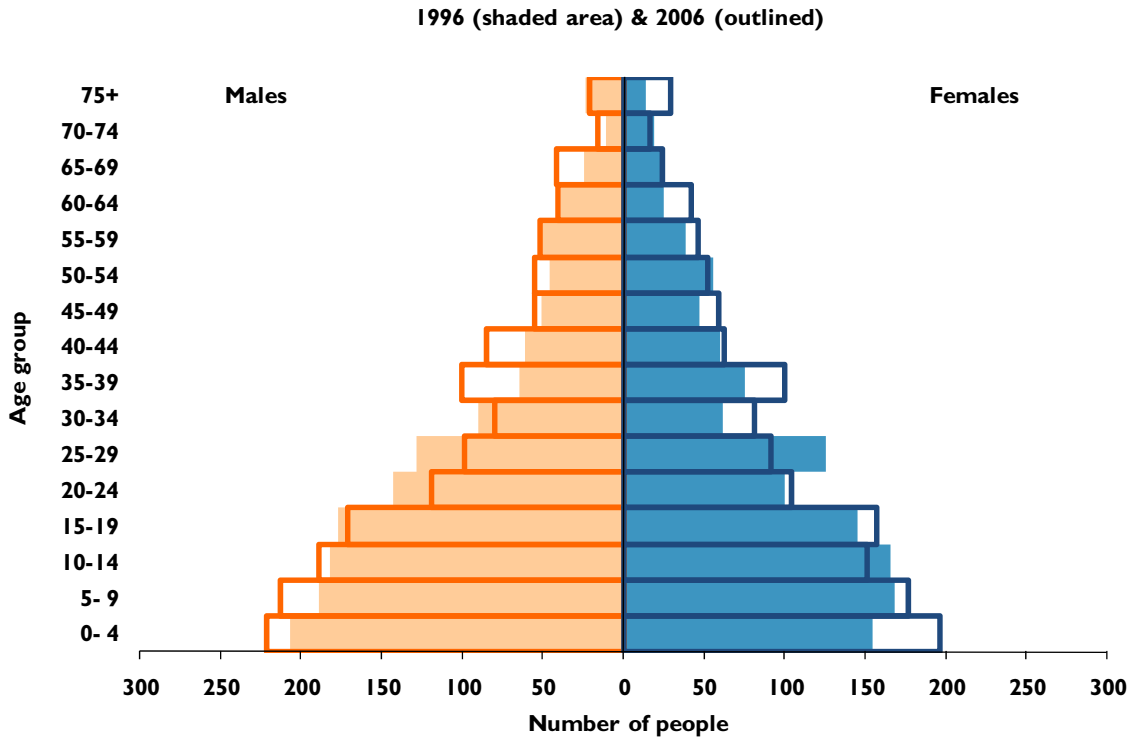
Population growth 1996-2006			
	Males	Females	**Total**
Total	-53	-95	**-148**
Average annual	-5	-9	**-15**
Percentage difference %	-11.2	-20.0	**-15.6**
Average annual growth rate	-1.2	-2.2	**-1.7**

‘EUA MOTU'A

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



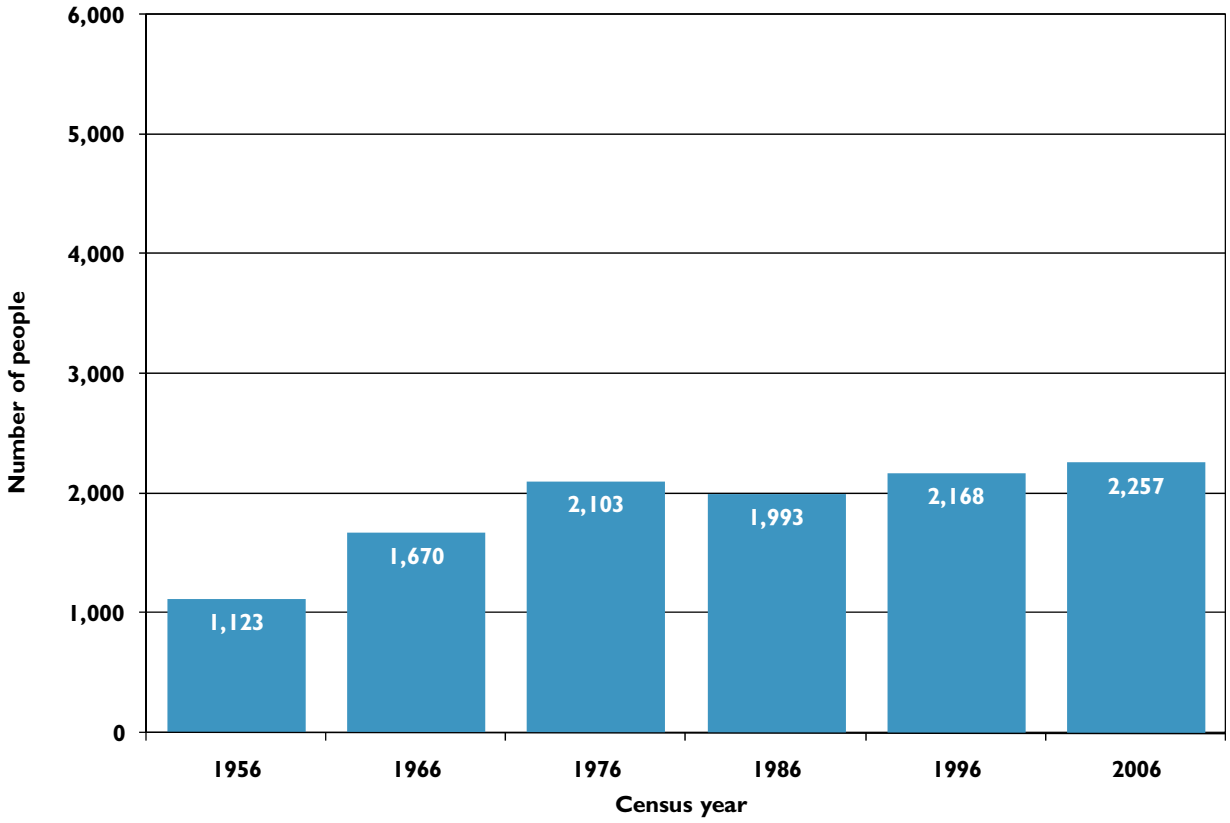
EUA MOTU'A

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	207	154	361	0-4	221	196	418
5-9	189	168	357	5-9	213	176	390
10-14	182	165	347	10-14	189	151	340
15-19	177	145	322	15-19	171	157	328
20-24	143	100	243	20-24	119	104	223
25-29	129	125	254	25-29	99	91	190
30-34	90	61	151	30-34	80	81	161
35-39	65	75	140	35-39	100	100	200
40-44	61	60	121	40-44	85	62	147
45-49	51	47	98	45-49	55	59	114
50-54	46	55	101	50-54	55	52	107
55-59	53	38	91	55-59	52	46	98
60-64	39	25	64	60-64	41	42	83
65-69	25	23	48	65-69	42	24	66
70-74	11	19	30	70-74	16	16	32
75+	24	14	38	75+	21	29	50
Total	1,492	1,274	**2,766**	Total	1,562	1,387	**2,949**
Population by broad age groups (in numbers)							
0-14	578	487	1,065	**0-14**	624	523	1,148
15-24	320	245	565	**15-24**	291	261	552
25-59	495	461	956	**25-59**	527	491	1,018
25-64	534	486	1,020	**25-64**	568	533	1,101
60+	99	81	180	**60+**	120	111	231
65+	60	56	116	**65+**	79	69	148
Population by broad age groups (in percentages)							
0-14	39	38	39	**0-14**	40	38	39
15-24	21	19	20	**15-24**	19	19	19
25-59	33	36	35	**25-59**	34	35	35
25-64	36	38	37	**25-64**	36	38	37
60+	7	6	7	**60+**	8	8	8
65+	4	4	4	**65+**	5	5	5
Age dependency ratio							
15-59			**82**	**15-59**			**88**
15-64			**75**	**15-64**			**78**
Sex ratio (males per 100 females)							
			117				**113**
Median age (years)							
Total	**19.8**	**20.3**	**19.9**	**Total**	**19.6**	**20.6**	**20.0**

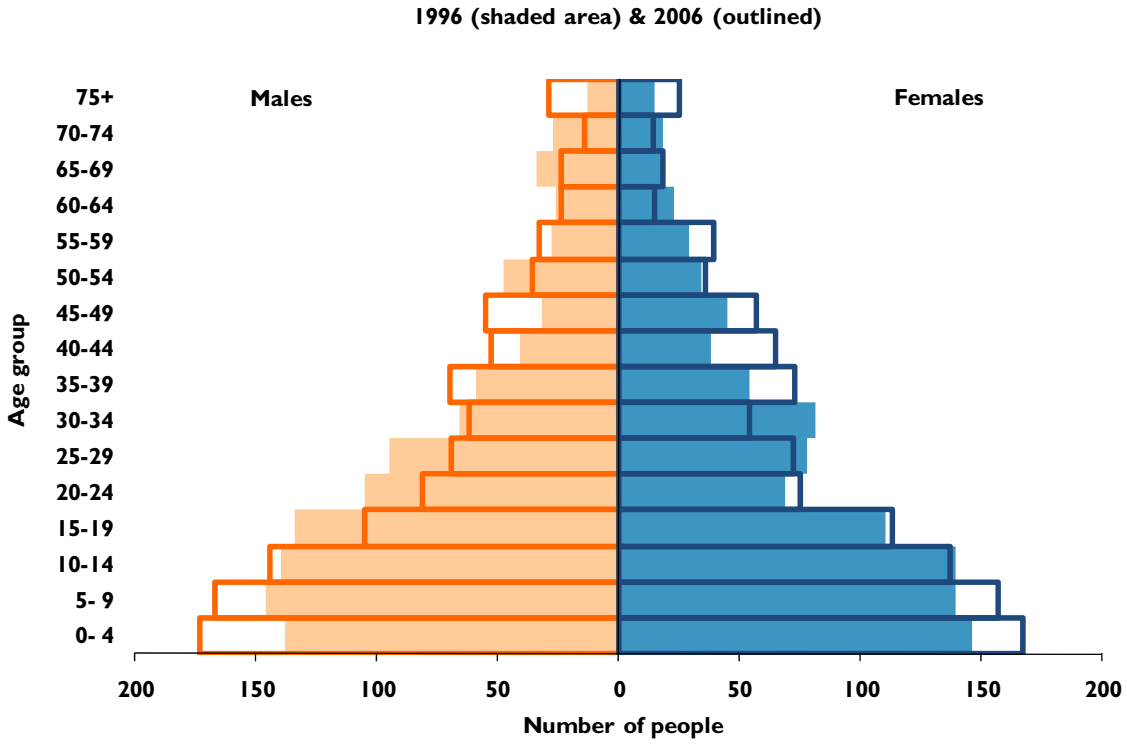
Population growth 1996-2006			
	Males	Females	**Total**
Total	70	113	**183**
Average annual	7	11	**18**
Percentage difference %	4.7	8.9	**6.6**
Average annual growth rate	0.5	0.8	**0.6**

ʻEUA FO'OU

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



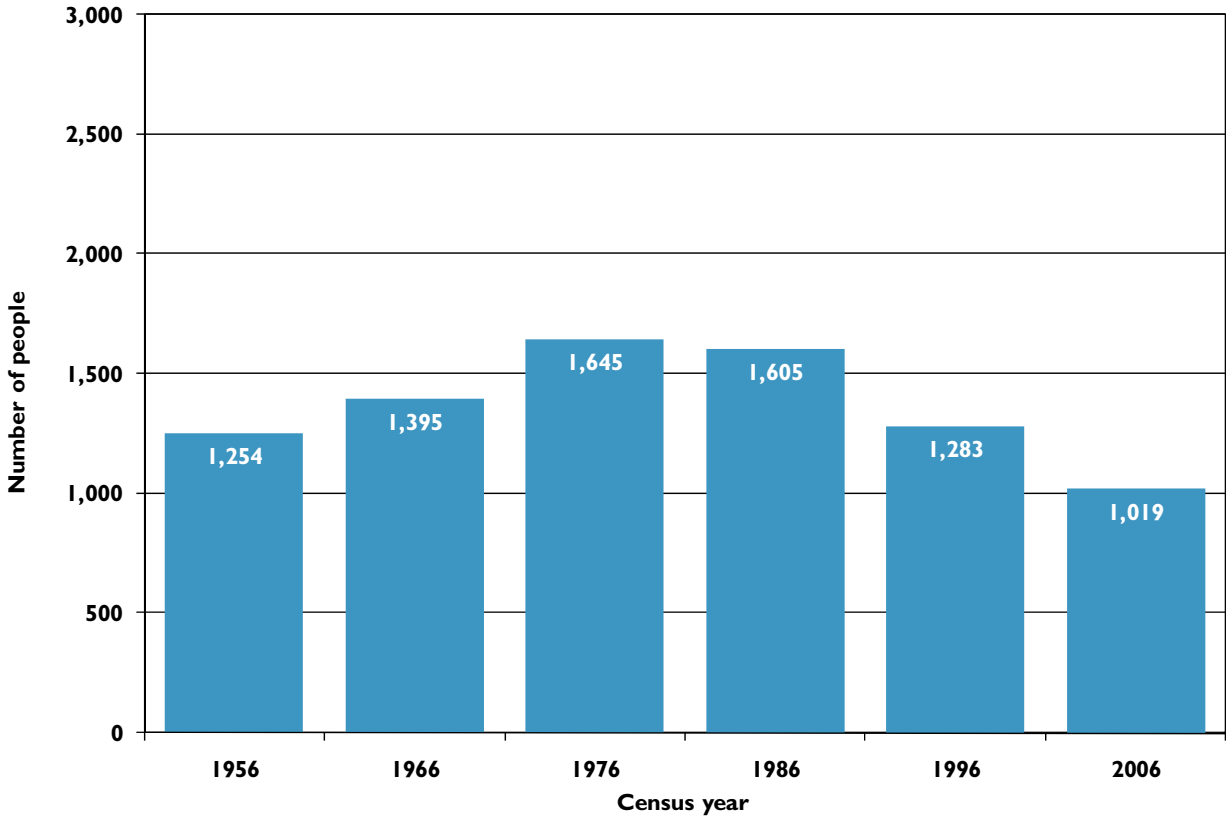
EUA FO'OU

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	138	146	284	0-4	173	167	340
5-9	146	139	285	5-9	167	157	324
10-14	140	139	279	10-14	144	137	281
15-19	134	110	244	15-19	105	113	218
20-24	105	69	174	20-24	81	75	156
25-29	95	78	173	25-29	69	72	141
30-34	66	81	147	30-34	62	54	116
35-39	59	54	113	35-39	70	73	143
40-44	41	38	79	40-44	53	65	118
45-49	32	45	77	45-49	55	57	112
50-54	48	34	82	50-54	36	36	72
55-59	28	29	57	55-59	33	39	72
60-64	26	23	49	60-64	24	15	39
65-69	34	18	52	65-69	24	18	42
70-74	27	18	45	70-74	14	14	28
75+	13	15	28	75+	29	25	54
Total	1,132	1,036	**2,168**	Total	1,140	1,117	**2,257**
Population by broad age groups (in numbers)							
0-14	424	424	848	**0-14**	484	461	945
15-24	239	179	418	**15-24**	186	188	374
25-59	369	359	728	**25-59**	378	396	774
25-64	395	382	777	**25-64**	402	411	813
60+	100	74	174	**60+**	91	72	163
65+	74	51	125	**65+**	67	57	124
Population by broad age groups (in percentages)							
0-14	37	41	39	**0-14**	42	41	42
15-24	21	17	19	**15-24**	16	17	17
25-59	33	35	34	**25-59**	33	35	34
25-64	35	37	36	**25-64**	35	37	36
60+	9	7	8	**60+**	8	6	7
65+	7	5	6	**65+**	6	5	5
Age dependency ratio							
15-59			**89**	**15-59**			**97**
15-64			**81**	**15-64**			**90**
Sex ratio (males per 100 females)							
			109				**102**
Median age (years)							
Total	**20.4**	**19.3**	**19.8**	**Total**	**19.1**	**19.3**	**19.2**

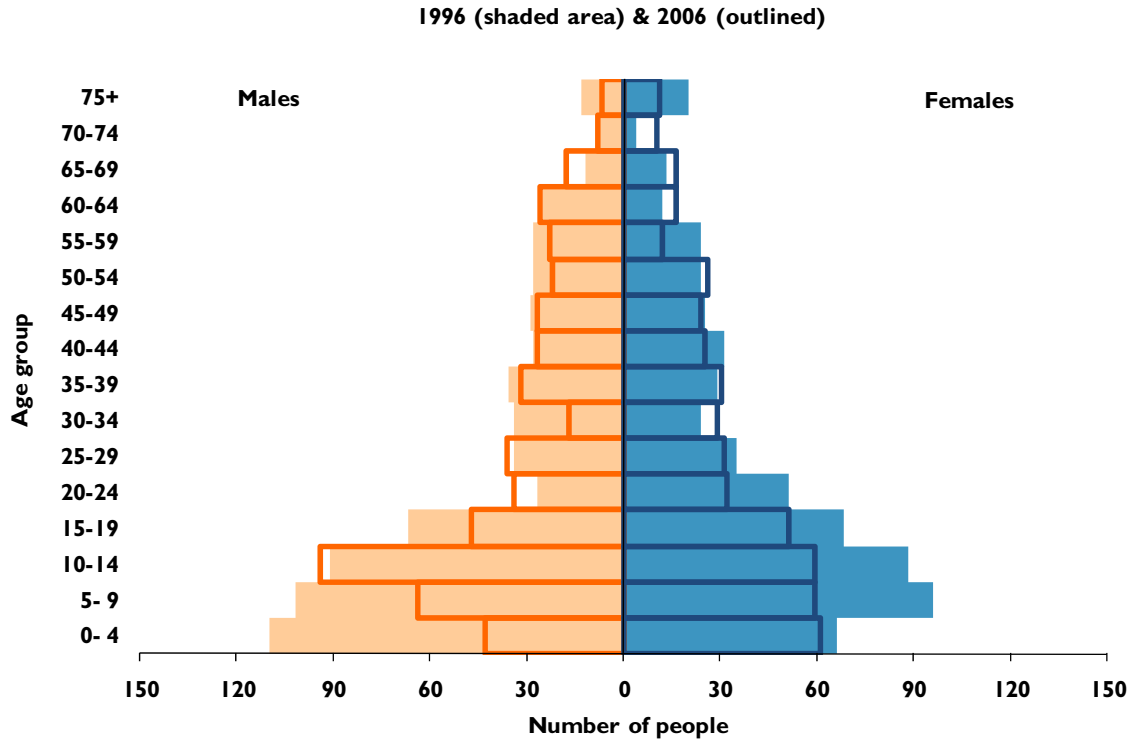
Population growth 1996-2006			
	Males	Females	**Total**
Total	8	81	**89**
Average annual	1	8	**9**
Percentage difference %	0.7	7.8	**4.1**
Average annual growth rate	0.1	0.8	**0.4**

NIUATOPUTAPU

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



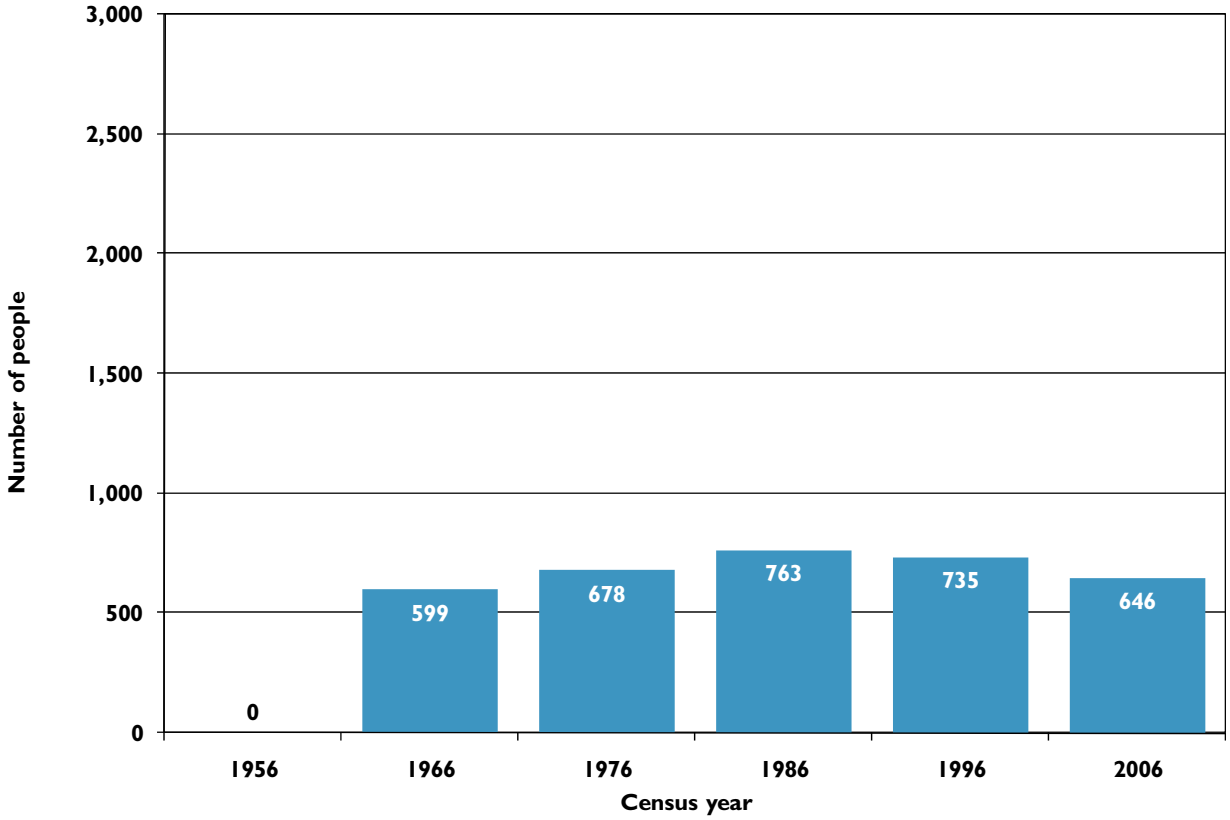
NIUATOPUTAPU

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	110	66	176	0-4	43	61	104
5-9	102	96	198	5-9	64	59	123
10-14	91	88	179	10-14	94	59	153
15-19	67	68	135	15-19	47	51	98
20-24	27	51	78	20-24	34	32	66
25-29	34	35	69	25-29	36	31	67
30-34	34	24	58	30-34	17	29	46
35-39	36	29	65	35-39	32	30	62
40-44	28	31	59	40-44	27	25	52
45-49	29	25	54	45-49	27	24	51
50-54	28	24	52	50-54	22	26	48
55-59	28	24	52	55-59	23	12	35
60-64	25	12	37	60-64	26	16	42
65-69	12	13	25	65-69	18	16	34
70-74	9	4	13	70-74	8	10	18
75+	13	20	33	75+	7	11	18
Total	673	610	**1,283**	Total	526	493	**1,019**
Population by broad age groups (in numbers)							
0-14	303	250	553	**0-14**	201	179	381
15-24	94	119	213	**15-24**	81	83	164
25-59	217	192	409	**25-59**	184	177	362
25-64	242	204	446	**25-64**	210	193	404
60+	59	49	108	**60+**	59	53	112
65+	34	37	71	**65+**	33	37	70
Population by broad age groups (in percentages)							
0-14	45	41	43	**0-14**	38	36	37
15-24	14	20	17	**15-24**	15	17	16
25-59	32	31	32	**25-59**	35	36	35
25-64	36	33	35	**25-64**	40	39	40
60+	9	8	8	**60+**	11	11	11
65+	5	6	6	**65+**	6	8	7
Age dependency ratio							
15-59			**106**	**15-59**			**94**
15-64			**95**	**15-64**			**79**
Sex ratio (males per 100 females)							
			110				**107**
Median age (years)							
Total	**17.5**	**19.1**	**18.3**	**Total**	**22.2**	**22.6**	**22.3**

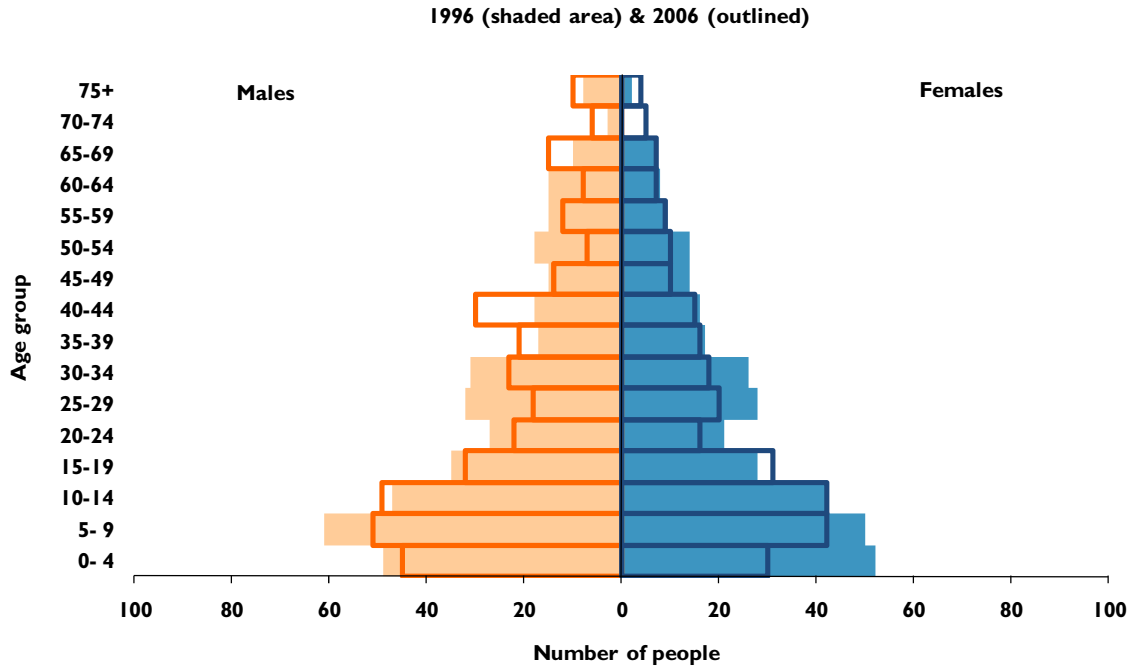
Population growth 1996-2006			
	Males	Females	**Total**
Total	-147	-117	**-264**
Average annual	-15	-12	**-26**
Percentage difference %	-21.8	-19.2	**-20.6**
Average annual growth rate	-2.5	-2.1	**-2.3**

NIUAFO'OU

Population trend: 1956–2006



Population pyramid by five-year age group and sex, 1996 and 2006



NIUAFO'OU

1996				2006*			
Age	**Males**	**Females**	**Total**	**Age**	**Males**	**Females**	**Total**
Population by 5-year age groups and sex							
0-4	49	52	101	0-4	45	30	75
5-9	61	50	111	5-9	51	42	93
10-14	47	42	89	10-14	49	42	91
15-19	35	28	63	15-19	32	31	63
20-24	27	21	48	20-24	22	16	38
25-29	32	28	60	25-29	18	20	38
30-34	31	26	57	30-34	23	18	41
35-39	17	17	34	35-39	21	16	37
40-44	18	16	34	40-44	30	15	45
45-49	15	14	29	45-49	14	10	24
50-54	18	14	32	50-54	7	10	17
55-59	15	9	24	55-59	12	9	21
60-64	15	8	23	60-64	8	7	15
65-69	10	7	17	65-69	15	7	22
70-74	3	0	3	70-74	6	5	11
75+	8	2	10	75+	10	4	14
Total	401	334	**735**	Total	364	282	**646**
Population by broad age groups (in numbers)							
0-14	157	144	301	**0-14**	145	114	259
15-24	62	49	111	**15-24**	54	47	101
25-59	146	124	270	**25-59**	125	98	223
25-64	161	132	293	**25-64**	133	105	238
60+	36	17	53	**60+**	39	23	62
65+	21	9	30	**65+**	31	16	47
Population by broad age groups (in percentages)							
0-14	39	43	41	**0-14**	40	40	40
15-24	15	15	15	**15-24**	15	17	16
25-59	36	37	37	**25-59**	34	35	35
25-64	40	40	40	**25-64**	37	37	37
60+	9	5	7	**60+**	11	8	10
65+	5	3	4	**65+**	9	6	7
Age dependency ratio							
15-59			**93**	**15-59**			**99**
15-64			**82**	**15-64**			**90**
Sex ratio (males per 100 females)							
			120				**129**
Median age (years)							
Total	**21.7**	**19.2**	**20.4**	**Total**	**21.1**	**19.4**	**20.1**

Population growth 1996-2006			
	Males	Females	**Total**
Total	-37	-52	**-89**
Average annual	-4	-5	**-9**
Percentage difference %	-9.2	-15.6	**-12.1**
Average annual growth rate	-1.0	-1.7	**-1.3**