



KINGDOM OF TONGA



Tonga 2011 Census of Population and Housing, Volume 2: Analytical Report



Tonga 2011 Census of Population and Housing, Volume 2: Analytical Report

Report prepared by Tonga Department of Statistics, and
the Secretariat of the Pacific Community, New Caledonia.

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Report prepared by

Sione Lolohea and Lu'isa Koloamatangi, Tonga Department of Statistics
Nicholas McTurk, Secretariat of the Pacific Community, New Caledonia

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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/>

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FOREWORD

We are happy to join with the Government of the Kingdom of Tonga in launching the ‘Tonga 2011 census of population and housing, Volume 2: Analytical report’. The report is based on Tonga’s 2011 census of population and housing and was prepared by SPC’s Statistics for Development Division in close collaboration with the Tonga Department of Statistics.

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 and their impact on the environment and implications for health, education and economic activity. The report presents a set of population projections to provide planners and policy-makers with scenarios of the size and structure of Tonga’s future population to aid planning for the differing needs of the young, working age and elderly.

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 Government 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.

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 socio-economic 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 the people of Tonga, the Tonga Department of Statistics and SPC. I acknowledge their valuable work and trust the results will be immensely useful in planning for Tonga’s future development.

Dr Gerald Haberkorn

Director
Statistics for Development Division
Secretariat of the Pacific Community

ACKNOWLEDGEMENT FROM THE KINGDOM OF TONGA GOVERNMENT

This analytical report is the 7th census of population and housing report of the kingdom since 1956, and the 5th census of population and housing conducted by the Statistics Department.

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 and their impact on the environment and implications for health, education and economic activity. The report presents a set of population projections to provide planners and policy-makers with scenarios of the size and structure of Tonga's future population to aid planning for the differing need of the young, working age and elderly. Information incorporated in this analytical report will facilitate decisions made on Tonga's future.

The 2011 census of population and housing was carried out with the support and efforts of many people. These include: Minister of Finance, under whose authority the census of population and housing was undertaken; the Chairperson of the Steering Committee; and the Secretary of Finance for his leadership and coordination of the Steering Committee, thus making all census activities possible. Thanks also to all the members of the steering committee for their valuable contributions and suggestions in making the census operations work efficiently.

My appreciation is extended to the Secretariat of the Pacific Community (SPC) for all the technical assistance they provided. I also wish to acknowledge the Australian Government's financial assistance because without their support the census would not have happened.

I gratefully acknowledge the support of local businesses, including Tonga Power, Tonga Broadcasting Commission and Tonga Communication Commission for their contributions toward our publicity programme. My sincere gratitude to the Director of Education for allowing education officers and teachers to enumerate and supervise the 2011 census of population and housing, and to all education officers and teachers involved – your hard work is highly appreciated.

I also wish to thank the census team and the rest of the staff of the Statistics Department for their valuable contributions offered throughout the 2011 census of population and housing. Finally, to all the people of Tonga for their generous responses to the questionnaires, your contributions are of vital importance in making Tonga's 2011 census of population and housing a success.

Malo 'Aupito

Mr 'Ata'ata Finau

Government Statistician
Statistics Department
TONGA

SUMMARY OF MAIN INDICATORS

	Total	Males	Females
Total enumerated population (30 November 2011)	103,252	51,979	51,273
Growth rate (%) of total population, 2006–2011	0.2		
Rate of natural increase (CBR – CDR)	2.2		
Implied net migration rate (rate of growth – rate of natural increase)	-2.0		
Population density (number of people/km ²)			
Tonga	159		
Tongatapu	290		
Median age (in years)	21.3	20.2	22.4
Per cent of population younger than 15 years of age	37.2	38.7	35.8
Per cent of population 15–24 years of age (youth)	18.6	18.9	18.3
Per cent of population 15–59 years of age	54.4	53.5	55.2
Per cent of population 60 years and older	8.3	7.7	9.0
Age dependency ratio	84.0		
Urban population (Nuku'alofa)	24,229	12,156	12,073
Per cent urban (%)	23.5	23.4	23.5
Households			
Number of private households (head of households)	18,033	13,982	4,051
Number of people in private households	101,969	51,055	50,914
Average household size	5.7		
Number of institutions (non-private households)	73		
Number of people in institutions	1,074		
Fertility			
Estimated number of births, 2011	2,896		
Crude birth rate (CBR), 2011 (per 1000)	28.0		
Total fertility rate (TFR), 2011	3.9		
Teenage fertility rate, 2011 (per 1000)	30.0		
Mean age at childbearing, 2011	29.9		
Average age at first marriage (SMAM ⁺), 2011	26.0	27.2	24.7
Mortality			
Estimated number of deaths, 2011	699		
Crude death rate (CDR), 2011 (per 1000)	6.8		
Life expectancy at birth, 2011	71.2	69.3	73.1
Infant mortality rate (IMR), 2011 (per 1000)	17	22	15
Child mortality rate (4q1 ⁺⁺), 2011 (per 1000)	3	4	2

SUMMARY OF MAIN INDICATORS (continued)

	Total	Males	Females
International migration			
International net migration (2006–2011)	-9, 850	-4,925	-4,925
Labour force			
Employed population (number)	33,422	19,695	13,727
Paid workers (number)	23,698	13,977	9,721
Subsistence workers (number)	9,549	5,612	3,937
Other unspecified workers (number)	175	106	69
Unemployed (number)	373	192	181
Unemployed (number) – adjusted definition*	2,313	1,356	957
Non-labour force			
Students	9,026	4,403	4,623
Retired, or disabled, or family responsibilities	18,496	5,539	12,957
Other	3,280	1,908	1,372
Other (according to adjusted unemployed)*	1,340	744	596
Labour force participation rate	52.3	62.7	42.3
Employment–population ratio	36.7	44.0	29.6
Unemployment rate (%)	1.1	1.0	1.3
Unemployment rate (%) – adjusted definition*	6.5	6.4	6.5
Unemployment rate (%) if ‘subsistence work’ is classified as unemployed	33.2	33.1	33.3
Education			
School enrollment rates of 6–14 year-olds (%)	97.8	97.5	98.1
Proportion of population aged 15 and older with:			
secondary education	74.6	74.7	74.4
tertiary education	16.1	16.2	16.1
secondary qualification	31.1	29.0	33.0
tertiary qualification	3.1	3.5	2.7
vocational/professional qualification	9.6	9.3	9.8
Literacy			
Proportion of population aged 15–24 who are able to read and write a simple sentence in Tongan or English	99.4	99.3	99.7

+ = singulate mean age at marriage

++ = probability of dying between exact age 1 and exact age 5

* = 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 could not afford transportation costs.

EXECUTIVE SUMMARY

The aim of this report is to provide an analysis of the 2011 Tonga census data with a strong emphasis on demographic trends, patterns and levels.

The 2011 census determined that the total population was 103,252. This compares with 101,991 people in 2006, and represents an increase of 1.3% or 1,261 people. This population increase represents an average annual growth rate of 0.2%, or an increase of 252 people per year. The 2011 census enumerated 51,979 males and 51,273 females, representing a sex ratio of 101 males per 100 females.

Tongatapu's population was 75,416, which constitutes 73% of Tonga's total population. The urban population was 24,229 people (24 percent of the total population), and includes the villages of Kolofou, Ma'ufanga, and Kolomotu'a, which are all part of Nuku'alofa, Tongatapu. The average population density was 159 people/km². This varies widely between division and district. For example, Tongatapu had 290 people/km², while Ongo Niua had only 18 people/km².

The census counted 18,033 private households with 101,969 household members, which represents 5.7 people per household on average. Twenty-two percent of all people that live in private households live in households with 10 or more people, and 3,811 people live in households with 15 or more people.

The 2011 census data show a net flow of people from the outer islands of Vava'u, Ha'apai, 'Eua, and Ongo Niua towards Tongatapu during the intercensal period 2006–2011. 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 (37 percent) 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, 84 were in the age dependent category.

The number of births was estimated at 2,896 in 2011. This accounts for a crude birth rate (CBR) of 28 per 1000. The total fertility rate (TFR) — the average number of births per woman — declined from about 4.2 in 2006 to about 3.9 in 2011.

Based on census data for the number of children ever born and still alive, the infant mortality rate (IMR) was estimated at 17; 22 for males and 15 for females. This estimate is similar to 2006 levels. Based on the number of deaths which were reported by the Ministry of Health as having occurred in the years 2008, 2009 and 2010 and the residents of households who were reported as having died in the 12 months preceding the 2011 census, life expectancies at birth were estimated to be 69.3 and 73.1 years for males and females, respectively. Females are expected to live, on average, just under four years longer than males. Based on the derived life tables, a crude death rate (CDR) of 6.8 per 1,000 was calculated.

Net international migration is estimated indirectly by applying the demographic balancing equation to the known 2006–2011 intercensal population growth rate, and estimated crude birth rate (CBR) and crude death rate (CDR). The net migration rate is estimated at -19.2 per 1000 population, which equates to -1,970 people per year on average which is -164 people per month during the intercensal period 2006–2011.

Women marry at younger ages than men. The average age at marriage was 27.2 and 24.7 years for males and females, respectively.

Methodism is the dominant religion in Tonga, and 36% of the population is affiliated with the Free Wesleyan Church. The Church of Latter Day Saints is the second largest, with 18%, followed by the Roman Catholic Church with 15%, and the Free Church of Tonga (12 percent).

The 2011 census questionnaire included a question on smoking habits of the population five years and older. It was found that 19% of the population smokes on a daily basis, 30% of males and 8% of females. Smoking is most prevalent amongst the population aged 25–34 years. In general, about one-half of all males aged 20–65 smoke on a daily basis, while 13% of females aged over 20 years smoke on a daily basis.

Data on disabilities indicate that 8% 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. From the age of 50 years the proportion of the population with a disability increases continuously until it reaches about 53% of people aged 70 years and older. The most commonly mentioned disability was vision, followed by difficulties with walking. Other disabilities were problems hearing, or remembering and/or concentrating. More than 250 people could not walk at all, 152 people reportedly could not remember or concentrate, 70 people were blind and 56 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 public hospital (and less frequently a private doctor). Others self-treated the complaint. Only 2% cent of all people with a health complaint did not seek any care.

School enrollment 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. Girls are slightly less likely than boys to attend primary school across Tonga but there is gender parity at secondary level.

Data on educational attainment indicate that in 2011, about 9% of the population had only a primary level education. More than 75% of the population aged 15 and older had a secondary level education, and about 17% of the population aged 15 and older had a tertiary level education. Educational levels were higher in the urban area than in rural areas. However compared to 2006, educational attainment levels had improved more in rural areas than urban areas due to greater scope for improvement in rural areas.

The proportion of the population aged 15 and older with a secondary educational qualification was 33% for females and 29% for males. Around 3% had a tertiary qualification and 56% had no qualification at all. About 10% had a vocational/professional qualification. Higher percentages of the urban population had secondary, vocational/professional and tertiary qualifications than those living in rural areas.

Literacy was measured by a respondent's ability to read and write a simple sentence in Tongan and English. Almost everyone older than 10 years of age was literate in Tongan. Literacy in English was almost as high as Tongan language skills for those aged 10–34 years. English literacy gradually declines as age increases. The literacy rate of 15–25 year-olds was 99% for both males and females.

Although a high percentage (52 percent) of Tonga's population aged 15 years and older was economically active, only 37% received a regular paid income; this group consisted of 59% males and 41% females.

Subsistence work — such as growing or gathering produce or fishing to feed families — was the main activity of 18% of Tonga's males and 12% of females aged 15 years and older. About 18% of the

population aged 15 and older in rural areas where subsistence workers compared with 4% of the population aged 15 and older in urban areas.

Only 373 people were categorised as being unemployed. However, 39 people did not work because of poor weather conditions, or because they could not afford the transportation costs to work. In addition, 1,901 people did not work and did not look for work, because they believed that no work was available. Using the international standard 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 these 1,940 people were included in the unemployed category, the unemployment rate would increase to 6% (eight percent in urban areas and six percent in 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 11,862 people, or an unemployment rate of 33% (16 percent in urban areas and 38 percent in rural areas). While the assumption that subsistence workers would look for work if they believed cash work was available may not apply to all subsistence workers, it is likely to apply to a proportion of them. Depending on the definition of unemployment a user of these data may wish to use, the unemployment rate would fall somewhere between 1% and 33%.

Sixty-seven per cent of all households obtained their drinking water from a cement tank. The second most important source was to obtain water from a neighbour (25 percent). Bottled water was used by 4% of households and piped water was used by 3% of households.

The most frequently recorded type of toilet facility used by 76% of all Tongan households was a flush toilet, although there were significant differences by division. While 83% of all households in Tongatapu had a flush toilet, the percentage was much lower in Ha'apai (47 percent) and Ongo Niua (35 percent).

The main source of lighting in Tonga was from mains electricity supply, used by an average of 89% of all households, although this percentage varied between 74% in Ha'apai and 93% in Tongatapu. There was no mains electricity supply in Ongo Niua. Instead, 40% of all households relied on kerosene/benzene, and 57% on solar power for their main lighting source.

The main energy source for cooking for half of all households was gas and its use was most common in Tongatapu, where 60% of all households relied on it. The percentage of households using gas was much lower in all other divisions, where firewood was the most common energy source for cooking.

About 58% of all households dispose of their waste by burning. In Tongatapu, 46% of households used a commercial waste collection. However, outwith Vava'u and Tongatapu, there is no waste collection service. Accordingly, between 86% (Vava'u) and 96% (Ongo Niua) of households in the outer islands continue to dispose of waste through burning.

Information on tenure reveals that 69% of all households owned their dwelling outright, while 5% rented their dwelling, and another 24% 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, a motor vehicle, refrigerator, washing machine, TV, video/DVD, computer, and have access to the internet. A bath or shower was availability in all private households across Tonga. Over 90% of households used mobile telephones in all divisions except for Ongo Niua, where mobile telephones were used by 61% of households. Ownership of a boat was more common in Vava'u, Ha'apai and Ongo Niua than in Tongatapu.

According to population projections prepared for this report, under the most likely scenario, Tonga's population will increase to about 108,500 people by 2031. The percentage of the population of working age (15–59) will increase from about 54% to about 55% by 2031. The dependency ratio will decline slightly because of this percentage increase (from 84 to 81). The percentage of the population aged 14 years and younger will decline from about 37% in 2011 to 34% by 2031 and the percentage of the population aged 60 years and older will increase from about 8% in 2011 to 11% by 2031. The population will age, with median age rising from 21.3 years in 2011 to 22.4 years by 2031. The Tongan government must ensure that adequate support is provided for families to look after their ageing relatives and that provision is made for adequate health care facilities for a growing elderly population.

Kingdom of Tonga



Legend

- Urban Tongatapu
- Rural Tongatapu
- Outer Islands

○ Niuafu'ou

◦ Tafahi
 ◡ Niuatoputapu

PACIFIC OCEAN

VAVA'U GROUP
 ◦ Fonualei
 ◦ Toku
 ◡ Late
 Vava'u

HA'APAI GROUP
 ◡ Kao
 ◡ Tofua
 Ha'ano
 Lifuka
 Uiha
 ◡ Nomuka

TONGATAPU GROUP
 Tongatapu
 Eua



0 50 100 km



1 INTRODUCTION

This report provides an analysis of the Tonga 2011 census data and, where data are available, presents comparisons with census data from 2006.

1.1 Geographic setting

Tonga consists of five administrative divisions: Tongatapu, Vava'u, Ha'apai, 'Eua, and Ongo Niua, spread over an area of 360,000 km² in the South Pacific with a total land area of 749 km². 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 division, followed by Vava'u, Ha'apai and 'Eua. Ongo Niua is the most remote division and has the smallest population share.

Nuku'alofa lies two degrees north of the tropic of Capricorn and is located: 890 km south of Apia, Samoa; 750 km south-east of Suva, Fiji; and 3,300 km north-east of Brisbane, Australia.

1.2 Background to report

This report is a collaborative effort between the Tonga Department of Statistics (TDS) — particularly the Assistant Government Statistician, Sione F. Lolohea and Statistician, Lu'isa Koloamatangi — and Nicholas McTurk of the Statistics for Development Division of the Secretariat of the Pacific Community (SPC). For this purpose, Mr Lolohea and Ms Lu'isa Koloamatangi visited SPC in Noumea, New Caledonia from 25 February to 8 March 2013. Mr Ata'ata Finau, Tonga's Government Statistician, reviewed and commented on the final draft of this report. The report is based on data collected during the population census enumeration, with 30 November 2011 being census day. The main purpose of the report is to:

- provide an analytical overview of the 2011 census results;
- generate interest among Tongan decision-makers and the general public; and
- inform and facilitate sound decision-making by policy-makers.

Data users are encouraged to contact either TDS or SPC's Statistics for Development Division for further information.

Tonga Department of Statistics
PO Box 149
Nuku'alofa
Tonga
Telephone: + 676 23300
Facsimile: + 676 23303
Email: dept@stats.gov.to
<http://www.spc.int/prism/tonga/>

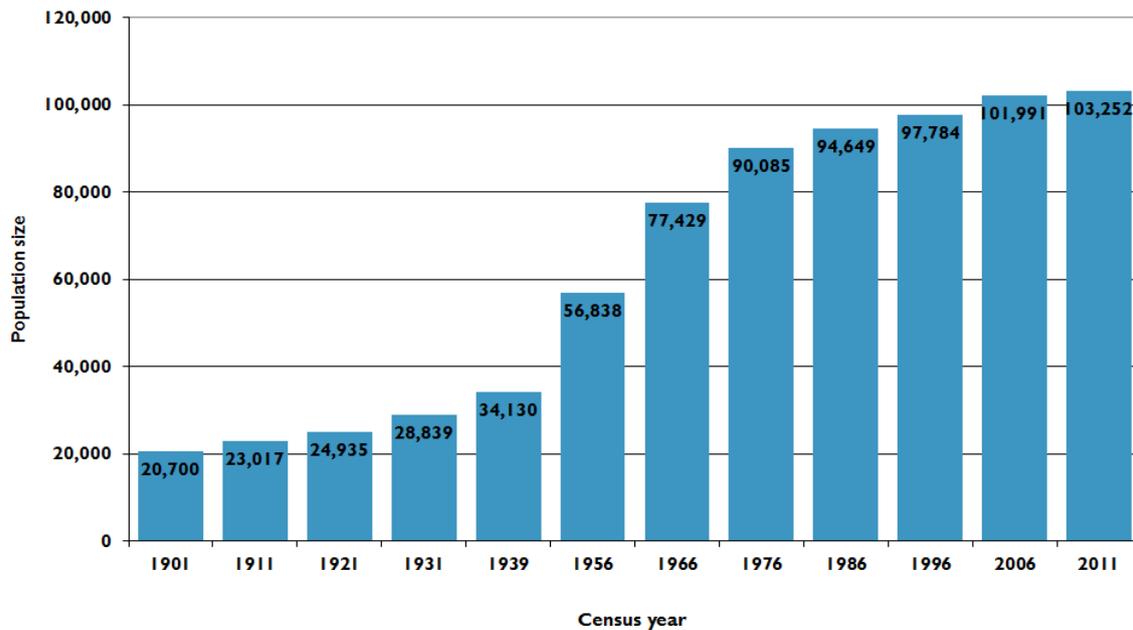
Statistics for Development Division
Secretariat of the Pacific Community
BP D5, 98848 Noumea Cedex
New Caledonia
Telephone: +687 26 20 00
Facsimile: +687 26 38 18
Email: sdd@spc.int
<http://www.spc.int>

2 POPULATION SIZE, TREND, DISTRIBUTION AND STRUCTURE

2.1 Population size and trend

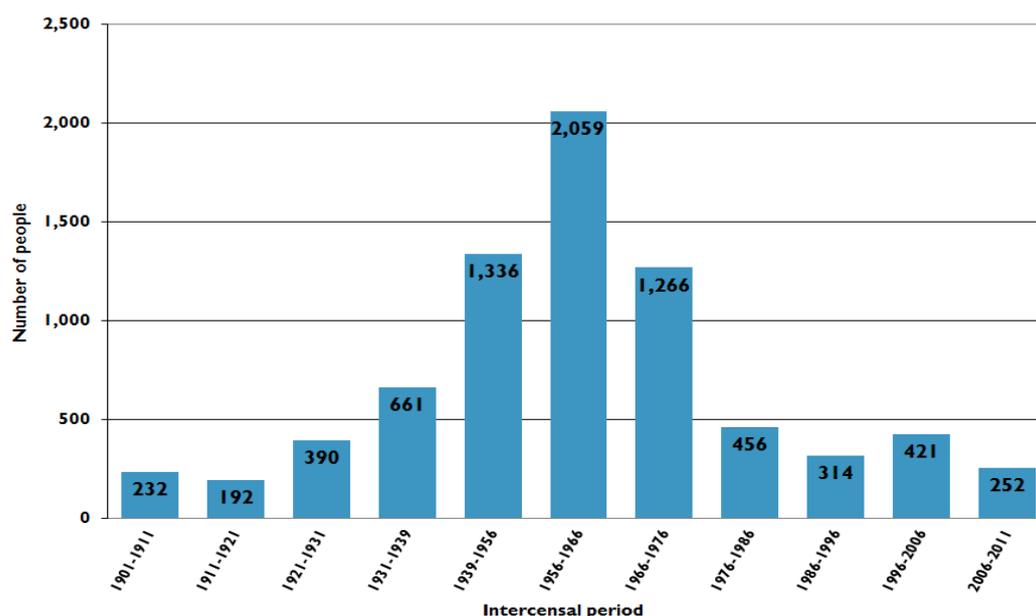
The population of Tonga, as enumerated on 30 November 2011, was 103,252 people: 51,979 males and 51,273 females. This is an increase of 1,261 people in five years – the 2006 population was 101,991 – and represents an annual rate of growth of 0.2%.

Figure 1: Total population size, Tonga: 1901–2011



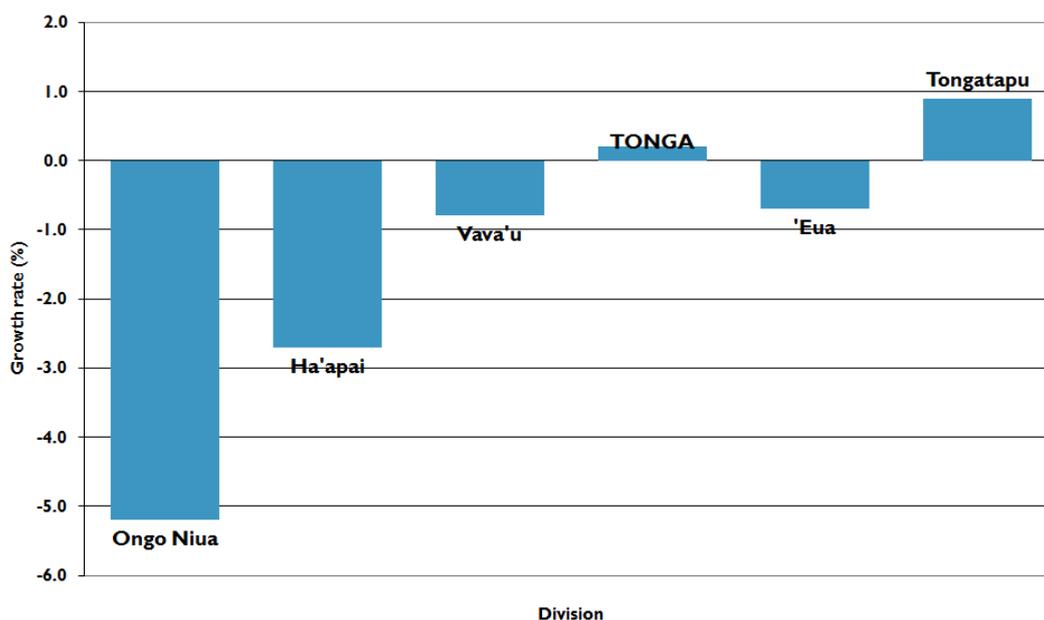
Tonga's population has steadily increased since 1901 when the first census was conducted (Fig. 1). Between the 1930's and 1970's, growth was at its strongest, when at times the population increased by more than 2,000 people per year (Fig. 2). From the 1970's until the 2011 census, the population increased only very slowly with an annual growth rate of less than 0.4% (about 375 people per year).

Figure 2: Intercensal average annual population change (in numbers), Tonga: 1901–2011



Population growth has varied extensively by division and district (Table 1, Fig. 3). While Tonga’s overall growth rate between the 2006 and 2011 censuses was 0.2% per annum, Tongatapu’s population grew at a rate of 0.9%. By contrast, all other divisions experienced negative growth (i.e. population loss). Rates of population decline in the outer Islands were stronger in the 2006 to 2011 intercensal period than were experienced during the 1996 to 2006 intercensal period.

Figure 3: Average annual population growth rate (%) by division, Tonga: 2006-2011



Ongo Niu’s population experienced a negative annual growth rate of -5.2%; its population decreased from 1,665 in 2006 to 1,282 in 2011 (Table 1). Most of the population decline was in the district of Niuva Toputapu, which experienced a negative annual growth rate of -5.9%. Niuva Toputapu population decreased from 1,019 in 2006 to 759 in 2011. Some of this depopulation can be attributed to the tsunami which struck the island on 29 September 2009. This contrasts with an earlier negative annual growth rate of -2.3% on Niuva Toputapu between 1996 and 2006.

Other districts that experienced higher rates of population decline between the 2006 and 2011 censuses were Pangai (-4.2 percent) and Ha'ano (-3.8 percent) in Ha'apai and Leimatu'a (-2.4 percent) in Vava'u.

Compared with the 1996 to 2006 intercensal period, there were fewer districts growing quickly during the 2006 to 2011 intercensal period. However, Nukunuku's rate of growth increased from 1% per annum between 1996 and 2006 to 2.5% per annum between 2006 and 2011. Kolomotu'a's rate of growth increased from 0.9% to 1.5%. Both districts are situated on Tongatapu. Motu in Vava'u had a positive annual growth rate of 2.5% between 2006 and 2011. This growth reversed a trend of population decline since 1986.

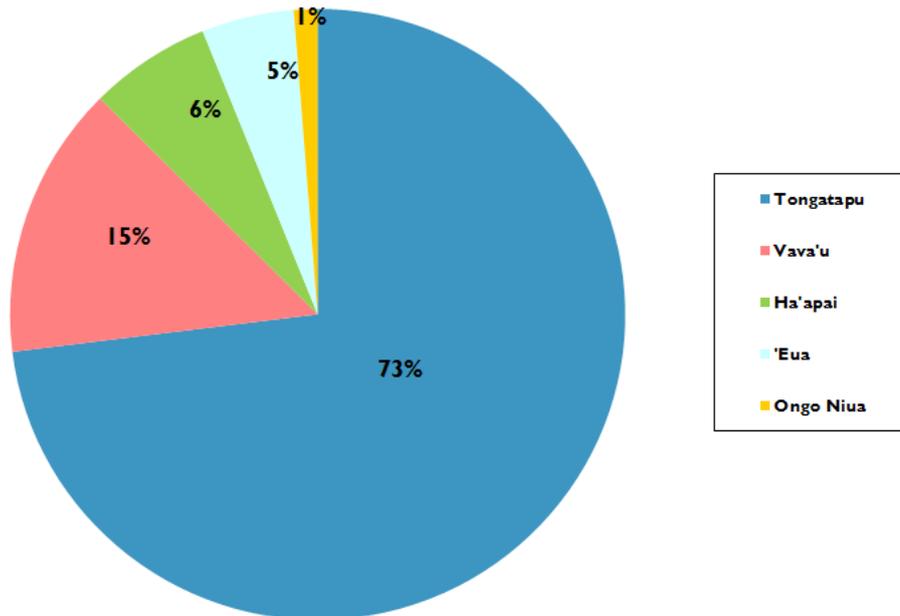
Table 1: Total population size and growth by division and district, Tonga: 1996, 2006 and 2011

Division/District	Census total population			Population change					
				(in numbers)		(in %)		(Annual growth rate)	
	1996	2006	2011	1996-2006	2006-2011	1996-2006	2006-2011	1996-2006	2006-2011
TONGA	97,784	101,991	103,252	4,207	1261	4.3	1.2	0.4	0.2
Tongatapu	66,979	72,045	75,416	5,066	3371	7.6	4.7	0.7	0.9
Kolofo'ou	16,953	18,463	18,957	1,510	494	8.9	2.7	0.9	0.5
Kolomotu'a	14,451	15,848	17,088	1,397	1240	9.7	7.8	0.9	1.5
Vaini	11,180	12,594	12,949	1,414	355	12.6	2.8	1.2	0.6
Tatakamotong	6,828	6,969	7,233	141	264	2.1	3.8	0.2	0.7
Lapaha	7,370	7,255	7,380	-115	125	-1.6	1.7	-0.2	0.3
Nukunuku	6,160	6,820	7,733	660	913	10.7	13.4	1.0	2.5
Kolovai	4,037	4,096	4,076	59	-20	1.5	-0.5	0.1	-0.1
Vava'u	15,715	15,505	14,922	-210	-583	-1.3	-3.8	-0.1	-0.8
Neiafu	5,650	5,787	5,774	137	-13	2.4	-0.2	0.2	0.0
Pangaimotu	1,298	1,412	1,325	114	-87	8.8	-6.2	0.8	-1.3
Hahake	2,291	2,422	2,297	131	-125	5.7	-5.2	0.6	-1.1
Leimatu'a	2,753	2,742	2,436	-11	-306	-0.4	-11.2	0.0	-2.4
Hihifo	2,375	2,267	2,105	-108	-162	-4.5	-7.1	-0.5	-1.5
Motu	1,348	875	985	-473	110	-35.1	12.6	-4.3	2.4
Ha'apai	8,138	7,570	6,616	-568	-954	-7.0	-12.6	-0.7	-2.7
Pangai	2,966	2,967	2,410	1	-557	0.0	-18.8	0.0	-4.2
Foa	1,434	1,479	1,359	45	-120	3.1	-8.1	0.3	-1.7
Lulunga	1,282	1,075	1,055	-207	-20	-16.1	-1.9	-1.8	-0.4
Mu'omu'a	735	630	609	-105	-21	-14.3	-3.3	-1.5	-0.7
Ha'ano	773	619	511	-154	-108	-19.9	-17.4	-2.2	-3.8
'Uiha	948	800	672	-148	-128	-15.6	-16.0	-1.7	-3.5
'Eua	4,934	5,206	5,016	272	-190	5.5	-3.6	0.5	-0.7
'Eua Motu'a	2,766	2,949	2,852	183	-97	6.6	-3.3	0.6	-0.7
'Eua Fo'ou	2,168	2,257	2,164	89	-93	4.1	-4.1	0.4	-0.8
Ongo Niua	2,018	1,665	1,282	-353	-383	-17.5	-23.0	-1.9	-5.2
Niua Toputapu	1,283	1,019	759	-264	-260	-20.6	-25.5	-2.3	-5.9
Niua Fo'ou	735	646	523	-89	-123	-12.1	-19.0	-1.3	-4.2

2.2 Population distribution

In 2011, 73% of Tonga's population was living in Tongatapu, a small increase from 2006 when 71% lived there. The proportion of Tonga's population that lived in Vava'u was 15%, Ha'apai 6%, 'Eua 5%, and Ongo Niua 1% (Fig 4). The percentages living in Vava'u was also 15% and in 'Eua was also 5% in 2006. However, Ha'apai and Ongo Niua had 7% and 2% of the total population respectively in 2006.

Figure 4: Population distribution by Division (%), Tonga: 2011



Urban-rural

Slightly over 23% of Tonga's population lived in the three urban districts of Kolofou, Kolomotu'a, and Ma'ufanga, which together form the township of Nuku'alofa, Tongatapu. The urban-rural split in the population has remained stable since 2006.

2.3 Population density

According to the 2011 census, Tonga's average population density was 159 people/km², an increase from 150 in 1996 and 157 in 2006 (Table 2).

Population density varied widely by division. While there were 290 people/km² in Tongatapu, there were only 18 people per/km² in Ongo Niua. Between 1996 and 2011, the population density in Tongatapu has been steadily increasing, while the population density in 'Eua has stayed about the same and the population density in Vava'u, Ha'apai and Ongo Niua has fallen. The largest decline in density has been in Ha'apai (by 13 people/km²).

Table 2: Population density (number of people/km²) by division, Tonga: 1996, 2006 and 2011

Division	land area (km ²)	Population density		
		1996	2006	2011
TONGA	650	150	157	159
Tongatapu	260	257	277	290
Vava'u	121	130	128	123
Ha'apai	109	74	69	61
'Eua	87	56	60	57
Ongo Niua	72	28	23	18

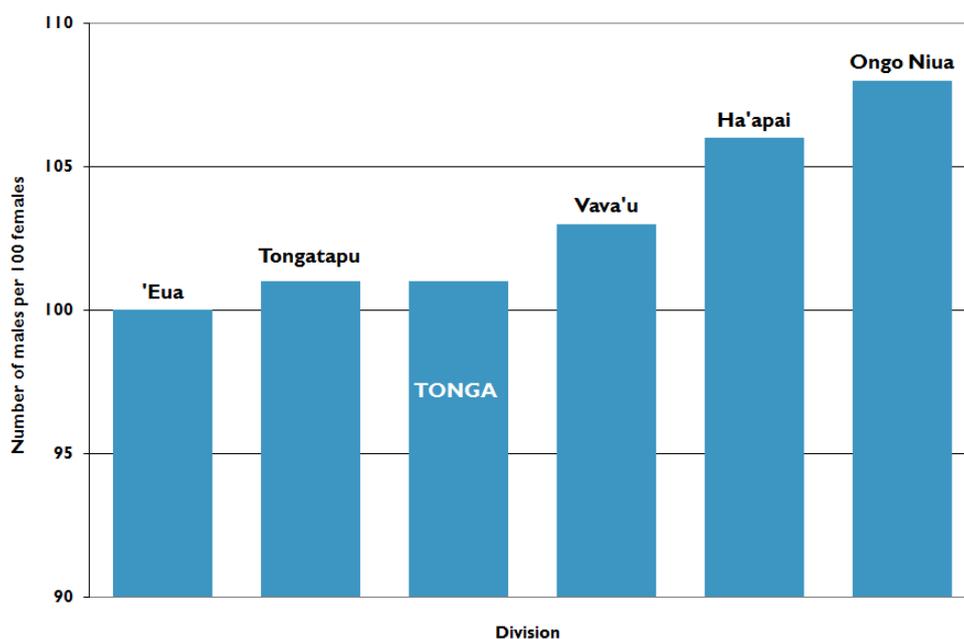
2.4 Population structure

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

The enumerated 2011 population consisted of 51,979 males and 51,273 females. Males out-numbered females by 706, resulting in a sex ratio of 101, which means that there were 101 males per 100 females. However, sex ratios varied widely by division (Fig. 5). Figure 5 indicates there were more males than females in all divisions except 'Eua and significantly more males compared to the number of females in Ongo Niua.

Between the 2006 and 2011 censuses, the sex ratio for Tonga declined by two males per 100 females (from 103 males per 100 females). The decline in the number of males per 100 females was largest in Ongo Niua (from 114 to 108 males per 100 females) and 'Eua (from 108 to 100 males per 100 females). Each of the other divisions experienced a decline of one male per 100 females. These declines can be explained by higher rates of out-migration of males than of females from the outer islands, higher rates of overseas migration of males than of females and slower improvements in life expectancy of males than of females.

Figure 5: Sex ratio by division, Tonga: 2011



A population pyramid 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 on the left and the number of females on the right.

Figure 6 presents population pyramids for Tonga, Tongatapu, Vava'u, Ha'apai, 'Eua and Ongo Niua. The shaded areas show the population count of the 2006 census, while the thickly outlined areas show the population count of the 2011 census. Note that the people counted in the 2011 census were five years older than in the 2006 census, if they were enumerated during both censuses.

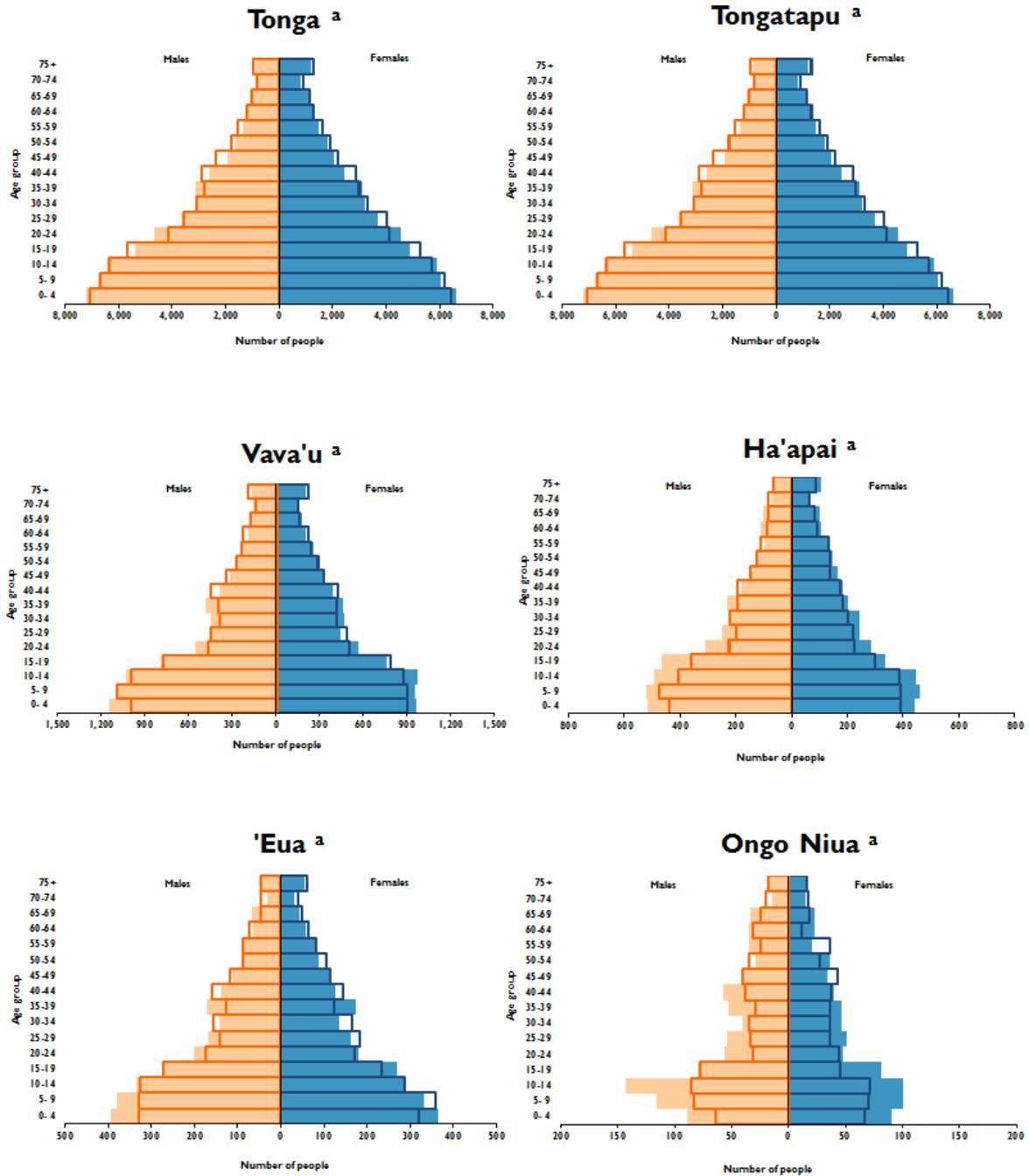
Tonga's population pyramid has a wide base and narrower bars represent smaller counts as age increases, meaning that a large percentage of people are in the younger age groups. Such a population structure is associated with relatively high fertility rates (i.e. high numbers of births per woman).

Tongatapu's population pyramid looks similar to that of Tonga's total population pyramid. However, the pyramids of Vava'u, Ha'apai, 'Eua and Ongo Niua are characterized by a distinctly smaller proportion of people aged 20–34 (in 2006 and even more-so in 2011). This is the result of out-migration of young people from the outer islands (rural areas) to Tongatapu or overseas.

The narrowing of the population bar of the 0–4 year-olds relative to the population bar of the 5–9 year-olds in Vava'u, Ha'apai, 'Eua and especially in Ongo Niua is attributable to declining fertility and out-migration of some of the children of the people aged 20–34 who have left the outer Islands for Tongatapu or overseas.

The general population decline in Vava'u, Ha'apai and Ongo Niua is illustrated by smaller thickly outlined bars, representing the size of the age groups in 2011 compared with the generally larger shaded bars that represent the size of these age groups in 2006.

Figure 6: Population pyramids, Tonga and Divisions: 2006 and 2011



a 2006 (shaded areas); 2011 (outlined areas)

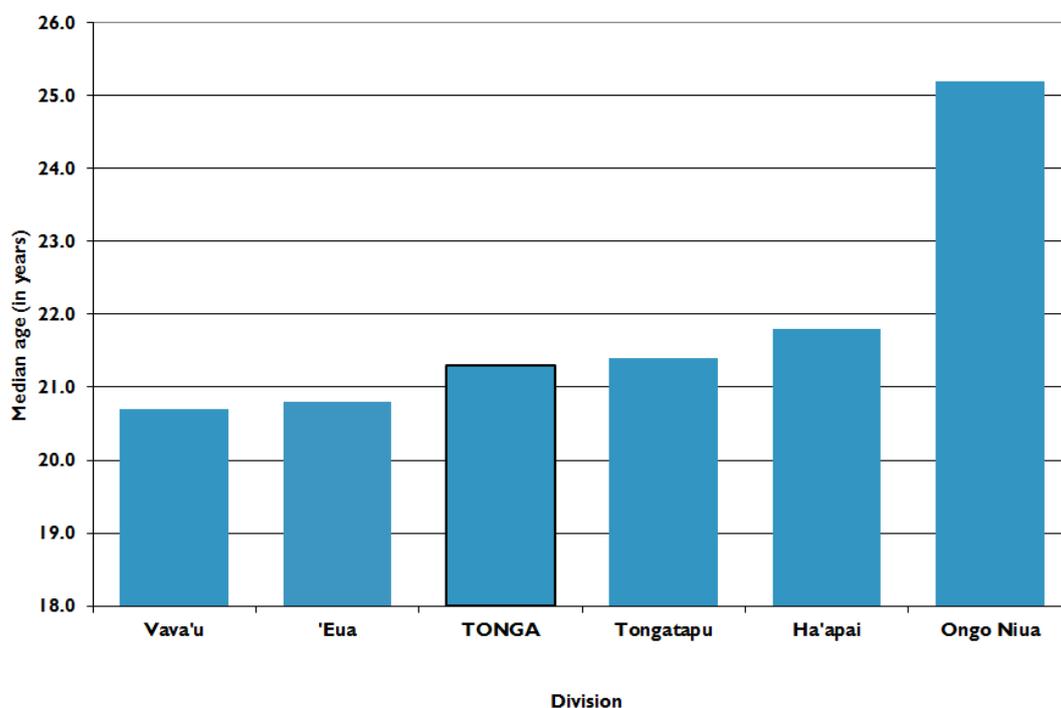
Tonga's population has a young age structure, with 37% of the population younger than 15 years of age, and only 8% older than 60 years (Table 3). This is also illustrated by the median age, of 21 years in 2011 (Table 3 and Fig. 7). This means that half of Tonga's population is younger and the other half older than 21 years of age.

Table 3: Population distribution by broad age group, dependency ratio, median age, and sex ratio, Tonga: 2006 and 2011

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	2006	38	19	35	8	86	21.0	103
	2011	37	19	36	8	84	21.3	101
Tongatapu	2006	38	20	35	8	83	21.2	102
	2011	37	19	36	8	81	21.4	101
Vava'u	2006	40	17	34	9	96	20.2	104
	2011	39	17	34	10	95	20.7	103
Ha'apai	2006	38	18	34	10	91	20.9	107
	2011	38	17	36	10	90	21.8	106
Eua	2006	40	18	34	8	91	19.7	108
	2011	39	17	36	8	90	20.8	100
Ongo Niua	2006	38	16	35	10	96	21.5	101
	2011	34	15	38	12	87	25.2	108

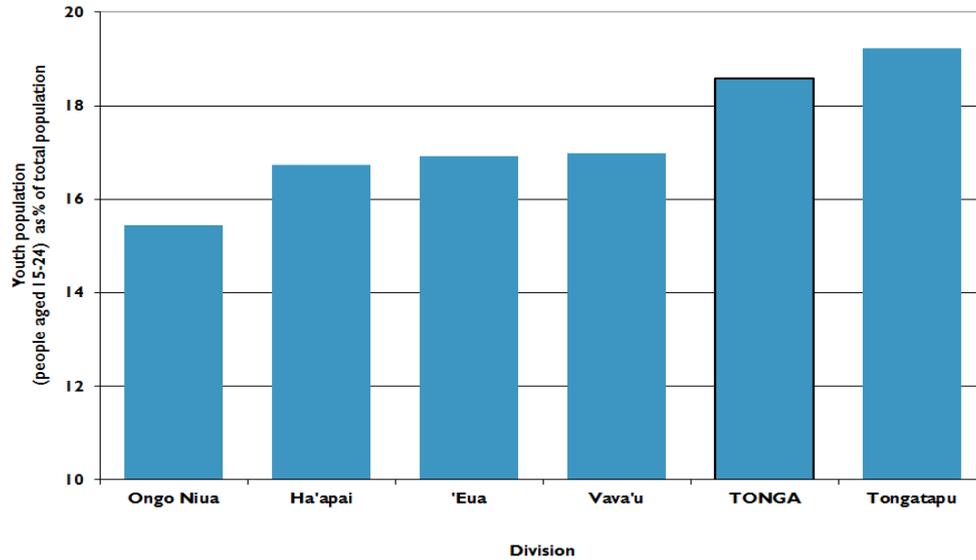
Population age structures change gradually over time and accordingly there is little difference in median ages at the Tonga level between the 2006 and 2011 censuses. However, as a result of out-migration of young adults, the median ages were higher in the divisions of Vava'u, Ha'apai, 'Eua and particularly in Ongo Niua in 2011 as compared to 2006.

Figure 7: Median age by division, Tonga: 2011



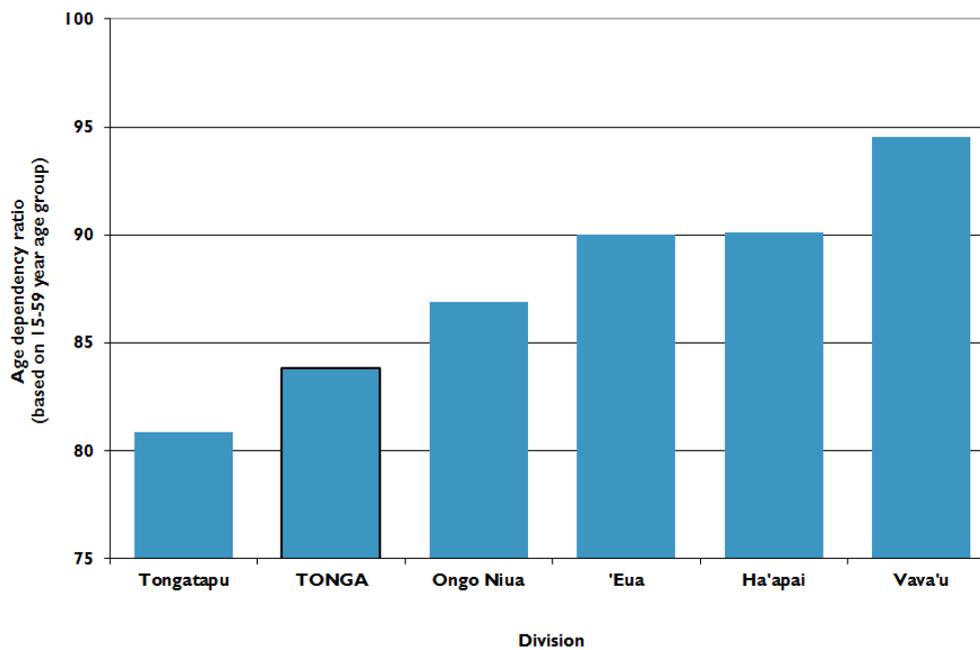
In Tonga, 19% of the population was between 15 and 24 years of age (the youth population) (Fig. 8). The highest proportion of youth was found in Tongatapu (19 percent) and the lowest proportion was in Ongo Niua (15 percent).

Figure 8: Total population by proportion of Youth population aged 15–24 years, Tonga: 2011



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) and old people (60 years and over) to 100 people of working age (15–59 years). A higher dependency ratio means that a larger young and elderly population requires material support by the working age population and a lower dependency ratio means that the working age population has a smaller young and elderly population to support.

Figure 9: Age dependency ratio by division, Tonga: 2011



Tonga's dependency ratio in 2011 was 84, meaning that for every 100 people of working age, 84 people were in the age dependent category (Table 3 and Fig. 9). In 2011, the dependency ratio had decreased by two, from 86 in 2006.

The most favorable dependency ratio can be found in Tongatapu with only 81 dependent people per 100 people of working age. Dependency ratios were higher in the outer islands. Vava'u had the highest dependency ratio of 95, meaning that there were almost as many young (0–14 years) and old people (60 years and older), as people aged 15–59 years.

Between the 2006 and 2011 censuses the dependency ratio declined in all divisions (Table 3). The smallest decline was in Vava'u (from 96 in 2006 to 95 in 2011) and the largest decline was in Ongo Niua (from 96 in 2006 to 87 in 2011).

3 DEMOGRAPHIC COMPONENTS

3.1 Fertility

This section presents the following fertility indicators:

- the *Age Specific Fertility Rate* (ASFR) is the number of births to women of a particular age group during a specific time period;
- the *Total Fertility Rate* (TFR) is the average number of children that would be born to a woman during her childbearing years (15–49) if she were to pass through all her childbearing years conforming to the age-specific fertility rates of a specific time period;
- the *Crude Birth Rate* (CBR) is the number of live births per 1,000 population in a specific time period;
- the *Teenage Fertility Rate* relates to child-bearing among women aged 15–19, and is synonymous with the ASFR (15–19);
- *Mean Age at Childbearing* (MAC) refers to the mean age of mothers at the birth of their children if women were subject throughout their lives to the ASFR observed in a specific time period.

3.1.1 Census data

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 their last child was born.

The total number of children born alive to 32,928 women aged 15 years and older was 89,827 (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: 2011

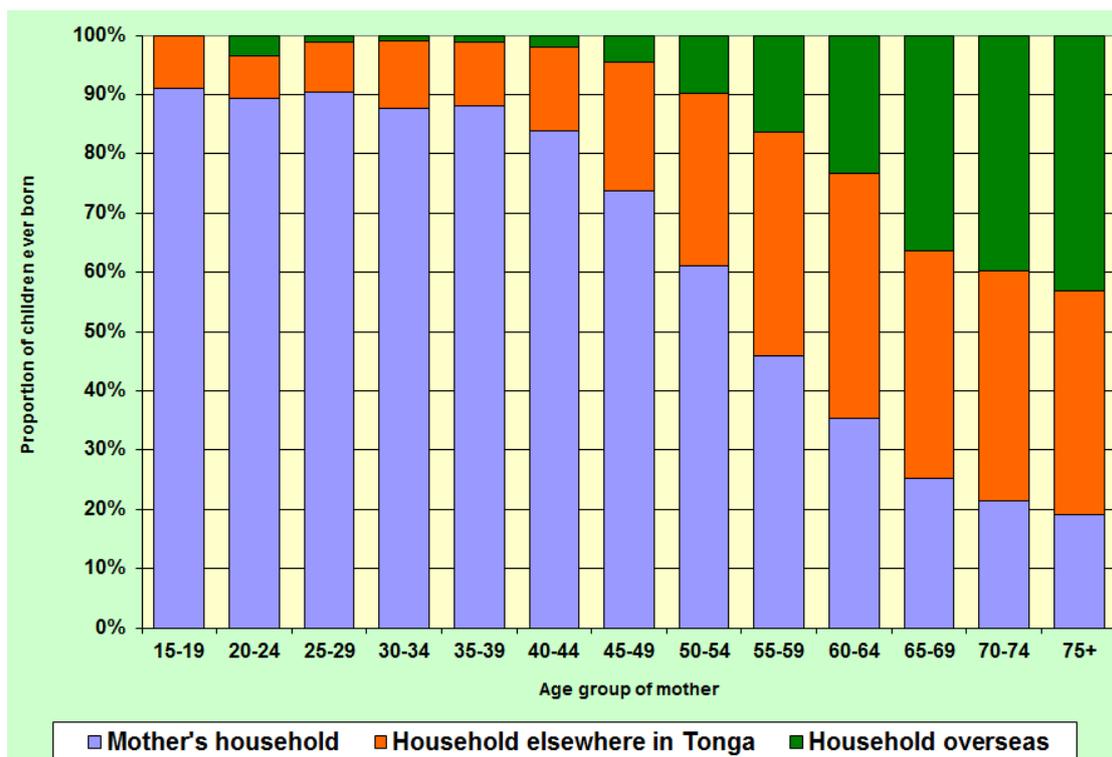
Age of women	Number of women	Number of Children ever born			Average number of children ever born		
		Males	Females	Total	Males	Females	Total
15-19	5,292	94	88	182	0.0	0.0	0.0
20-24	4,099	1,021	926	1,947	0.2	0.2	0.5
25-29	4,015	3,133	2,730	5,863	0.8	0.7	1.5
30-34	3,317	4,279	4,005	8,284	1.3	1.2	2.5
35-39	2,972	5,330	4,788	10,118	1.8	1.6	3.4
40-44	2,864	6,021	5,679	11,700	2.1	2.0	4.1
45-49	2,214	5,221	4,640	9,861	2.4	2.1	4.5
50-54	1,921	4,591	4,103	8,694	2.4	2.1	4.5
55-59	1,637	4,121	3,857	7,978	2.5	2.4	4.9
60-64	1,308	3,603	3,267	6,870	2.8	2.5	5.3
65-69	1,133	3,056	2,865	5,921	2.7	2.5	5.2
70-74	889	2,524	2,333	4,857	2.8	2.6	5.5
75+	1,267	3,889	3,661	7,550	3.1	2.9	6.0
Total	32,928	46,884	42,943	89,827	1.4	1.3	2.7

Note: includes 5 women with age not stated and their children

Average parity increases with the age of women. While women 15–19 years of age had only very few children, women aged 45–49 had 4.5 children, and women older than 70 years of age had on average six 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 completed their childbearing actually produced during their childbearing 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. 10). The proportion of children living in their mother's household decreased with the age group of mothers, because as children grow older they leave their parents' home and form their own household. More than 40% of children of mother's aged 70 years and older live overseas.

Figure 10: Proportion of children ever born and whether mother's children live in the same household as mother, Tonga: 2011



From the question on the 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 one-year period before the census (1 December 2010–30 November 2011) by age group of women, Tonga: 2011

Age group of women	Number of women	Number of children			ASFR ¹
		Males	Females	Total	
15-19	5,292	52	57	109	0.0206
20-24	4,099	297	254	551	0.1344
25-29	4,015	441	414	855	0.2130
30-34	3,317	326	262	588	0.1773
35-39	2,972	194	173	367	0.1235
40-44	2,864	75	64	139	0.0485
45-49	2,214	9	8	17	0.0077
50-54	1,921	1	0	1	0.0005
Total	26,694	1,395	1,232	2,627	TFR² = 3.6

¹ Age Specific Fertility Rate

² Total Fertility Rate

Responses from women during the 2011 census indicate that 2,627 children were born during the one-year period before the census, between December 2010 and November 2011 (Table 5). However, this count compares to 2,720 children younger than one year of age enumerated during the census. The Tonga Ministry of Health reported that 2,766 births had occurred during 2011. Mismatches in counts

suggest that a sizeable number of women did not report the birth of their child during the year before the census, or did not accurately report the exact date of birth of her children.

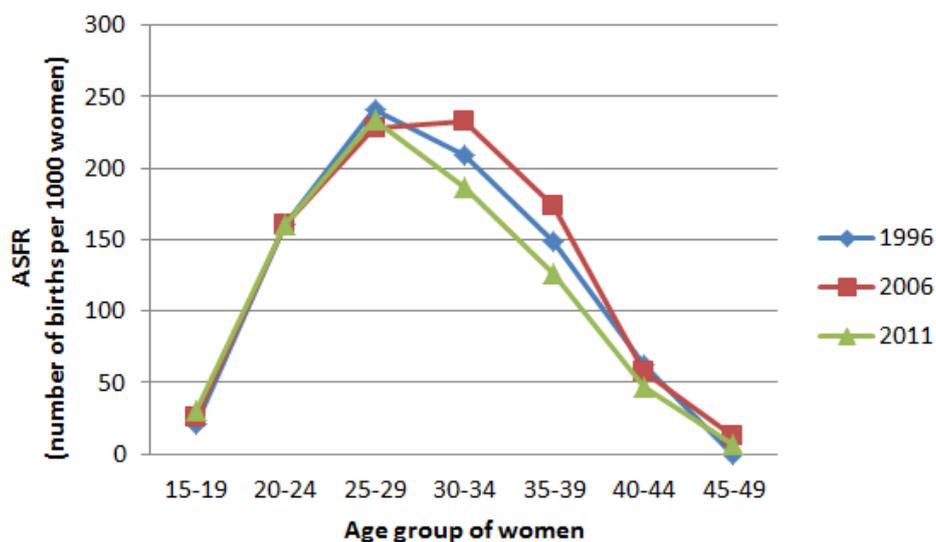
In order to estimate Tonga’s fertility rate, this analysis relies on indirect estimation techniques, based on census data of the number of children ever born by age of women, and the number of children born during the year before the census by age of women as reported in the census. The demographic indicator most commonly used to describe a country’s fertility situation is called the total fertility rate (TFR). 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 2006 and 2011 census data, to which the Arriaga method, which measures fertility based on data at two points in time, was applied. The software PAS of the United States Bureau of Census (procedure ARFE-2) and the software MORTPAK 4.1 of the United Nations (procedure FERTPF) were used. Both of these methods estimated virtually identical fertility rates. FERTPF and ARFE-2 output can be found in Appendices 1 and 2.

The Arriaga method calculates age specific fertility based on an average of the adjustment factors for women aged 20–34, the age group for which women’s reported fertility is assumed to be most accurate. Using the Arriaga method, Tonga’s TFR was estimated at 3.9 in 2011 (Table 6). There has been a small decline in TFR compared to 2006, when the TFR was 4.2.

During the 15-year period, 1996–2011, there have been shifts in the fertility pattern by age group of women (Fig. 11). The teenage fertility rate increased slightly from 21 in 1996 to 25 in 2006 and to 30 in 2011 (i.e. 30 births per 1,000 women aged 15–19). However, fertility rates were similar in 1996, 2006 and 2011 up to age group 25–29. In 1996 and 2011, women aged 25–29 had peak fertility, whereas in 2006 peak fertility was at age group 30–34. The most noticeable transition is that fertility rates are lower for women aged between 30 and 40 in 2011 than at the time of the 1996 and 2006 censuses. Fertility levels of women aged 45–49 remain consistently low.

Figure 11: Age-specific fertility rates (ASFRs), Tonga: 1996, 2006 and 2011



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

The number of births by age group of women during the one-year period before the 2011 census can be calculated by multiplying the estimated ASFR by the enumerated number of women by age group in the census. In total 2,896 births were estimated to have occurred during the one-year prior to the census (Table 6).

Table 6: Estimated/adjusted age-specific fertility rate (ASFR), total fertility rate (TFR), and mean age at childbearing (MAC), Tonga: 2011

Age group of women	Number of women	Estimated ASFR	Estimated number of births
15-19	5,292	0.0300	159
20-24	4,099	0.1601	656
25-29	4,015	0.2336	938
30-34	3,317	0.1867	619
35-39	2,972	0.1266	376
40-44	2,864	0.0465	133
45-49	2,214	0.0064	14
Total	24,773		2,896
TFR	3.9 children per woman		
MAC	29.9 years		

The crude birth rate (CBR) can then be calculated by dividing the estimated number of births (2,896) by the total 2011 census population (103,252), multiplied by 1,000:

CBR = 2,896/103,252 X 1,000 = 28 (there were 28 births/1,000 population)

3.1.2 Fertility estimates based on vital statistics

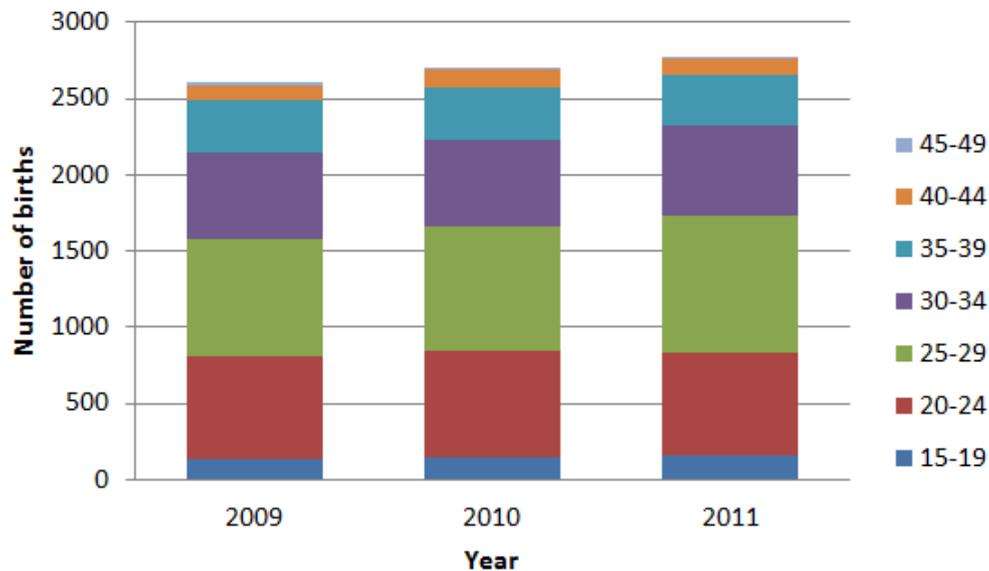
In order to verify Tonga’s fertility rate derived using census data, the following analysis uses Ministry of Health data for occurred male and female births by age of mother and year of birth (Table 7, Fig. 12).

Table 7: Number of births by age of mother and year of occurrence, Tonga: 2009–2011

Age of mother	2009	2010	2011 ¹
15-19	135	146	160
20-24	673	700	672
25-29	771	811	900
30-34	566	571	588
35-39	345	347	329
40-44	93	112	108
45-49	28	5	8
Total	2,611	2,692	2,764

¹ Includes prorated births where age of mother was not stated
Source: Tonga Ministry of Health

Figure 12: Number of births by age of mother and year of occurrence, Tonga: 2009–2011



Source: Tonga Ministry of Health

Female population estimates for 30 June 2009, 2010 and 2011 were calculated by means of interpolation between the female populations as recorded on the 2006 and 2011 censuses. Subsequently, the number of births by age of mother in 2009, 2010 and 2011 were divided by the estimated female population of the same age groups, in order to calculate ASFRs and TFRs for 2009, 2010 and 2011. Three-year period ASFRs and a TFR were derived for 2009–2011 to reduce the effect of annual fluctuations in births (Table 8).

Table 8: Estimated number of females aged 15–49 and ASFRs by five-year age groups, Tonga: 2009–2011

	Estimated number of women				ASFR			30 June 09 to 30 June 2011 ¹
	30-Jun-09	30-Jun-10	30-Jun-11		30-Jun-09	30-Jun-10	30-Jun-11	
15-19	5,096	5,175	5,255		0.026491	0.028212	0.03042	0.0284
20-24	4,306	4,217	4,131		0.156293	0.165977	0.162598	0.1616
25-29	3,841	3,911	3,982		0.200752	0.207384	0.22599	0.21155
30-34	3,255	3,281	3,306		0.173871	0.174059	0.177921	0.1753
35-39	3,041	3,012	2,983		0.113452	0.115207	0.110209	0.11297
40-44	2,646	2,731	2,820		0.035151	0.041005	0.038153	0.03815
45-49	2,137	2,168	2,200		0.013101	0.002306	0.003657	0.00631
Total	24,350	24,523	24,697	TFR	3.6	3.7	3.7	3.7

¹ Calculated using three-years of births data and the mid-point population estimate as the denominator

The TFR is consistent for 2010, 2011 and 2009–2011. The fertility level by age group of mother (ASFR) of the three-year period 2009 to 2011 is shown in Figure 13. Women aged 25–29 produced the most children (212 per 1000 women), followed by women aged 30–34 years.

Figure 13: ASFRs based on Ministry of Health births data by year of occurrence, Tonga: 2009–2011

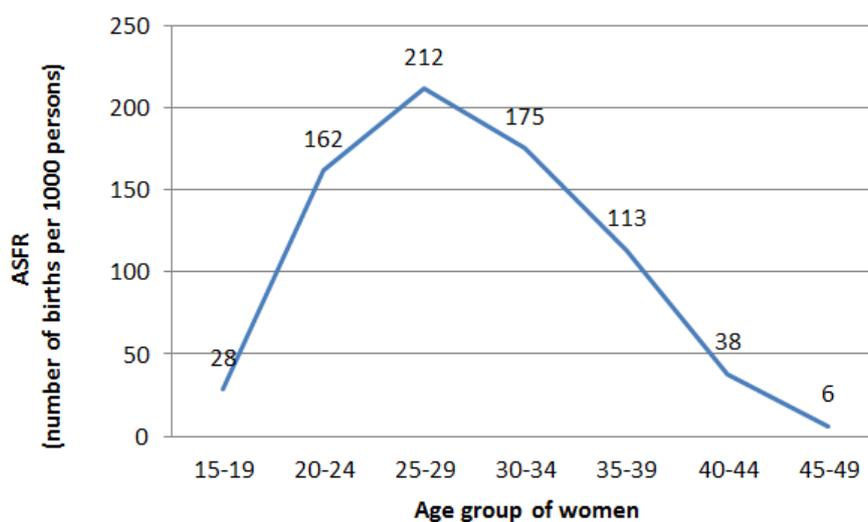
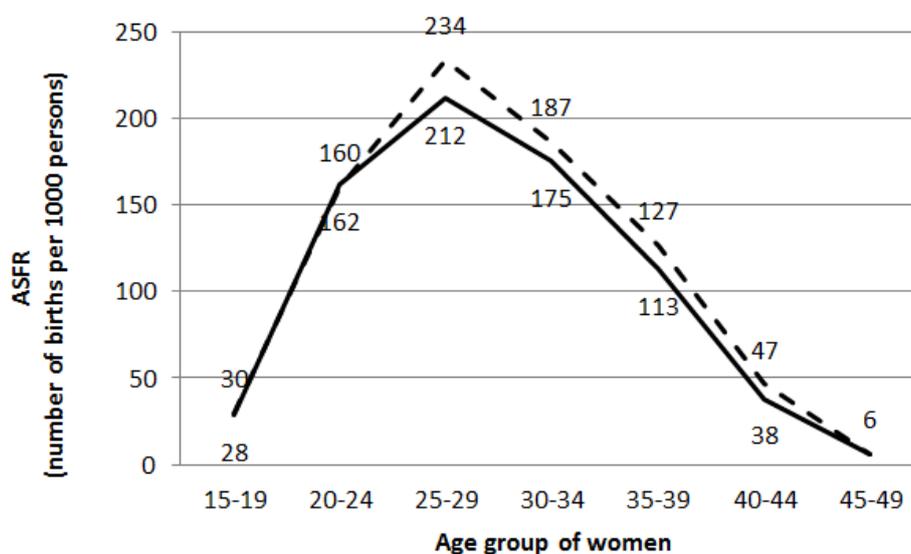


Figure 14 compares the ASFRs for Ministry of Health 2009–2011 data (solid line) with 2011 census data ASFRs calculated indirectly using the Arriaga method (dashed line). It can be seen that adjustment to census data produces more births for women for all age groups except 20–24 year olds. This suggests an undercount of births for all age groups except for mothers aged between 20 and 24 years in Ministry of Health data.

Figure 14: ASFRs based on 2009–2011 Ministry of Health births data by year of occurrence and adjusted 2011 census data. Tonga



Applying the same adjustments to the 2009–2011 Ministry of Health data as were made to 2011 census births data (for all age groups except births to women aged between 20 and 24 years) results in a TFR of 3.9 births per women (Table 9). This value matches the value for 2011 census estimated ASFRs calculated indirectly using the Arriaga method.

Table 9: Adjustment of 2009–2011 Ministry of Health ASFRs, Tonga

Age group of mother	a. 2011 Census ASFRs (a)	2011 Census Estimated ASFRs (b)	c. Adjustment factor (b/a)	2009-2011 MOH ASFRs (d)	Estimated MOH ASFRs (c X d)
15-19	0.0206	0.0300	1.4543	0.0284	0.0413
20-24	0.1344	0.1601	1.0000	0.1616	0.1616
25-29	0.2130	0.2336	1.0971	0.2116	0.2321
30-34	0.1773	0.1867	1.0531	0.1753	0.1846
35-39	0.1235	0.1266	1.0256	0.1130	0.1159
40-44	0.0485	0.0465	0.9586	0.0381	0.0366
45-49	0.0077	0.0064	1.0000	0.0063	0.0063
TFR	3.6	3.9	-	3.7	3.9

3.2 Mortality

The questions relating to mortality in the 2011 census were:

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

Of all children that were ever born to women 15 years and older (89,827) reported in the 2011 census, 96% (86,443) were still alive, and 3,384 had died (Table 10).

The proportion of surviving females was slightly higher than that of males (Table 11).

The proportion of surviving children decreases with the age of women (Table 11 and Fig. 15). Whilst 99% of all children that were ever born to women now aged 20–24 were still alive, only 97% of children born to women now aged 45–49 were still alive, and only 90% of children born to women now aged 75 years and older were still alive. This general trend is explained by the fact that as the age of mothers increases, so does the age of her children.

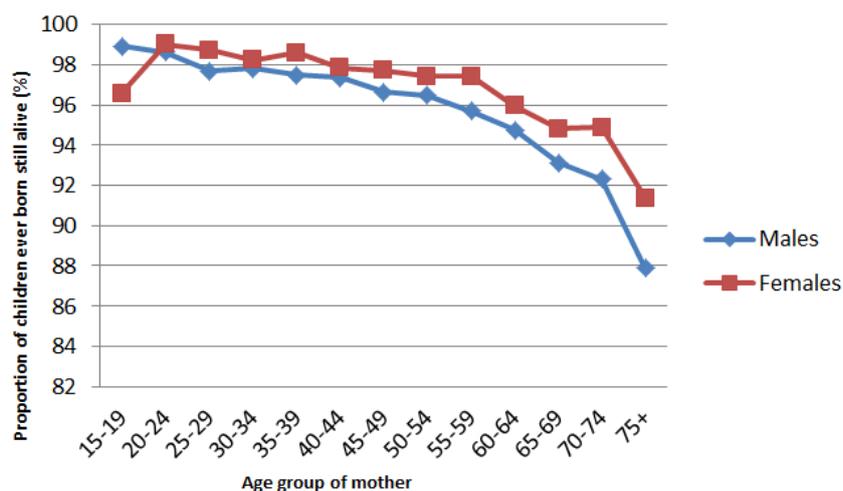
Table 10: Female population aged 15 and older by number of children ever born, number of children still alive, and number of children dead, Tonga: 2011

Age of women	Number of women	Number of children ever born			Number of children			Number of children dead		
		Males	Females	Total	Males	Females	Total	Male	Female	Total
15-19	5,293	94	88	182	93	85	178	1	3	4
20-24	4,100	1,021	926	1,947	1,007	917	1,924	14	9	23
25-29	4,016	3,133	2,730	5,863	3,060	2,695	5,755	73	35	108
30-34	3,318	4,279	4,005	8,284	4,185	3,934	8,119	94	71	165
35-39	2,972	5,330	4,788	10,118	5,197	4,721	9,918	133	67	200
40-44	2,864	6,021	5,679	11,700	5,861	5,557	11,418	160	122	282
45-49	2,214	5,221	4,640	9,861	5,046	4,534	9,580	175	106	281
50-54	1,921	4,591	4,103	8,694	4,430	3,998	8,428	161	105	266
55-59	1,637	4,121	3,857	7,978	3,944	3,758	7,702	177	99	276
60-64	1,308	3,603	3,267	6,870	3,414	3,135	6,549	189	132	321
65-69	1,133	3,056	2,865	5,921	2,846	2,717	5,563	210	148	358
70-74	889	2,524	2,333	4,857	2,330	2,214	4,544	194	119	313
75+	1,267	3,889	3,661	7,550	3,418	3,345	6,763	471	316	787
Total	32,933	46,884	42,943	89,827	44,832	41,611	86,443	2,052	1,332	3,384

Table 11: Female population aged 15 and older by proportion of children ever born and still alive, and proportion now dead, Tonga: 2011

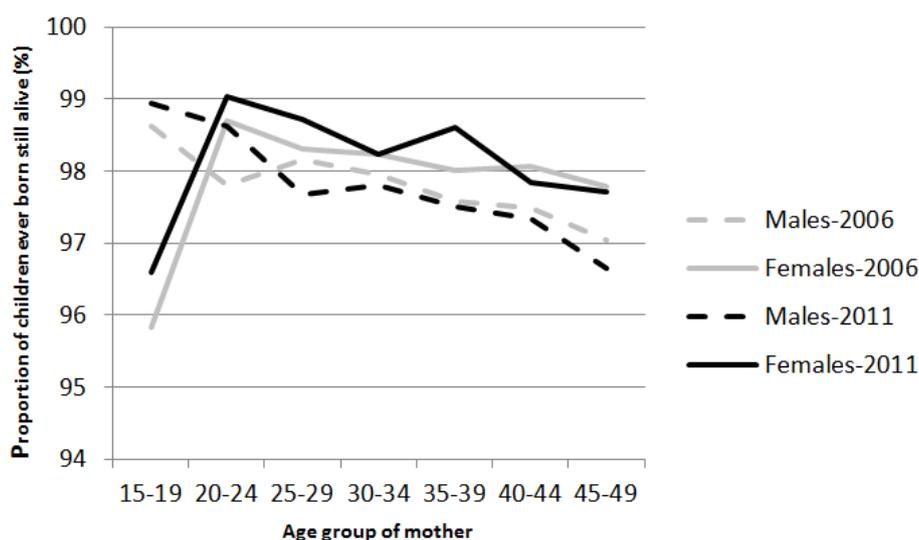
Age of women	Number of women	Proportion of children ever born still alive			Proportion of children ever born now dead		
		Males	Females	Total	Males	Females	Total
15-19	5,293	98.9	96.6	97.8	1.1	3.4	2.2
20-24	4,100	98.6	99.0	98.8	1.4	1.0	1.2
25-29	4,016	97.7	98.7	98.2	2.3	1.3	1.8
30-34	3,318	97.8	98.2	98.0	2.2	1.8	2.0
35-39	2,972	97.5	98.6	98.0	2.5	1.4	2.0
40-44	2,864	97.3	97.9	97.6	2.7	2.1	2.4
45-49	2,214	96.6	97.7	97.2	3.4	2.3	2.8
50-54	1,921	96.5	97.4	96.9	3.5	2.6	3.1
55-59	1,637	95.7	97.4	96.5	4.3	2.6	3.5
60-64	1,308	94.8	96.0	95.3	5.2	4.0	4.7
65-69	1,133	93.1	94.8	94.0	6.9	5.2	6.0
70-74	889	92.3	94.9	93.6	7.7	5.1	6.4
75+	1,267	87.9	91.4	89.6	12.1	8.6	10.4
Total	32,933	95.6	96.9	96.2	4.4	3.1	3.8

Figure 15: Proportion of children ever born and still alive by age of mother, Tonga: 2011



A comparison of data on children ever born and still alive from the 2006 and 2011 censuses (Fig. 16) shows that there have been improvements for females in most age groups, but that this was not the case for males aged 25 and older.

Figure 16: Proportion of children ever born and still alive by age of mother, Tonga: 2006 and 2011



Using the 2011 census data on children ever born and children surviving by age group of mother, early childhood mortality rates were calculated using the United Nations software package MORTPAK 4.1, procedure CEBCS (Table 12 and Apps. 3 and 4).

Table 12: Early childhood mortality indicators, Tonga: 2011

Indicator	Total	Males	Females
Infant mortality rate (IMR)	17	22	15
Child mortality rate (4q1 ¹)	3	4	2
Under 5 mortality rate (q5 ²)	20	26	17

¹ the probability of dying between one and five years of age

² the probability of dying between birth and five years of age

The infant mortality rate (IMR) measures the number of deaths of children under one year of age per 1,000 live births. The IMR for 2011 was estimated at 22 and 15 for males and females, respectively, about the same rates as in 2006.

Child mortality, the probability of dying between one and five years of age, was estimated at four male deaths and two female deaths per 1,000 people of that age.

Under five mortality, the probability of dying between birth and five years of age, was estimated at 26 and 17 for males and females, respectively, per 1,000 people.

Based on the number of deaths which were reported by the Ministry of Health as having occurred in the years 2008, 2009 and 2010 and the residents of households who were reported in the 2011 census as having died in the 12 months preceding the census (App. 5), an average annual number of deaths by age and sex for the period 2008 to 2011 was calculated. Average age specific death rates (m(x)) were derived by dividing these ASDRs by the estimated mid-point population – 14 December 2009.

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 (Tables 14 and 15) using MORTPAK 4.1 procedure LIFTB. According to the assumptions made and the procedures and methods used, life expectancy at birth was calculated at 69.3 and 73.1 years for males and females, respectively (Table 13). This compares with estimates of 67.3 and 73.0 years for males and females in 2006 and with 67.6 and 70.5 years for males and females, respectively in 1996. In fifteen years, life expectancy for males is estimated to have increased by 1.7 years for males and by 2.6 years for females. These increases are demographically plausible for Tonga.

The derived mortality pattern (ASDR) was compared with the different Coale–Demeny and United Nations model life tables using MORTPAK 4.1 procedure COMPAR. The assumption was made that possible under-registration of deaths is not age specific and therefore did 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 2011 can be estimated by multiplying the estimated age specific death rates [m(x,n)–values] of the derived male and female life tables (Tables 14 and 15) with the 2011 census male and female population specified by age (App. 6). Subsequently the crude death rate (CDR) can be calculated as follows:

CDR = 699/103,252 X 1,000 = 6.8 (there were 6.8 deaths per 1,000 population in 2011)

Table 13: General mortality indicators, Tonga: 2011

Indicator	Total	Male	Female
Life expectancy at birth e(0)	71.2	69.3	73.1
Crude Death Rate (CDR)	6.8	7.2	6.3

Table 13 illustrates more positive mortality indicators for females than for males in 2011, with females living on average 3.8 years longer than males and the CDR for males exceeding the CDR for females by almost one death per 1,000 persons. However, the advantage in life expectancy for females as compared to males declined by 1.9 years between 2006 and 2011. Similarly, the advantage in CDR for females as compared to males declined by 0.8 deaths per 1000 persons between 2006 and 2011.

Table 14: Abridged life table, Tonga males: 2011

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	6,933,417	69.3
1	0.0010	0.0040	97,800	391	390,256	0.9967	6,835,384	69.9
5	0.0003	0.0015	97,409	146	486,679	0.9984	6,445,129	66.2
10	0.0004	0.0018	97,263	175	485,876	0.9969	5,958,450	61.3
15	0.0009	0.0046	97,088	447	484,390	0.9957	5,472,574	56.4
20	0.0008	0.0038	96,641	367	482,323	0.9945	4,988,184	51.6
25	0.0015	0.0074	96,274	712	479,668	0.9929	4,505,861	46.8
30	0.0013	0.0066	95,561	631	476,281	0.9916	4,026,193	42.1
35	0.0022	0.0110	94,931	1,044	472,276	0.9851	3,549,913	37.4
40	0.0040	0.0196	93,886	1,840	465,240	0.9740	3,077,637	32.8
45	0.0067	0.0329	92,046	3,028	453,167	0.9609	2,612,396	28.4
50	0.0094	0.0462	89,018	4,113	435,428	0.9412	2,159,229	24.3
55	0.0151	0.0731	84,905	6,207	409,826	0.9148	1,723,801	20.3
60	0.0207	0.0984	78,699	7,744	374,897	0.8827	1,313,975	16.7
65	0.0299	0.1394	70,955	9,891	330,934	0.8383	939,078	13.2
70	0.0429	0.1947	61,064	11,889	277,431	0.7167	608,144	10.0
75	0.0963	0.3893	49,175	19,144	198,839	0.3988	330,712	6.7
80	0.2277	...	30,031	30,031	131,873	...	131,873	4.4

Table 15: Abridged life table, Tonga females: 2011

Age	$m(x,n)$	$q(x,n)$	$l(x)$	$d(x,n)$	$L(x,n)$	$S(x,n)$	$T(x)$	$e(x)$
0	0.0152	0.0150	100,000	1,500	98,628	0.9843	7,307,646	73.1
1	0.0005	0.0020	98,500	197	393,529	0.9982	7,209,018	73.2
5	0.0002	0.0010	98,303	98	491,269	0.9989	6,815,489	69.3
10	0.0003	0.0013	98,205	128	490,704	0.9986	6,324,220	64.4
15	0.0003	0.0017	98,077	167	489,994	0.9979	5,833,515	59.5
20	0.0005	0.0027	97,910	264	488,956	0.9960	5,343,522	54.6
25	0.0011	0.0056	97,646	547	486,983	0.9933	4,854,566	49.7
30	0.0016	0.0078	97,099	757	483,699	0.9910	4,367,583	45.0
35	0.0021	0.0105	96,342	1,012	479,349	0.9859	3,883,884	40.3
40	0.0036	0.0177	95,330	1,687	472,603	0.9826	3,404,535	35.7
45	0.0035	0.0176	93,643	1,648	464,370	0.9723	2,931,932	31.3
50	0.0083	0.0406	91,995	3,735	451,519	0.9500	2,467,562	26.8
55	0.0120	0.0583	88,260	5,146	428,949	0.9350	2,016,043	22.8
60	0.0151	0.0727	83,114	6,042	401,065	0.9117	1,587,094	19.1
65	0.0225	0.1066	77,072	8,216	365,666	0.8779	1,186,029	15.4
70	0.0309	0.1442	68,856	9,929	321,029	0.7926	820,363	11.9
75	0.0654	0.2826	58,927	16,653	254,441	0.4904	499,334	8.5
80	0.1726	...	42,274	42,274	244,893	...	244,893	5.8

$e(0)$ = life expectancy at birth

$q(0)$ = an approximation of the infant mortality rate as calculated in Table 12 (Apps. 3 and 4)

$4q1$ = an approximation of the probability of dying between age one and five years (Table 12, Apps. 3 and 4)

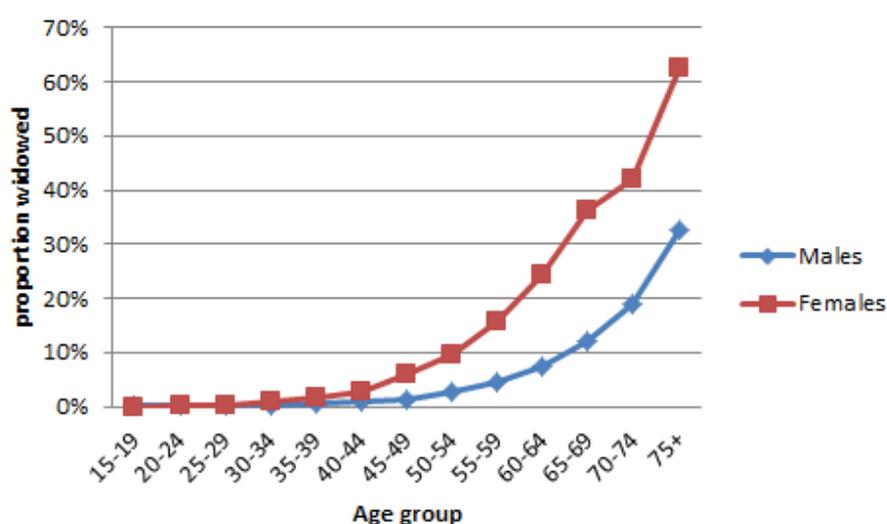
Widowhood

The number and proportion of females widowed was higher than that of males widowed in Tonga in 2011 (Table 16 and Fig. 17). The proportion of women widowed relative to men widowed begins increasing markedly from the age of 40 and continues to rise in older age groups. This is because female life expectancy is higher (Table 13) and the number of estimated male deaths exceeds the number of estimated female deaths for almost every age group to 75–79 years (App. 6).

Table 16: Population 15 years and older by sex and marital status (widowed), Tonga: 2011

Age group	Total population			Widowed population		
	Total	Males	Females	Total	Males	Females
15-19	10,969	5,675	5,292	3	3	-
20-24	8,230	4,130	4,099	8	3	5
25-29	7,591	3,575	4,015	18	5	13
30-34	6,412	3,094	3,317	33	6	27
35-39	5,756	2,783	2,972	62	17	45
40-44	5,754	2,889	2,864	103	24	79
45-49	4,583	2,368	2,214	162	32	130
50-54	3,718	1,796	1,921	232	48	184
55-59	3,159	1,522	1,637	328	71	257
60-64	2,528	1,220	1,308	411	91	320
65-69	2,143	1,010	1,133	536	124	412
70-74	1,725	836	889	532	159	373
75+	2,221	954	1,267	1,104	310	794
Total	64,789	31,852	32,928	3,532	893	2,639

Figure 17: Proportion of population 15 years and older by sex and marital status (widowed), Tonga: 2011



3.3 Migration

3.3.1 Internal migration

Internal migration – the movement of people from one division 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.

Based on the question regarding place of residence in 2010 (one year prior to the census), (94,040) 94% of the total population one year and older answered that they had not moved to their division of residence during the year prior to census night; 3% (3,551 people) said that they lived elsewhere in Tonga, and 2,695 people (three percent) said that they were overseas (Table 17).

Table 17: Population by place of enumeration and usual residence one year ago (in 2010), Tonga: 2011

Place of enumeration at the time of the 2011 Census		Usual residential address one year prior to the 2011 Census							
Division	Total	Tongatapu	Vava'u	Ha'apai	'Eua	Ongo Nuia	Not born ²	Overseas	N/S
Tongatapu	75,281	69,341 ¹	817	479	211	139	2,084	2,206	4
Vava'u	14,884	575	13,485 ¹	91	33	25	354	321	0
Ha'apai	6,607	522	45	5,788 ¹	21	6	168	57	0
'Eua	4,989	428	32	24	4,269 ¹	8	122	106	0
Ongo Nuia	1,282	75	16	2	2	1,157 ¹	25	5	0
Tonga	103,043	70,941	14,395	6,384	4,536	1,335	2,753	2,695	4

¹ Non-movers i.e. those people who did not change their residence during the reference period

² People aged less than one year enumerated in the census

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

$$\text{Net migration} = \text{Arrivals (immigrants)} \text{ minus } \text{Departures (emigrants)}$$

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

Tongatapu had a net gain of 242 people from Vava'u (817 minus 575), a net loss of 43 people to Ha'apai (479 minus 522), a net loss to 'Eua of 217 people (211 minus 428), and a net gain of 64 people from Ongo Niua (139 minus 75). The migration flows were in the same direction in the year prior to the 2006 census. However, the most notable differences were that Tongatapu gained 62 additional people from Vava'u in the year prior to the 2011 census as compared to the year prior to the 2006 census and lost 161 more people to 'Eua in the year prior to the 2011 census as compared to the year prior to the 2006 census.

Overall, Tongatapu gained 46 people from all other divisions during the one-year prior to the 2011 census (Table 18). Vava'u had a net loss of 186 people to all other divisions, Eua had the largest net

gain (225 people). Ongo Niua had a net loss of 83 people. Compared to the one-year prior to the 2006 census, net migration was 110 people lower to Tongatapu and increased by 159 people to 'Eua in the one-year prior to the 2011 census. Most of the migrants to 'Eua between December 2010 and November 2011 were from Tongatapu.

Table 18: Interregional migration during the one-year period prior to the 2011 census, Tonga: 2011

Division	In-migrants	Out-migrants	Net migrants
Tongatapu	1,646	1,600	46
Vava'u	724	910	-186
Ha'apai	594	596	-2
'Eua	492	267	225
Ongo Niua	95	178	-83
Tonga	3,551	3,551	0

Based on the question regarding place of residence in 2006 (five years prior to the census) 89% of the total population aged five years and older answered that they had not moved from their November 2006 division of residence; 7% (5,879 people) said that they lived elsewhere in Tonga, and 3,806 people (four percent) said that they were overseas (Table 19).

Table 19: Population by place of enumeration and usual residence five-years ago (in 2006), Tonga: 2011

Place of enumeration at the time of the 2011 Census		Usual residential address five years prior to the 2011 Census							
Division	Total	Tongatapu	Vava'u	Ha'apai	'Eua	Ongo Niua	Not born ²	Overseas	N/S
Tongatapu	75,281	58,921 ¹	1,433	942	528	290	9,982	3,179	6
Vava'u	14,884	755	11,520 ¹	128	91	70	1,907	413	0
Ha'apai	6,607	688	98	4,836 ¹	43	15	831	96	0
'Eua	4,989	532	65	33	3,593 ¹	8	648	110	0
Ongo Niua	1,282	93	31	12	24	983 ¹	131	8	0
Tonga	103,043	60,989	13,147	5,951	4,279	1,366	13,499	3,806	6

¹ Non-movers i.e. those people who did not change their residence during the reference period

² People aged less than five years enumerated in the census

Tongatapu had a net gain of 678 people from Vava'u (1,433 minus 755), a net gain from Ha'apai of 254 people (942 minus 688), a net loss to 'Eua of four people (528 minus 532), and a net gain of 197 people from Ongo Niua (290 minus 93). Overall, Tongatapu gained 1,125 people from all other divisions during the five-year period prior to the 2011 census (Table 20). Vava'u had a net loss of 583 people to all other divisions, Ha'apai a net loss of 271 people, Eua a net loss of 48 people and Ongo Niua a net loss of 223 people.

The direction and magnitude of migration flows during the five years prior to the 2006 census and the five years prior to the 2011 census were largely consistent, with the outer island divisions losing population and Tongatapu gaining population. Comparison of Tables 18 and 20 shows that given their close proximity, the migration flows between 'Eua and Tongatapu are likely to be cyclical, compared to the one-way traffic between the more distant outer islands and Tongatapu. 'Eua experienced a net gain that was five-times as large in a single year as the net losses experienced over the 2006–2010 period – annual net flows balance to smaller net flows over five years.

Table 20: Interregional migration during the five-year period prior to the 2011 census, Tonga: 2011

Division	In-migrants	Out-migrants	Net migrants
Tongatapu	3,193	2,068	1,125
Vava'u	1,044	1,627	-583
Ha'apai	844	1,115	-271
'Eua	638	686	-48
Ongo Nui	160	383	-223
Tonga	5,879	5,879	0

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

Seventy-five percent of Tonga's population was living at the same place where they were born; 20% (20,824 people) of Tonga's population were born in Tonga but do not reside in their current (November 2011) division of residence, and 5% of the population (4,647 people) was born overseas (Table 21).

Table 21: Population by place of residence in 2011 and place of birth (lifetime migration), Tonga: 2011

Place of enumeration at the time of the 2011 Census		Place of birth						
Division	Total	Tongatapu	Vava'u	Ha'apai	'Eua	Ongo Nui	Overseas	N/S
Tongatapu	75,416	56,599 ¹	6,039	5,724	1,563	1,483	3,975	33
Vava'u	14,922	1,753	11,940 ¹	528	106	157	437	1
Ha'apai	6,616	973	372	5,035 ¹	79	55	102	0
'Eua	5,016	1,016	244	251	3,259 ¹	124	121	1
Ongo Nui	1,282	202	93	43	19	913 ¹	12	0
Tonga	103,252	60,543	18,688	11,581	5,026	2,732	4,647	35

¹ Non-movers i.e. those people who did not change their residence during the reference period

Fifty-nine percent (60,543) of the population were born in Tongatapu, 18% in Vava'u (18,688), 11% (11,581) in Ha'apai, 5% in 'Eua and 3% in Ongo Nui. Between the 2006 and 2011 censuses, the percentage of the population born and still residing in Tongatapu increased by 2% and decreased by 4% in Vava'u and 5% in Ha'apai.

In 2011, 75% of Tongatapu's residents were also born in Tongatapu. Eighty percent of Vava'u's residents were also born there. This is the highest proportion for all divisions. Only 65% of the 2011 residents of 'Eua were also born in 'Eua, which is the lowest proportion for all divisions

Tongatapu had the highest proportion of residents born overseas with just over 5% of its 2011 residents. Vava'u had 3%, 'Eua and Ha'apai had 2% and Ongo Nui had less than 1% born overseas in 2011.

At the time of the 2011 census, Tongatapu had a net gain of 10,865 lifetime migrants, mainly from Vava'u and Ha'apai. Outwith Tongatapu, all other divisions had a net loss of lifetime migrants (Table 22).

Table 22: Interregional lifetime migration, Tonga: 2011

Division	In-migrants	Out-migrants	Net migrants
Tongatapu	14,809	3,944	10,865
Vava'u	2,544	6,748	-4,204
Ha'apai	1,479	6,546	-5,067
'Eua	1,635	1,767	-132
Ongo Nuia	357	1,819	-1,462
Tonga	20,824	20,824	0

3.3.2 International migration

International migration refers to people who cross national boundaries to move to another country. Time and intent are important. Someone coming for a short visit is not a migrant — he or she is a visitor or tourist. 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, usual at least six months, in order to establish whether the arriving and departing person qualifies as a visitor or migrant.

The 2011 census included three questions that provide an indication of the level of international migration. It asked questions about a respondent's:

- residence one and five years prior to the 2011 census, and
- place of birth.

Three percent of the population one year and older (2,695 people) answered that they had lived overseas one year prior to the 2011 census (Table 17). Four percent of the population five years and older (3,806 people) had lived overseas five years prior to the 2011 census (Table 19) and 5% of the population at the time of the 2011 census (4,647 people) had been born overseas (Table 21).

A crude indication of the level of net migration in Tonga can be derived by applying the balancing equation to the intercensal 2006–2011 population growth rate:

Balancing equation

$$\text{Population growth} = \text{CBR} \text{ minus } \text{CDR} \text{ plus } \text{Net migration rate}$$

Net migration rate can be estimated as

$$\text{Net migration rate} = \text{Population growth} \text{ minus } \text{CBR} \text{ plus } \text{CDR}$$

Note: CBR = crude birth rate
CDR = crude death rate

Tonga's population increased from 101,991 to 103,252 people between the 2006 and 2011 censuses. The average annual growth rate between 2006 and 2011 was 0.2% per annum.

The CBR and CDR were estimated at 28 and 6.8, respectively.

According to the balancing equation, the net migration rate can be calculated as follows:

$$[\text{Population growth} = 2(\text{‰})] \text{ minus } [\text{CBR} = 28(\text{‰})] \text{ plus } [\text{CDR} = 6.8(\text{‰})]$$

$$\text{Net migration rate} = -19.2 (\text{‰}).$$

With an average population size of 102,600 people during the intercensal period 2006 (101,991 people) to 2011 (103,252 people), a net migration rate of -19/1000 accounts for -1,970 persons per year, or -164 people per month. This represents a 9% increase on the estimated net migration rate of -18/1000, or 1,800 persons per year, for the 1996 to 2006 intercensal period.

Table 23 presents arrivals and departures data provided by the Tonga Ministry of Foreign Affairs and Immigration. There is volatility in these data from year to year. However, an annual average of these figures provides a net migration value of -1,945 persons per annum for the years 2007 to 2011, which is only 25 fewer annual out-migrants than estimated for the 2006 to 2011 intercensal period by indirect methods (-1,970 persons per year).

Table 23: International arrivals and departures data, Tonga: 2006–2011

	2006	2007	2008	2009	2010	2011
Arrivals	66975	65657	74701	70845	71582	72592
Departures	68637	71325	76704	70949	72533	73589
Net migration	-1662	-5668	-2003	-104	-951	-997

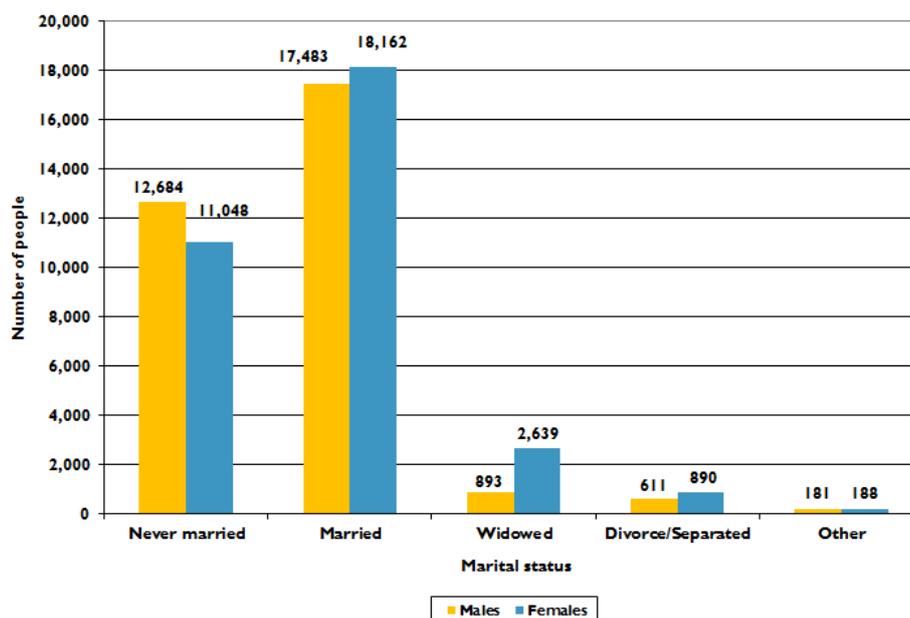
4 SOCIAL CHARACTERISTICS

4.1 Marital status

During the 2011 census, 55% of males (17,483) and 55% of females (18,162) aged 15 and older were married, another 40% of males (12,684) and 34% of females (11,048) were never married (single), and 3% of males (893) and 8% of females (2,639) were widowed (Fig. 18).

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

Figure 18: Population aged 15 and older by marital status, Tonga: 2011



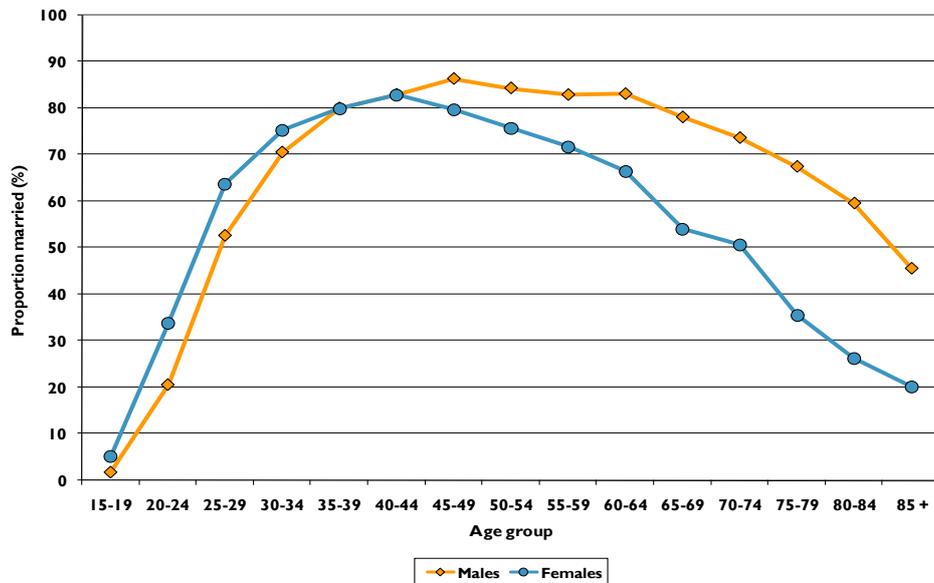
In general, women marry at younger ages than men. The average age at marriage was 27.2 and 24.7 years for males and females, respectively, and was calculated based on the average number of years of single life among those who marry before age 50 (the singulate mean age at marriage, SMAM¹). The singulate mean age at marriage declined by 0.8 years for males and 0.9 years for females between the 2006 and 2011 censuses, indicating that people are choosing to marry earlier.

¹ United Nations 1983. Manual X, indirect techniques for demographic estimation. New York: United Nations.

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. 19).

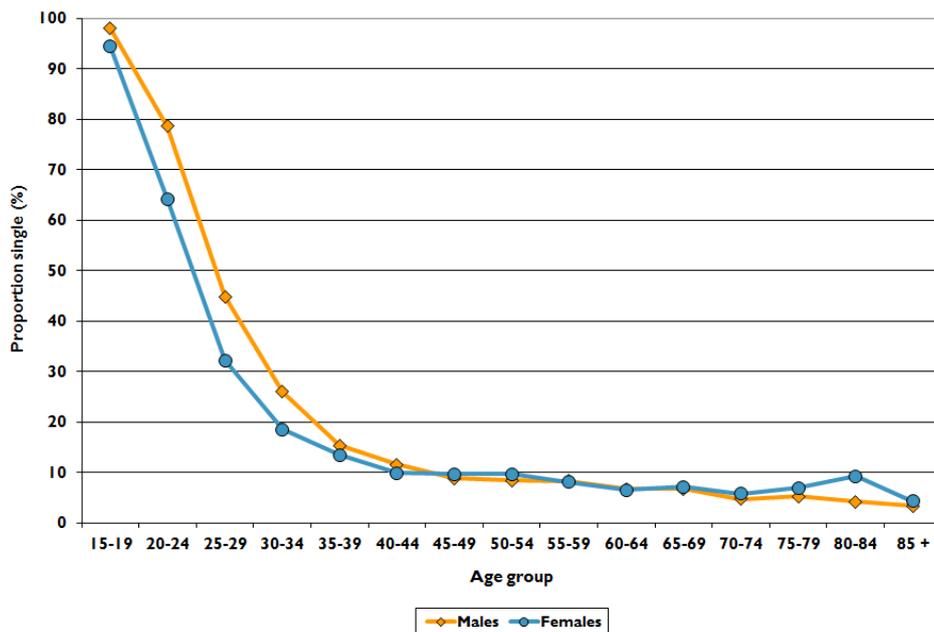
Only 21% of males were married at age 20–24, compared with 34% of females, and 53% of males were married at age 25–29 years, compared with 64% of females. At ages 35–49 slightly over 80% of males and females were married. The proportion of married females declines after the age of 44 because an increasing higher proportion of females become widowed (Fig. 19).

Figure 19: Population aged 15 and older by sex and proportion married, Tonga: 2011



The same pattern can be seen by looking at the population who never married (single) (Fig. 20). A higher proportion of males than females were never married (single) at all age groups up to age 44.

Figure 20: Population aged 15 and older by sex and proportion never married (single), Tonga: 2011



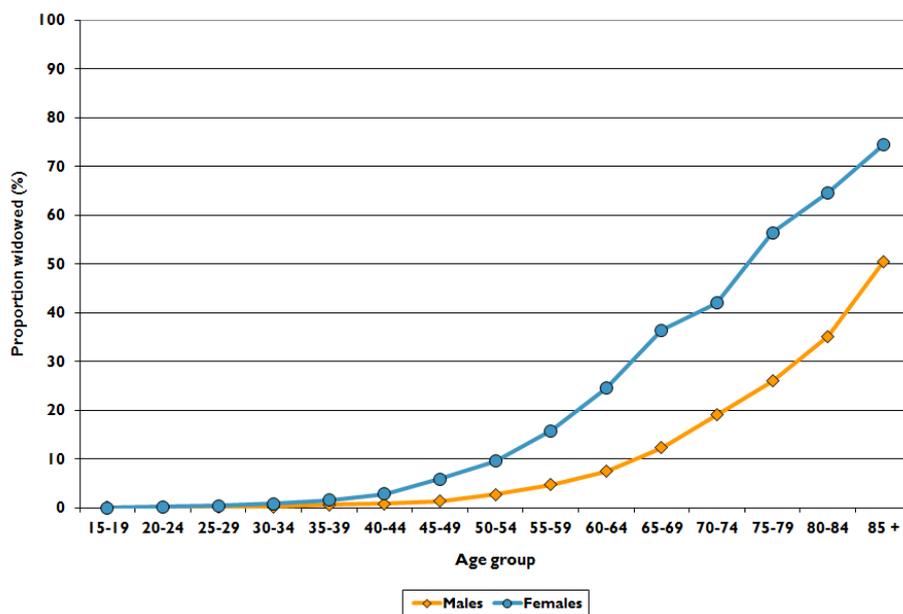
The discrepancy between the proportion of widowed males and widowed females, at ages 40 years and older, increased continuously to age 85 (Fig. 21). At ages 55–59, only 5% of males were widowed, compared with 16% of females. At age 75 and older, only 32% of males were widowed, compared with 63% of females. Due to ageing of the population, widowhood at age 75 and older increased from 30% for males and 58% for females in the 2006 census.

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 21: Population aged 15 and older by sex and proportion widowed, Tonga: 2011



4.2 Religion

Methodism is the dominant religion in Tonga, with 36% of the population (36,592 members) affiliated with the Free Wesleyan Church (Table 24 and Fig. 22). The Church of Latter Day Saints is the second largest, with 18,554 members (18 percent of the population) followed by the Roman Catholic Church with 15% (15,441 members), the Free Church of Tonga with 12% (11,863 members), and the Church of Tonga with 7% (6,935 members). All other religions had less than 3% of the population as members.

Table 24: Population by religious affiliation, Tonga: 1986, 1996, 2006 and 2011

Religion	1986	1996	2006	2011
Free Wesleyan Church	40,371	39,703	38,052	36,592
Roman Catholic	14,921	15,309	15,922	15,441
Church of Latter Day Saints	11,270	13,225	17,109	18,554
Free Church of Tonga	10,413	11,226	11,599	11,863
Church of Tonga	6,882	7,016	7,295	6,935
Tokaikolo	3,047	2,919	2,597	2,533
Anglican	563	720	765	728
Seventh Day Adventist	2,143	2,381	2,282	2,331
Assembly of God	565	1,082	2,350	2,602
Constitutional Church of Tonga			941	961
Gospel			243	236
Bahai			686	777
Hindu			104	100
Islam			47	24
Buddahist			71	183
The Salvation Army				247
Jehova's Witness				462
Pentecostal Denominations (excluding Assembly of God)				1,034
Other	2,874 ¹	2,368 ¹	202	288
No religious affiliation		61	28	34
Refused to answer		10	1,509	877
Not stated			189	241
Total	93,049²	96,020²	101,991³	103,043⁴

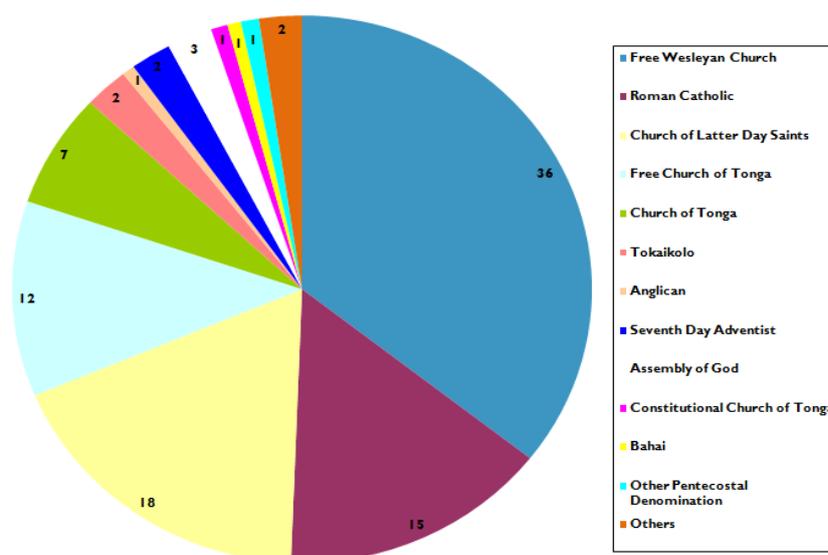
¹ Includes Gospel, Baha'I Faith, Islam, The Salvation Army and other religions.

² Tongan and part – Tongan population

³ Total population of Tonga.

⁴ Population in private households and Tongan and part – Tongan population in institutions.

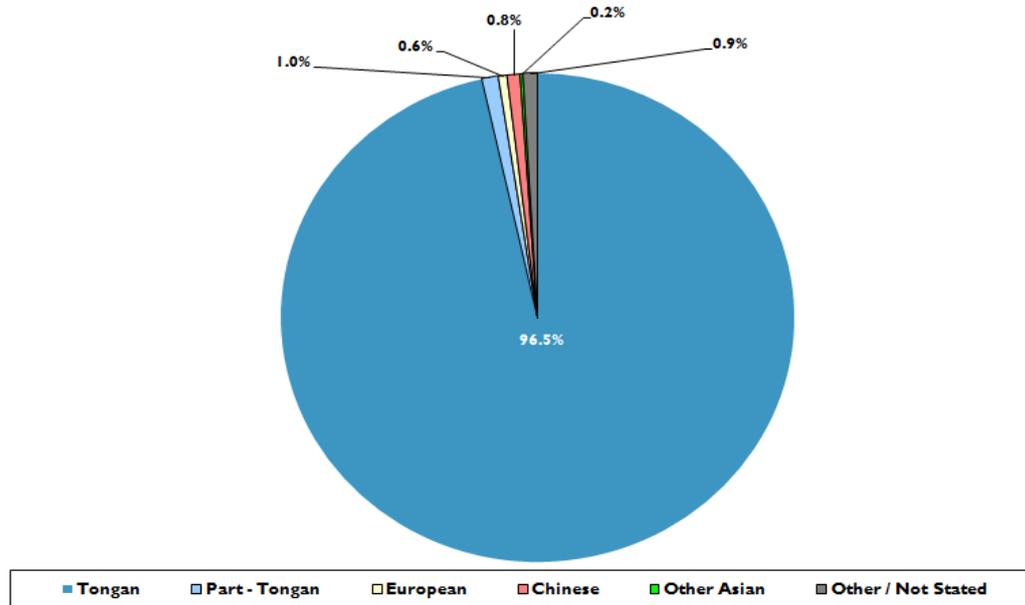
Figure 22: Population by religion, Tonga: 2011



4.3 Ethnicity origin

Based on information on the number of people by ethnic origin, Tonga has a very homogenous population with almost 97% (99,641) of Tongan origin, and another 1% (1,069) of part-Tongan origin (Fig. 23 and Table 25).

Figure 23: Total population by ethnic origin (in % of total population), Tonga: 2011



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 5% are not Tongan or Part-Tongan; 2% are of Chinese origin, 1% of European origin, and 0.4% are other Asians.

Table 25: Total population by ethnic origin, Tonga: 2011

Ethnic origin	Total	Urban	Rural
Tongan	99,641	22,623	77,018
Part-Tongan	1,069	362	707
European	569	212	357
Fijian Islanders	437	290	147
Other Pacific Island	236	82	154
Chinese	843	443	400
Other Asian	186	100	86
Other	259	105	154
Not stated	12	12	0
Total	103,252	24,229	79,023

4.4 Health

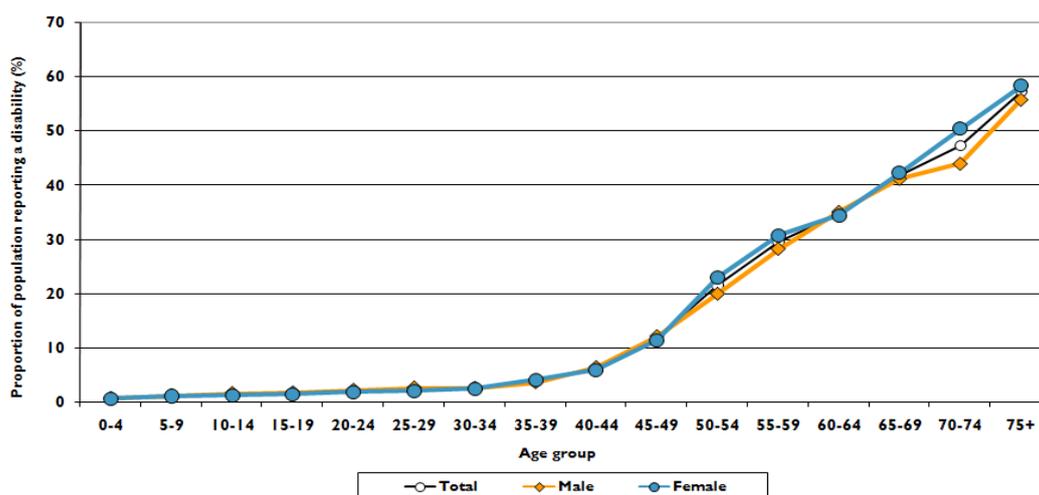
4.4.1 Disability

Following requests from the Ministry of Health, the 2011 census questionnaire included several questions on disability within the population. The questions on disability include difficulties that affect seeing, hearing, walking, remembering or concentrating properly.

Overall, 8% of the total population reported a disability. This was 3% higher than for the 2006 census. As can be expected, the proportion of the population with a disability increases with age (Fig. 24). From the age of 50 years the proportion of the population with a disability increases continuously until it reaches about 53% of people aged 70 years and older. The proportion of the population aged 70 years and older with a disability has increased from 45% in 2006. Overall there was very little difference in the proportion of males and females with a disability.

Increased reporting of disability can in part be attributed to ageing within the population (an actual increase in the number of people with disabilities associated with ageing) and in part to an increase in perception amongst Tongan people regarding what constitutes a disability.

Figure 24: Proportion of the total population with a disability, Tonga: 2011



The disability that was most commonly mentioned was vision (3,472 people) (Table 26). This was followed by difficulties with walking (2,668 people), difficulties with hearing (1,760 people) and difficulties remembering and/or concentrating (1,107 people). Compared to 2006, all of these disabilities were reported by more people in 2011 except for difficulties with hearing, which was reported by 172 more people in 2006 than in 2011. The largest increase was in difficulties with vision, which was reported by 1,146 additional people in the 2011 census as compared to the 2006 census, an increase of almost 50% from 2006.

In 2011, 252 people could not walk at all and 152 people were not able to remember or concentrate (Table 27). Seventy people were blind, and 56 people were deaf. Forty-one fewer people were reported to be senile or amnesic in 2011 as compared to 2006. The number of blind, deaf or lame people was higher in 2011 than in 2006. The largest increase was in lame people, with an additional 58 people reporting being lame in 2011. Compared to 2006, when 44 people were recorded as blind, the number of people recorded as blind in 2011 had increased by almost 60%.

Table 26: Total population reporting a disability regardless of the severity of the disability, Tonga: 2011

Disability	Total	Male	Female
Vision	3,472	1,538	1,934
Hearing	1,760	864	896
Walking	2,668	1,245	1,423
Remembering or concentrating	1,107	551	556

Table 27: Total population reporting a severe disability, Tonga: 2011

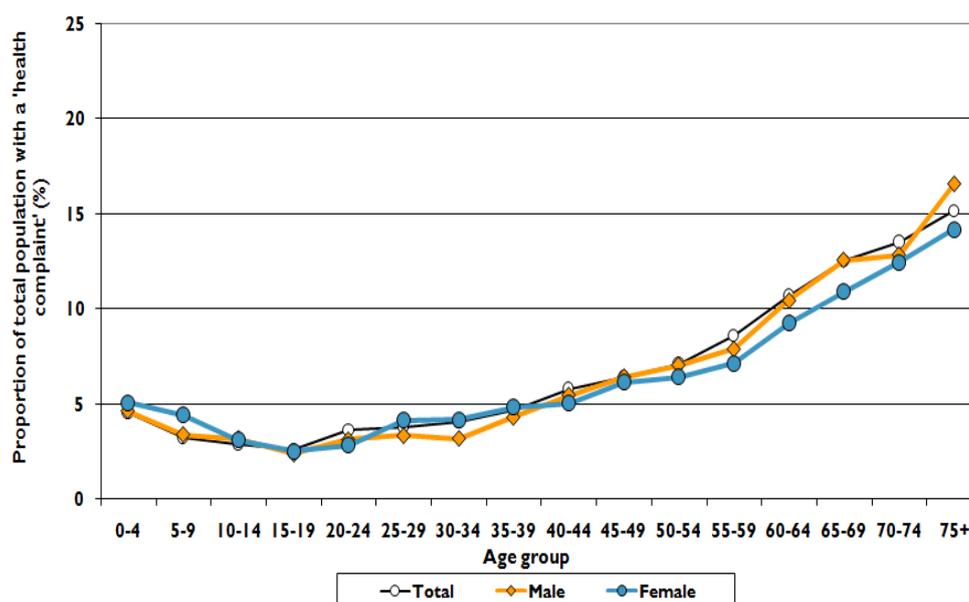
Disability	Total	Male	Female
Blindness	70	32	38
Deafness	56	26	30
Lameness	252	115	137
Senile and / or amnesic	152	82	70

4.4.2 Illness, injury or other health complaints

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, 5,038 people (2,429 males and 2,609 females), suffered an illness, injury or any health complaint, which equates to about 5% of the total population.

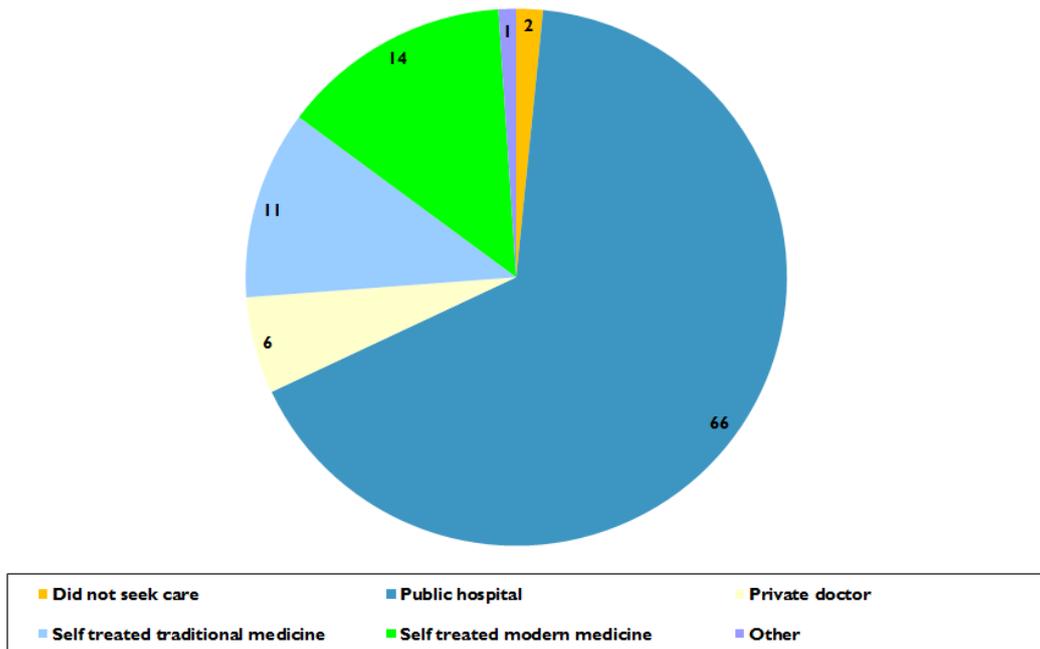
The proportion of people who suffered an illness, injury or any health complaint increases with age, just as it does with a disability. The proportion of people who suffered an illness, injury or any health complaint was slightly higher for females than for males aged between 25 and 39 years of age and was higher for males than for females over 40 years of age (Fig. 25). By contrast, females in all age groups except 45–49 and 75 years and over were more likely than males to have suffered an illness, injury or any health complaint in the two weeks prior to the 2006 census.

Figure 25: Proportion of the total population with an illness, injury, or health complaint, Tonga: 2011



Based on the question of whether and where a person with a health complaint sought care, 66% said that they went to the hospital, 6% went to a private doctor, 14% self-treated the complaint with modern medicine, and another 11% self-treated themselves with traditional medicine (Fig. 26). Two percent (80 people) did not seek any care. Compared to 2006 census data, the proportion of the population attending hospital for care was down by 3% and the proportion of the population who went to a private doctor was down by 2% in 2011. Self-treating with modern medicine or traditional medicine were both up by 3% on 2006 census data.

Figure 26: Proportion of population with a ‘health complaint’ and whether and where they sought care, Tonga: 2011

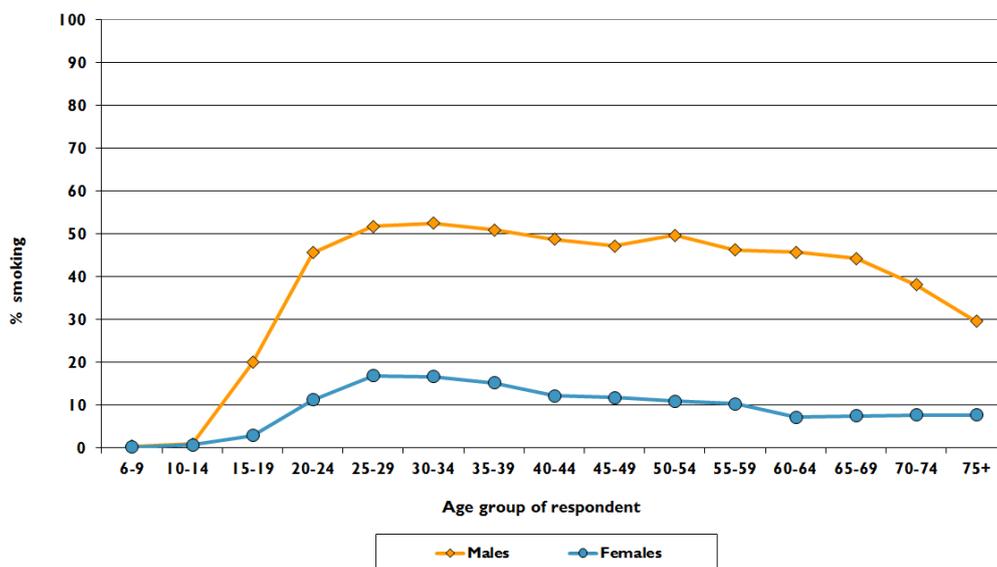


Subsequently all people that did not seek any care (80 people) were asked why they did not do so. Fifty-one percent believed that they were not ill enough, 8% said that it was too far too travel for treatment and 3% replied that they could not afford the treatment.

4.4.3 Smoking habits

During the 2011 census, every person aged five years and older was asked whether they smoked tobacco or cigarettes on a daily basis. It was found that 19% of the population aged five years and older smoked on a daily basis: 30% of males and 8% of females. This contrasts with the 2006 census when 21% of all persons aged six years or older smoked on a daily basis (33 percent of males and nine percent of females). About half of all males aged 20–65 years of age smoked on a daily basis in 2006 and 2011. Around 13% of females aged 20 years and older smoked in 2006 and 2011. In 2006 smoking on a daily basis was most prevalent in the 25–29 year old age group, whereas in the 2011 census, smoking on a daily basis was equally prevalent in the 25–29 and 30–34 year old age groups (Fig. 27). Therefore, the incidence of smoking on a daily basis has not declined in the Tongan population between 2006 and 2011.

Figure 27: Population six years and older and whether smoking on a daily basis, Tonga: 2011



4.5 Educational characteristics

4.5.1 School enrollment

In Tonga, it is compulsory for children to be at school from ages six to 14. The formal education system is divided into three stages Primary (six years), Secondary (seven years) and post-secondary (generally six months to three years depending on type of training). Secondary education covers years 7 to 13 (during which students are generally aged 13 to 17). Secondary students in Tonga either attend government funded, mission, or non-government private schools.

As of the 2011 population census, 33,344 people aged six years and over were enrolled in school: 17,027 males and 16,317 females – of which nearly 2% were part time students. A small proportion (one percent) of the population had never been to school.

Tonga has achieved full enrollment access in Primary education with 98% of 6–14 year-olds attending school in 2011 (Fig. 28). Enrollment rates decline from age 15 years and over (once students have completed compulsory education requirements). In general, age specific enrollment rates of females were higher than those of males after completing compulsory schooling.

Figure 28: Population aged six years and older (by sex) attending school, Tonga: 2011

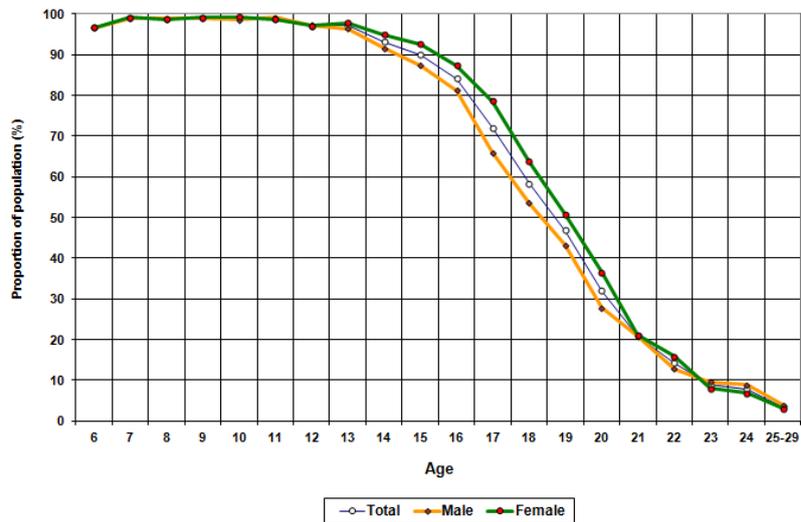
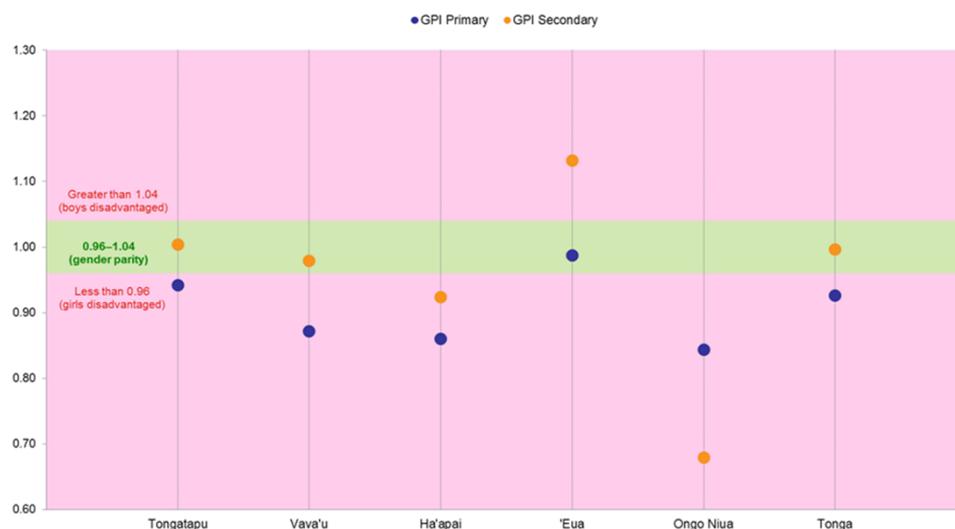


Figure 29: Gender parity index (GPI) in primary and secondary education, Tonga: 2011



The gender parity index measures the ratio of females to males in school. 2011 census data illustrates that girls are slightly less likely than boys to attend primary school across Tonga but there is gender parity at secondary level (Fig. 29). Boys are less likely than girls to attend secondary school in ‘Eua.

4.5.2 Educational attainment

Less than 1% of the population had no formal education whatsoever according to the 2011 census, while about one-in-ten had only primary education, as compared with 25% in the 2006 census (Fig. 30). More than 75% of the population 15 years and older had at least secondary education according to the 2011 census, as compared with 62% in the 2006 census. About 17% had tertiary education according to the 2011 census, as compared with 11% in the 2006 census. There were no real differences between male and female educational attainment in the 2011 census. With over 90% of all Tongans achieving secondary and tertiary education in 2011 compared to about 70% in 2006 and only 57% in 1986, these data illustrate a quarter of a century of consistent and solid improvement in educational attainment.

Figure 30: Population aged 15 and older by sex and educational attainment (in %), Tonga: 2011

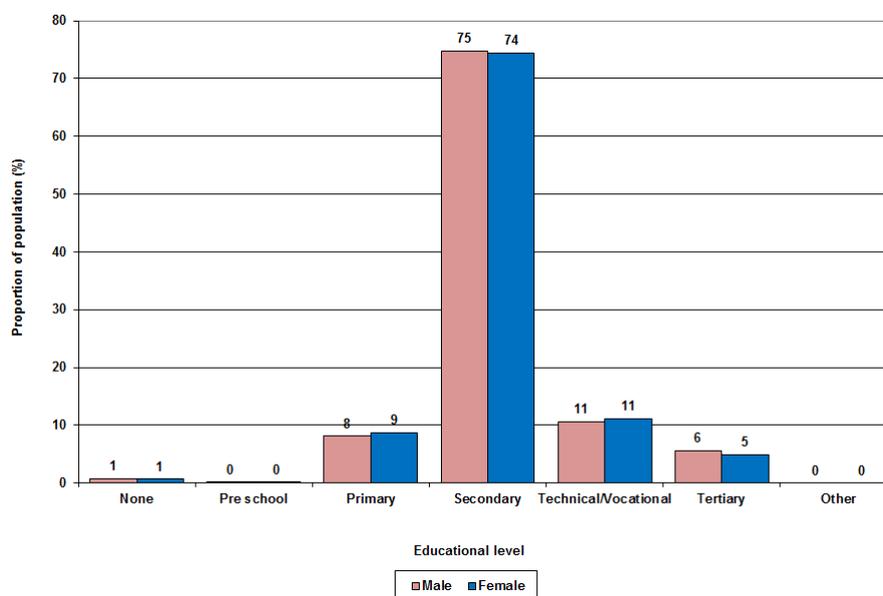


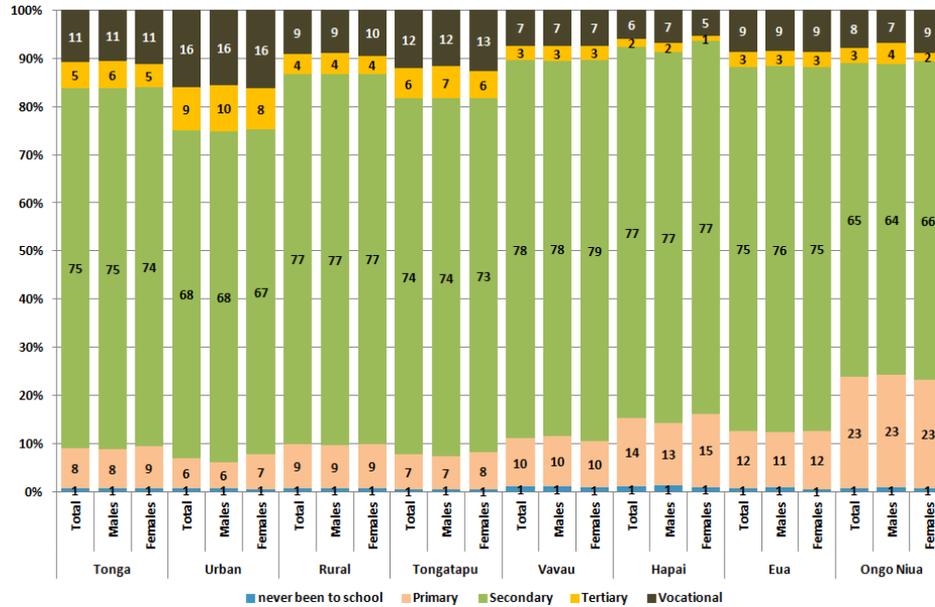
Table 28: Population aged 15 and older by urban–rural residence and educational attainment (in %), Tonga: 2011

Place of residence	Educational level			
	None	Primary	Secondary	Tertiary
Total	0.7	8.4	74.6	16.1
Urban	0.6	6.3	67.9	25
Rural	0.7	9.1	76.7	13.3

About 6% of the Tongan population aged 15 years and over living in urban areas had only primary education according to the 2011 census, as compared with 16% in the 2006 census (Table 28). Just over two-thirds of urban residents aged 15 years and over achieved secondary education in 2011, a similar percentage to 2006. In rural areas, about 9% of the population aged 15 and over had only primary education in 2011, as compared with 29% in 2006. Just over three-quarters of rural residents 15 years and over achieved secondary education in 2011, as compared with 62% in 2006. This reflects: a. greater improvements in education levels in rural areas than urban areas; and b. less scope

for improvement in urban areas than rural areas (the proportion of the population going on to undertake post-secondary education was higher in urban areas than rural areas in both 2006 and 2011). For example the tertiary education level was 17% in the urban and only 8% in rural areas in 2006 and 25% in urban and 13% in rural areas in 2011. Education levels are lower out with Tongatapu (Fig. 31).

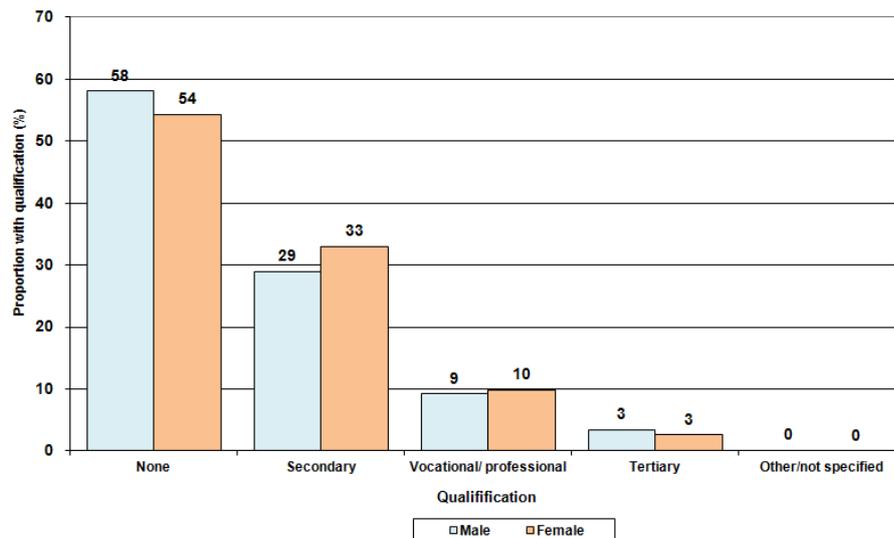
Figure 31: Population aged 15 and older by sex and educational attainment (in %), by Urban/Rural and Division, Tonga: 2011



4.5.3 Educational qualifications

The proportion of the population aged 15 years and older with a secondary qualification was 33% for females, slightly higher than for males (29%) according to the 2011 census (Fig. 32).

Figure 32: Population aged 15 and older by sex and educational qualification (in %), Tonga: 2011



This disparity is consistent with 2006 census data, when 27% of females and 25% of males had a secondary qualification. Around 3% had a tertiary qualification according to the 2011 census, less than 59% of males and 54% of females had no qualification at all. About 10% had a vocational/professional qualification such as a teaching or nursing certificate in 2011. The percentage of the population 15 years and older with either no qualifications or tertiary qualifications were similar in 2006 and 2011.

In the 2011 census, the urban population was more qualified than the rural population aged 15 years and older (Table 29). In urban areas, 35% had secondary level qualifications, 14% had vocational/professional qualifications and 6% had tertiary qualifications. In rural areas, 30% had secondary level qualifications, 8% had vocational/professional qualifications and only 2% had tertiary qualifications. In urban areas, 45% had no qualifications as compared to 60% in rural areas. Compared to the 2006 census, the greatest improvements have been in rural areas, in particular in the reduction of the percentage of the population with no qualifications (from 67 percent in 2006 to 60 percent in 2011) and the increase in the percentage of the population with secondary level qualifications (from 23 percent in 2006 to 30 percent in 2011).

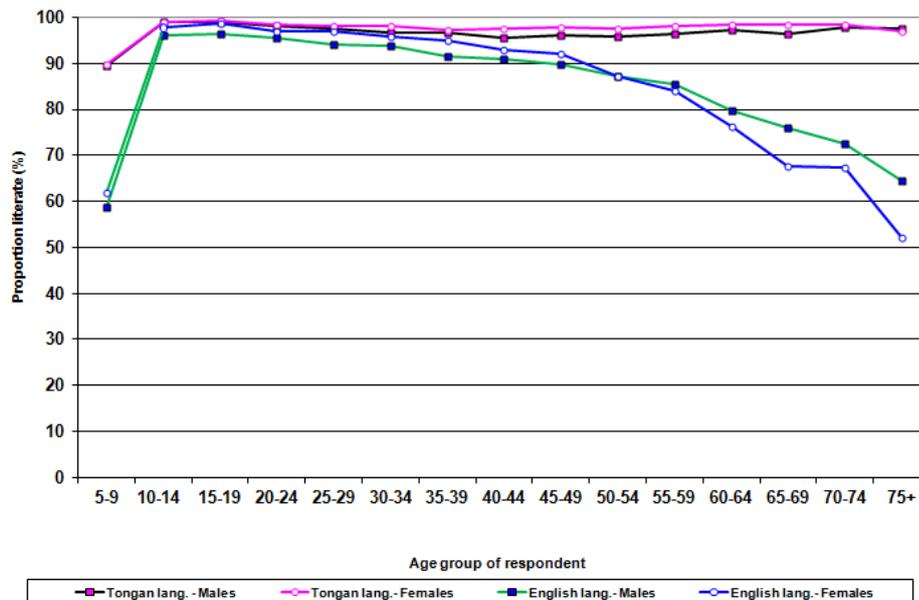
Table 29: Population aged 15 and older by urban–rural residence and educational qualification (in %), Tonga: 2011

Place of residence	Educational qualification			
	None	Secondary	Vocational/ professional	Tertiary
Total	56.2	31.1	9.6	3.1
Urban	45.3	34.8	14.3	5.6
Rural	59.8	29.9	8	2.2

4.5.4 Literacy

Literacy was measured by testing respondents on their ability to read and write a simple sentence in Tongan and English. In the 2011 census, English literacy competency was observed to increase from around 60% for age group 5–9 years to over 95% for age group 10–14 years for both males and females. Improvements were also observed in Tongan literacy over the same age range from a higher base (from 90 percent for age group 5–9 years to 99 percent for age group 10–14 years) (Fig. 33).

Figure 33: Population aged six years and older by sex and whether literate in Tongan or English (in %), Tonga: 2011



2011 census data illustrates that English literacy competency gradually declines from age group 10–14 years onwards, dropping below 90% for age group 50–54 years, and further decreases with age. Female English literacy is slightly higher than for males aged between 10 and 49 years. However, at ages 55 years and above, a higher proportion of males than females are literate in English.

4.6 Labour market activity

4.6.1 Introduction

The 2011 census individual questionnaire included a "Labor Market Activity" section. Enumerators were instructed to ask each respondent 15 years of age and over the question: "During last week, what type of work did this person mainly do?". 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 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;
- None of the above.

A person who 'works for pay' is someone who worked for wages, salary, commission, has a contract, or was operating a business during the week prior to the census.

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 handicraft for own consumption and are subsequently described as subsistence workers.

The category 'Other' was utilized when the other three categories were not appropriate and the activity of the respondent could be specified through an open ended response.

The 'none of the above' category applies to those people who did nothing in the reference week (i.e. the week before the census) to provide for themselves or their families or household. This includes people engaged in family responsibilities, people who are retired, people who are disabled, students, the unemployed, and those who did not want to work or were not interested in finding work.

People classified as unemployed

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

The following analysis of Tonga's unemployment level provides an option of including 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.

If a 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 labour force).

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

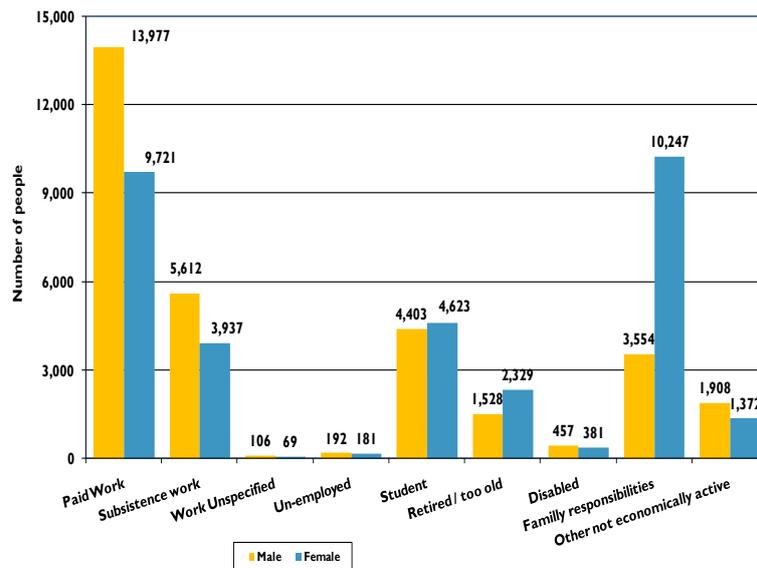
- employed (those that work for pay or work to support the household by producing goods mainly for sale or work to support the household by producing goods mainly for own consumption);
- unemployed (see definition above);
- not in the labour force (those not employed or unemployed).

4.6.2 Employed: paid workers and subsistence workers

As indicated in the introduction, those people who are defined as being employed (33,422 people) included 23,698 (71 percent) paid workers, and 9,549 (29 percent) subsistence workers (App. 7A and 7B).

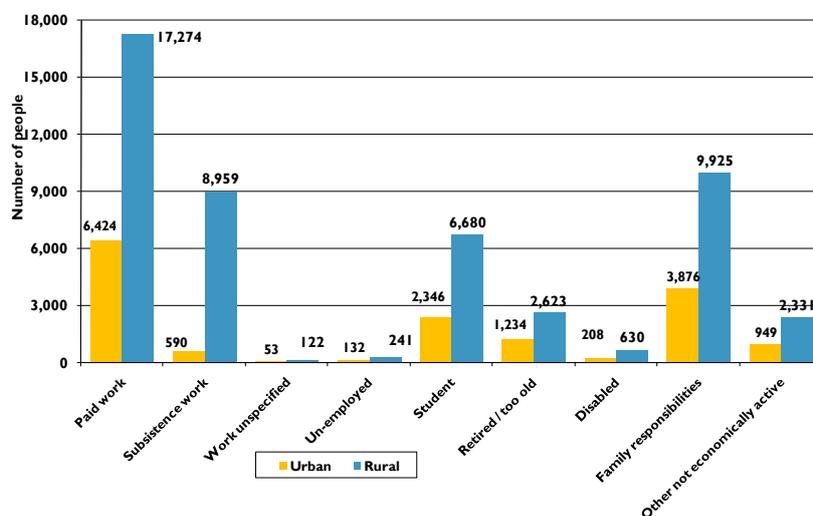
The total number of employed people consisted of 19,695 (59 percent) males and 13,727 (41 percent) females (Fig. 34). The total number of paid workers was 23,698, of which, 13,977 (59 percent) were males and 9,721 (41 percent) were females. The total number of subsistence workers included 5,612 males and 3,937 females.

Figure 34: Population aged 15 and older by sex and labour market activity, Tonga: 2011



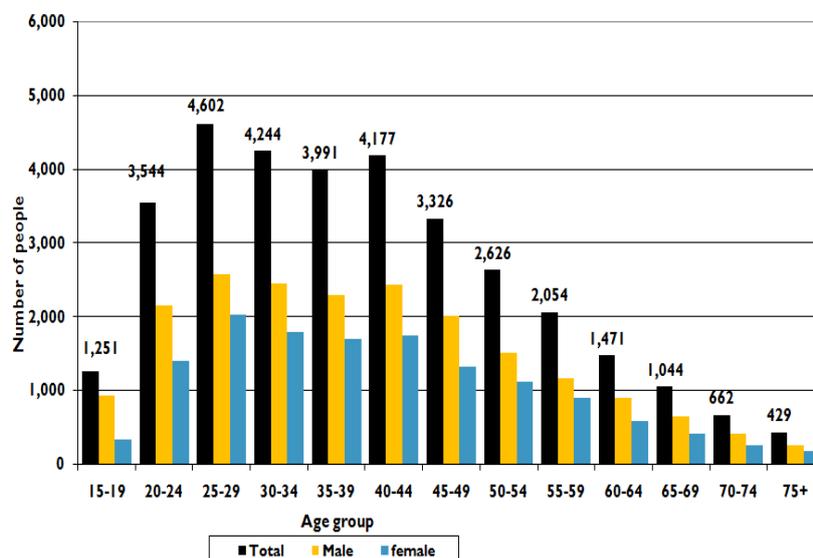
In the urban area, 7,067 people (45 percent of urban people aged 15 years and older) were employed, compared to 26,355 in rural areas (54 percent of rural people aged 15 years and older) (Fig. 35). 6,424 (27 percent) of paid workers were in the urban area, and 17,274 (73 percent) in the rural areas. In the case of subsistence workers, however, only 590 (six percent) were in the urban area, with 8,959 (94 percent) in rural areas.

Figure 35: Population aged 15 and older by urban–rural residence and labour market activity, Tonga: 2011



The total number of people employed, by age group, included 4,795 people in the 15–24 year age group, 25,020 in the 25–59 year-old age group, and 3,606 in the 60 years and over age group (Fig. 36). In addition, one employed person did not state their age.

Figure 36: Employed population aged 15 and older by age and sex, Tonga: 2011



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 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 divided by the corresponding total population with the same characteristics, multiplied by 100.

Figure 37 provides an overview of the labour force participation rate and the employment-population ratio for the total population aged 15 years and older by sex, and Table 30 breaks the same indicators further down to urban and rural areas.

The labour force participation rate and employment-population ratio were higher for males than for females. The labour force participation rate was higher for the rural population than the urban population. The employment-population ratio was higher for the urban than the rural population because of proportionately greater participation in paid employment in urban areas.

Figure 37: Population 15 years and older by labour force participation rate and employment–population ratio by sex, Tonga: 2011

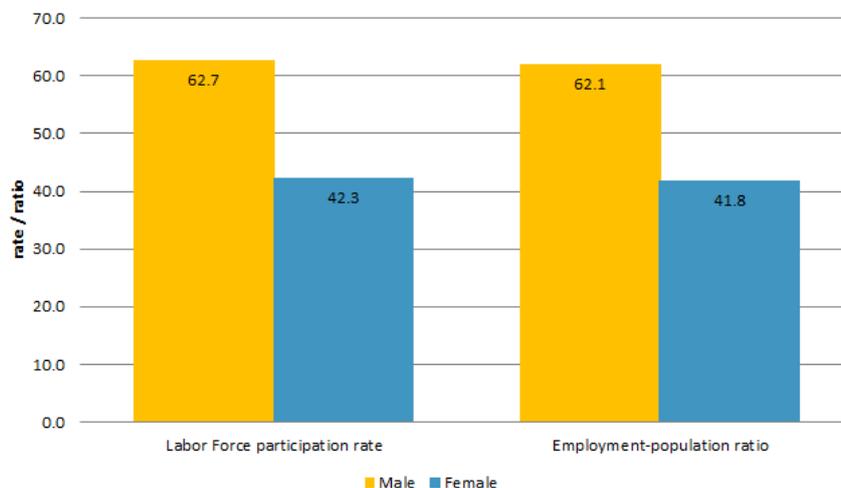


Table 30: Population aged 15 and older by sex, urban–rural residence, labour force participation rate, and employment–population ratio, Tonga: 2011

	Labour force participation rate	Employment–population ratio
Tonga	52.3	36.7
Males	62.7	44
Females	42.3	29.6
Urban	45.5	40.6
Males	55.7	49.5
Females	35.6	32
Rural	54.5	35.4
Males	64.9	42.2
Females	44.5	28.8

The labour force participation rate and the employment-population ratio were higher for males than for females at all ages (Figs. 38 and 39).

The labour force participation rate for females did not exceed 70% at any age, while that of males peaked at 85% at 40–49 years of age.

Figure 38: Population aged 15 and older by age, sex and labour force participation rate, Tonga: 2011

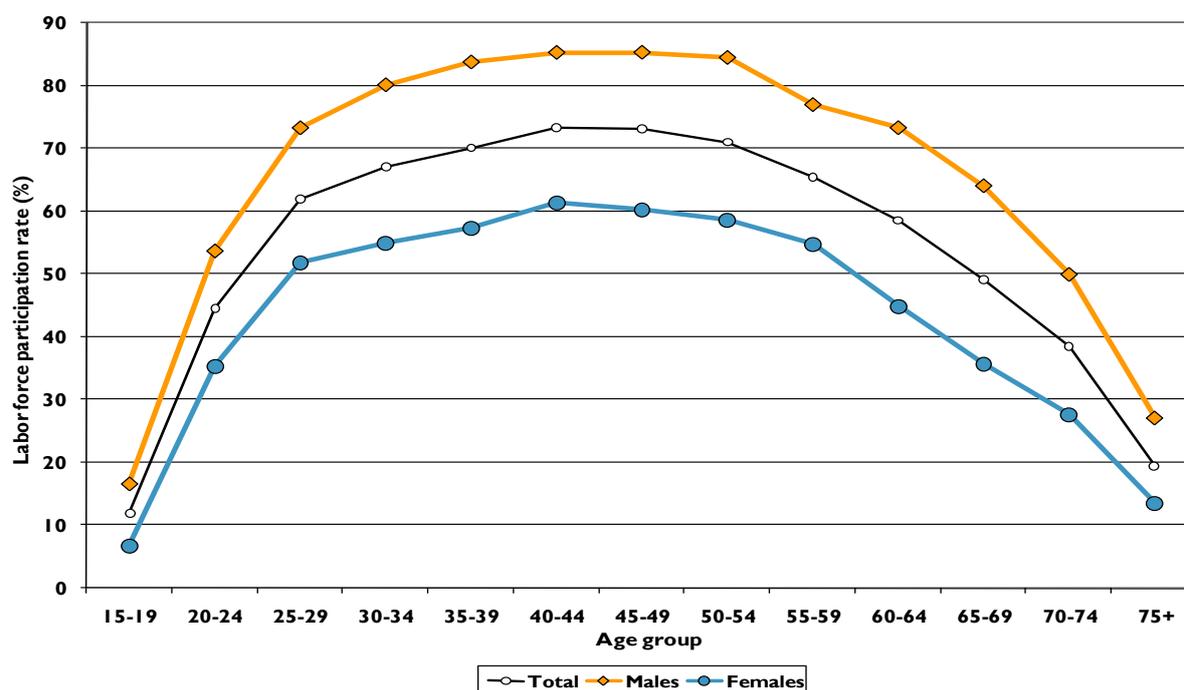
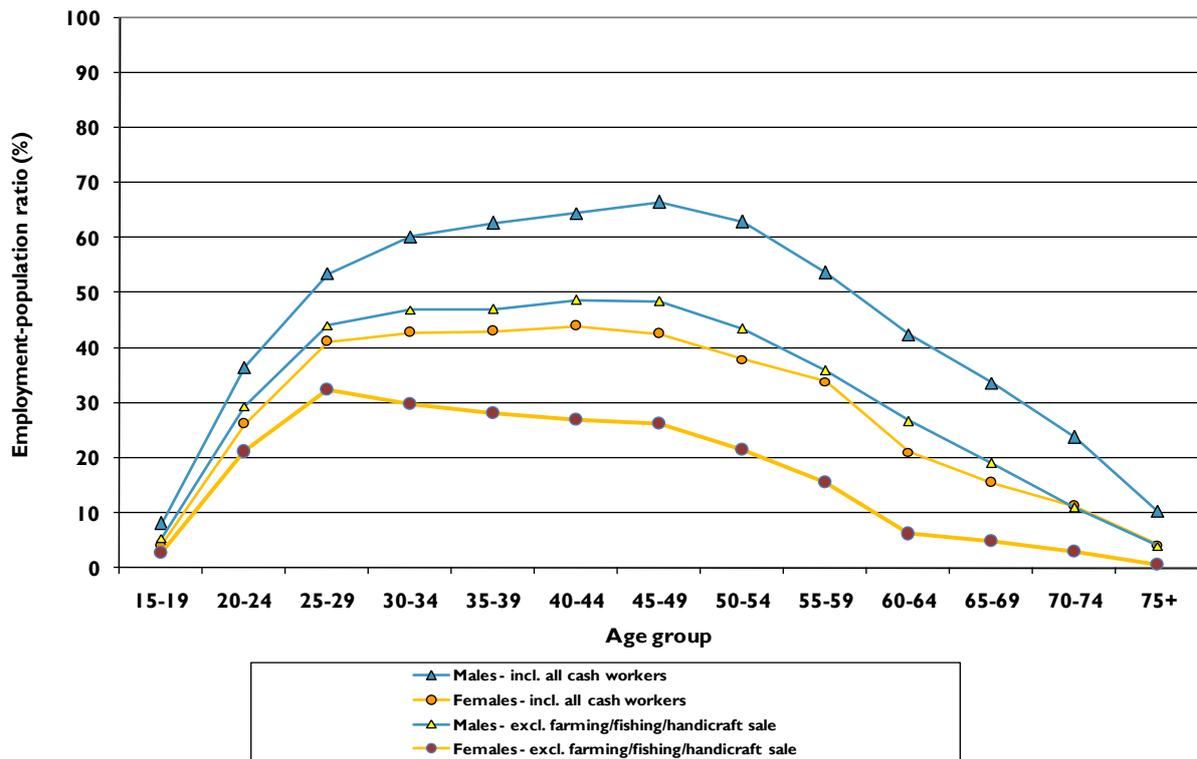


Figure 39: Population aged 15 and older by age, sex and employment–population ratio, Tonga: 2011



The employment-population ratio is categorized as either: all people that work for cash (whether contract worker or self-employed); or excluding self-employed people that farm, fish or produce handicrafts for sale.

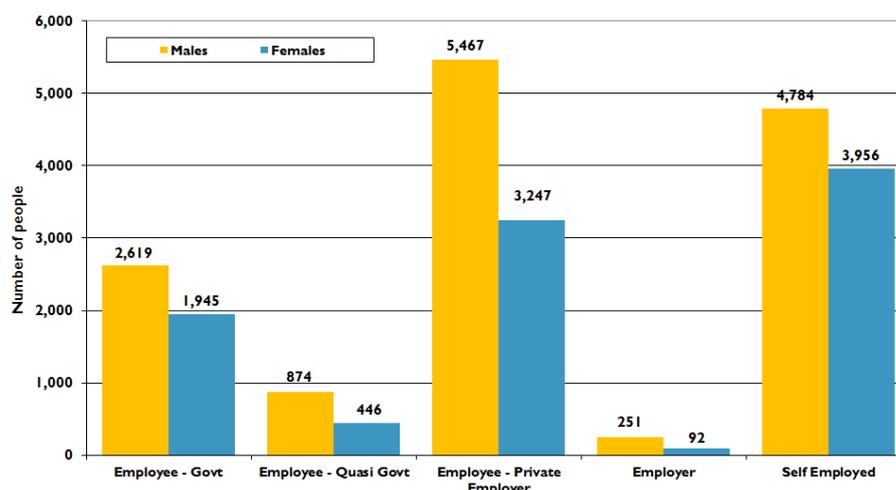
A peak of 67% of all males aged 45–49 years were employed as cash workers while about 43% of females aged 45–49 years were employed as cash workers (Fig. 39). The highest percentage of female cash workers were aged 40–44 years (44 percent).

A general pattern was of low participation rates at ages 15–19 years, and higher participation rates at ages 60 years and older, indicating that many older people keep providing economically for themselves and their household/families.

4.6.4 Paid workers by employment status

About 62% of all paid workers were employees for government, quasi-government or a private employer: 8,960 males and 5,638 females (Fig. 40).

Figure 40: Paid workers by employment status and sex, Tonga: 2011



There were only 343 employers, which is 1.4% of all cash workers. Another 8,740 people (37 percent of all cash workers) were self-employed; 4,784 males and 3,956 females.

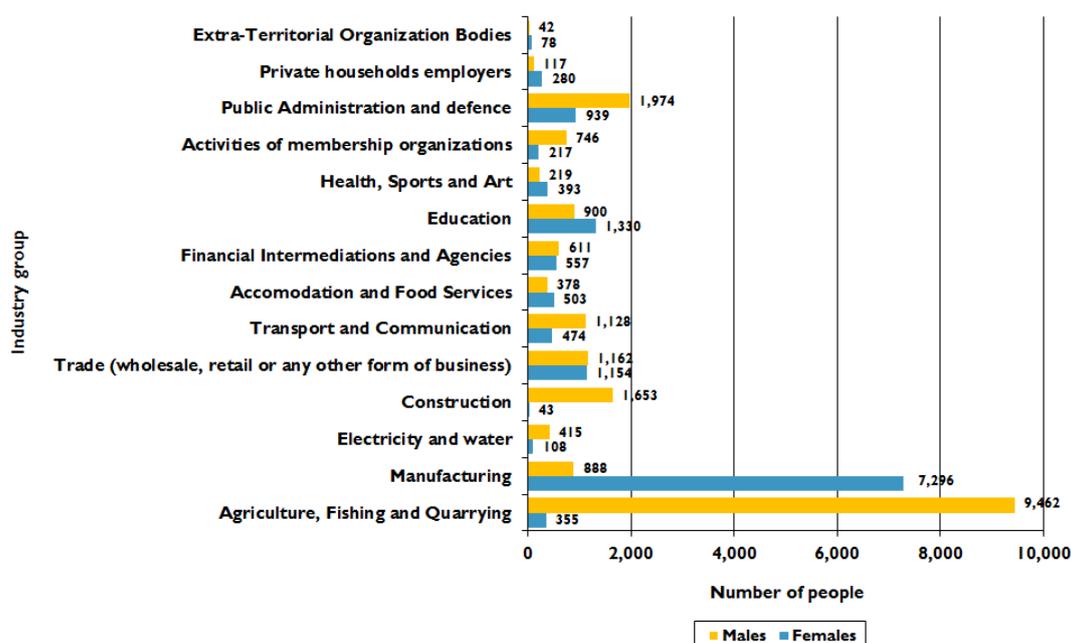
In any of the work status categories, there were considerably more male than female employed cash workers in 2011.

4.6.5 Employed workers by industry group

By far, the majority of employed workers in Tonga were employed in Agriculture, Fishing and Quarrying (9,817) or in Manufacturing (8,184) which together constitutes 54% of all total employed workers (Fig. 41). While Manufacturing was dominated by females, the employees in Agriculture, Fishing and Quarrying were almost all men.

The other sizable three industry groups with a significant proportion of employed people were: Trade (wholesale, retail or any other form of business) – 2,316 (seven percent); Public administration and defence – 2,913 (nine percent); and Education – 2,230 (seven percent). Employment levels in the remaining industry groups all represent less than 5% of the total.

Figure 41: Employed workers by industry, Tonga: 2011

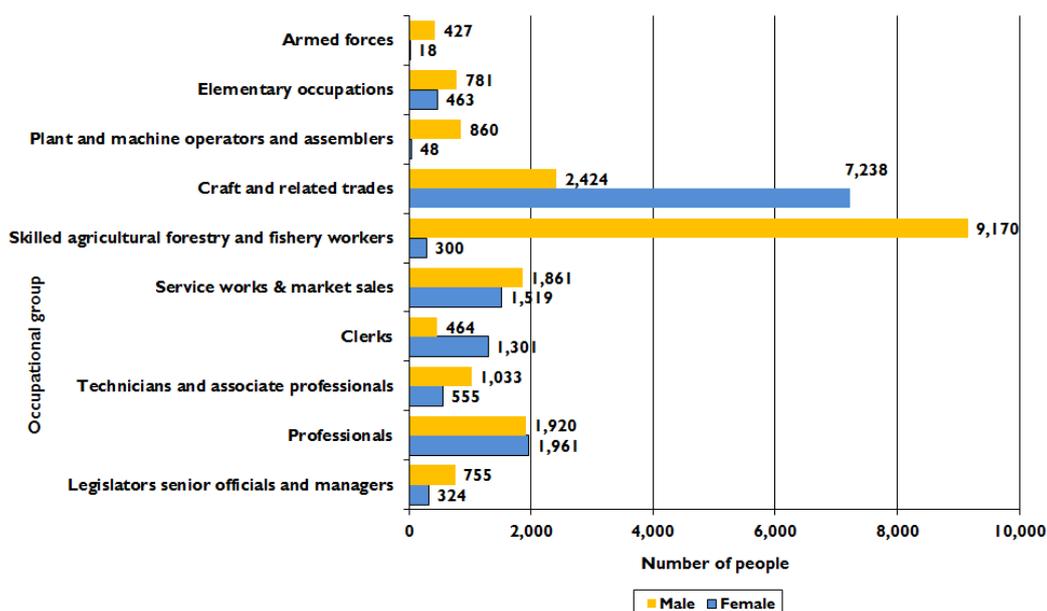


4.6.6 Employed workers by occupational group

The largest number of employed workers were Craft and related trades workers – 9,662 (29 percent), followed closely by Skilled agricultural and fishery workers – 9,470 (28 percent) (Fig. 42). While Craft and related trades workers were dominated by females (75 percent), the Skilled agricultural & fishery category was dominated by males (97 percent).

The next most prominent occupational groups were Professionals (12 percent of all employed workers), Service workers and Market sales workers (ten percent), Clerks (five percent), and Technician and associate professionals (five percent). All other groups had less than 1,500 workers.

Figure 42: Employed workers by occupation, Tonga: 2011



4.6.7 Unemployed

There were 373 people (192 males and 181 females) aged 15 years of age and older who did not work, but spend time looking for work, and were available and willing to start work if a job was offered to them, was only 373 people, 192 males and 181 females. This level of unemployment represents 1.1% of the total labour force (Table 31, App. 7a).

However, 39 people did not look for work in the week prior to the census because of bad weather conditions or because they could not afford the transportation costs. In addition, a group of 1,901 people did not work, and did not look for work because they believed that no work was available. If all these people (1,940) 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 2,313 people, and the unemployment rate would be 6.5% (Table 31, App. 7B).

If subsistence workers are 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. The total unemployed was 11,862 people, which equates to an unemployment rate of 33%. Broken down by urban and rural areas, this amounts to 1,226 people (16 percent) in the urban area, and 10,636 people (38 percent) in rural areas (Table 31, App. 7B). While not all people who did not seek work and not every subsistence worker could be considered unemployed, a proportion of them may be and the unemployment rate must fall somewhere between 1% and 33%.

Regardless of the unemployment concept used, unemployment levels were very similar for females and males, which represents a difference from the 2006 census when unemployment rates were higher for females than for males when the adjusted definition or subsistence workers were counted as unemployed. Unemployment rates have increased since 2006 levels in total, urban and rural areas and for both males and females when the adjusted definition is used, but have declined from 2006 levels in total, urban and rural areas and for both males and females when subsistence workers are counted as unemployed, because the number of subsistence workers has declined from 10,048 in 2006 to 9,549 in 2011.

Table 31: Population aged 15 and older and unemployment status according to various unemployment concepts, Tonga: 2011

Unemployment concept	Number of unemployed			Unemployment rate		
	Male	Female	Total	Males	Females	Total
According to unadjusted definition						
Tonga	192	181	373	1.0	1.3	1.1
Urban	73	59	132	1.7	2.1	1.8
Rural	119	122	241	0.8	1.1	0.9
According to adjusted definition*						
Tonga	1,356	957	2,313	6.4	6.5	6.5
Urban	396	240	636	8.5	7.9	8.3
Rural	960	717	1,677	5.9	6.2	6.0
If "subsistence work" is classified as unemployed						
Tonga	6,968	4,894	11,862	33.1	33.3	33.2
Urban	780	446	1,226	16.7	14.7	15.9
Rural	6,188	4,448	10,636	37.8	38.2	37.9

* 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 2011 Tonga census was 30,802 (Table 32). However, if some of the 1,940 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 same number (App. 7B).

Table 32: Population aged 15 and older not in the labour force, Tonga: 2011

Non-labour force	Males	Females	Total
Student	4,403	4,623	9,026
Retired or too old	1,528	2,329	3,857
Disabled	457	381	838
Home responsibilities or domestic duties	3,554	10,247	13,801
Others, including people who did not work because	1,908	1,372	3,280
they were not willing and available to work	97	137	234
of poor weather conditions & cannot afford transport	25	14	39
they did not look for work because they believe that no work was available	1,139	762	1,901
for reasons not specified	647	459	1,106
Total	11,850	18,952	30,802

Of the population aged 15 years and older not in the labour force, 62% were females (18,952), and 38% (11,850) were males. This compares with 59% females and 41% males in 2006. There were more female students (4,623) than male students (4,403). About 70% of those people retired, disabled or with home responsibilities or domestic duties were female (12,957), which was also the case in 2006.

5 HOUSEHOLD CHARACTERISTICS

5.1 Household size

The number of (private) households increased from 17,462 in 2006 to 18,033 in 2011, an overall increase of 571 households (Table 33). On average, the number of private households increased by 114 per year between 2006 and 2011, whereas between 1996 and 2006 the number of households in Tonga increased by 127 each year.

Table 33: Number of private households, number of occupants, and average household size by division/district, Tonga: 2006 and 2011

Division/District	Number of private households		Number of people in private households		Average household size (number of people per household)	
	2006	2011	2006	2011	2006	2011
TONGA	17,462	18,033	101,144	101,969	5.8	5.7
Tongatapu	11,971	12,818	71,340	74,327	6.0	5.8
Kolofo'ou	3,036	3,203	18,216	18,547	6.0	5.8
Kolomotu'a	2,689	2,988	15,753	16,791	5.9	5.6
Vaini	2,029	2,087	12,497	12,756	6.2	6.1
Tatakamotonga	1,190	1,220	6,775	7,105	5.7	5.8
Lapaha	1,220	1,274	7,255	7,378	5.9	5.8
Nukunuku	1,131	1,346	6,807	7,708	6.0	5.7
Kolovai	676	700	4,037	4,042	6.0	5.8
Vava'u	2,871	2,813	15,435	14,825	5.4	5.3
Neiafu	1,060	1,070	5,738	5,698	5.4	5.3
Pangaimotu	243	243	1,406	1,324	5.8	5.4
Hahake	436	418	2,422	2,297	5.6	5.5
Leimatu'a	489	465	2,734	2,418	5.6	5.2
Hihifo	430	405	2,267	2,105	5.3	5.2
Motu	213	212	868	983	4.1	4.6
Ha'apai	1,372	1,258	7,541	6,577	5.5	5.2
Pangai Hp	530	463	2,943	2,377	5.6	5.1
Foa	251	229	1,474	1,353	5.9	5.9
Lulunga	196	204	1,075	1,055	5.5	5.2
Mu'omu'a	127	111	630	609	5.0	5.5
Ha'ano	120	106	619	511	5.2	4.8
Uiha	148	145	800	672	5.4	4.6
'Eua	899	862	5,169	4,958	5.7	5.8
'Eua Motu'a	515	503	2,914	2,794	5.7	5.6
'Eua Fo'ou	384	359	2,255	2,164	5.9	6.0
Ongo Niua	349	282	1,659	1,282	4.8	4.5
Niuatoputapu	210	168	1,013	759	4.8	4.5
Niuafo'ou	139	114	646	523	4.6	4.6

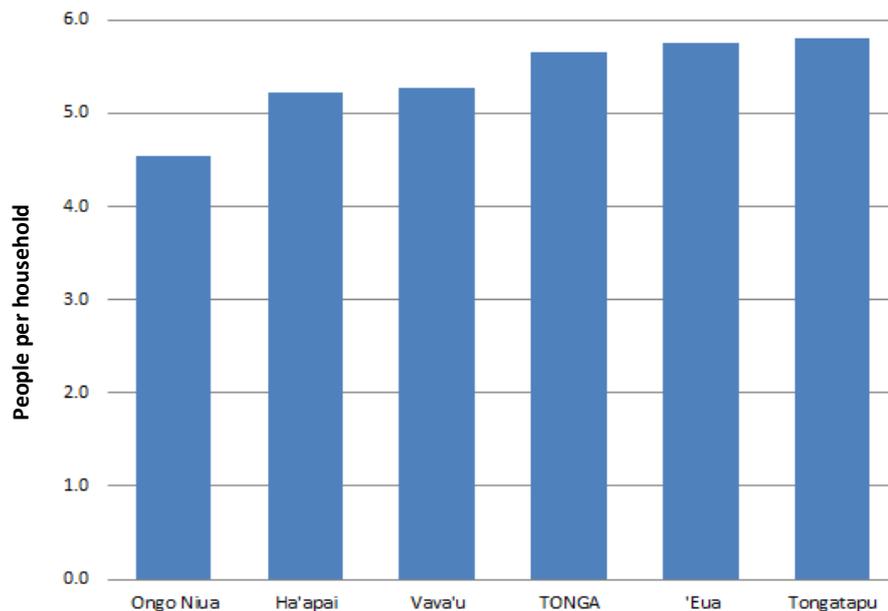
In addition, there was a significant increase in the number of non-private dwellings (institutions), from 67 in 2006 to 123 in 2011, an increase of nearly 84%. Non-private dwellings include accommodation for short-term visitors, such as hotels and hostels, hospitals, camps and prisons.

The number of households increased substantially in Tongatapu, especially in the districts of Kolofo'ou, Kolomotu'a, Vaini and Nukunuku. This was the same as during the period 1996 to 2006. The total number of households decreased in all other divisions of Tonga between 2006 and 2011.

The average household size decreased slightly from 5.8 to 5.7 people per household between 2006 and 2011, maintaining a trend of declining household size from 6.0 people per household in 1996.

The average household size of 5.8 people in Tongatapu was higher than the average in all the other divisions except for 'Eua (also 5.8 people per household). The average household size in Ongo Niua was lower than in the other divisions (4.5 people per household) (Fig. 43).

Figure 43: Average household size (number of people per household) by division, Tonga: 2011



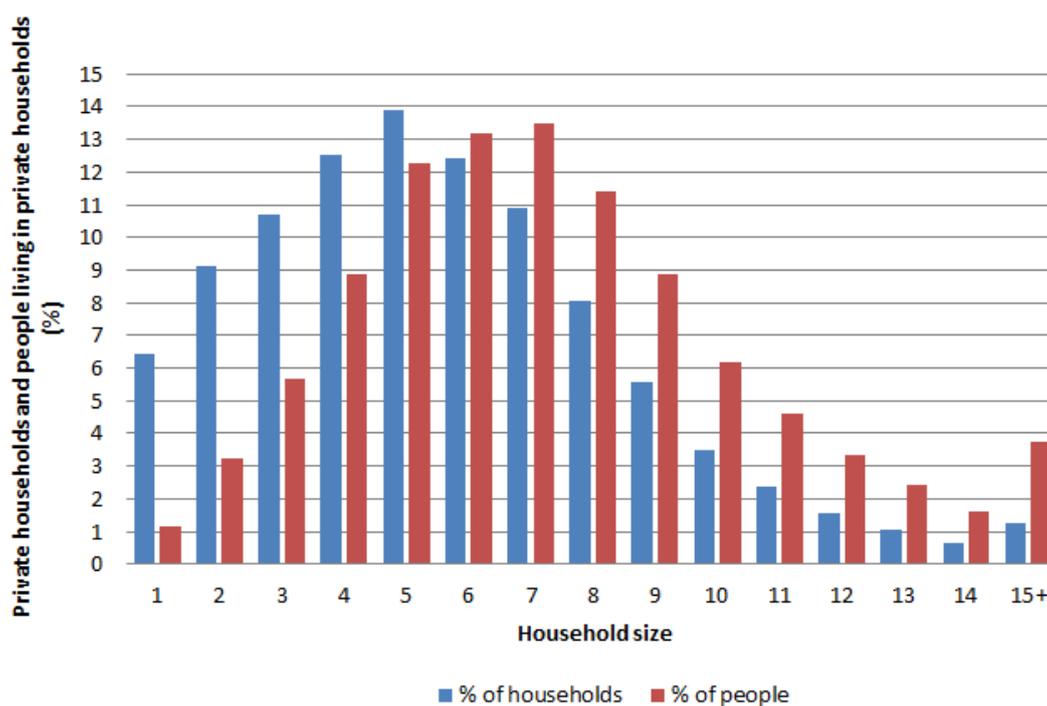
In 2011, the most common household size was 5, accounting for 14% of all households (Table 34 and Fig. 44). However, the highest proportion of all people lived in households with 7 people, which also accounted for 14% of all households.

Twenty-two percent of the population lived in households of 10 or more people, and almost 4% of the population lived in households of 15 or more people. Just over 1% of the population lived in single-person households, which accounted for just over 6% of all households.

Table 34: Number of private households by household size and people per household, Tonga: 2011

Household size	Private households		People per household size	
	Number	%	Number	%
1	1,161	6.4	1,161	1.1
2	1,642	9.1	3,284	3.2
3	1,932	10.7	5,796	5.7
4	2,256	12.5	9,024	8.8
5	2,503	13.9	12,515	12.3
6	2,242	12.4	13,452	13.2
7	1,966	10.9	13,762	13.5
8	1,455	8.1	11,640	11.4
9	1,003	5.6	9,027	8.9
10	628	3.5	6,280	6.2
11	425	2.4	4,675	4.6
12	285	1.6	3,420	3.4
13	190	1.1	2,470	2.4
14	118	0.7	1,652	1.6
15+	227	1.3	3,811	3.7
Total	18,033	100.0	101,969	100.0

Figure 44: Distribution of households and population living in private households, by household size, Tonga: 2011



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 35).

The majority of all heads of households (78 percent) in Tonga were men (13,982) with 22% (4,051) of households headed by women.

Sixty-nine percent of all household members consisted of a husband and wife and their children (nuclear family).

About 15% of household members consisted of other children such as adopted children or grandchildren of the household head. Another 11% of all household members were other relatives, such as uncles and aunts, nephews, etc.

Less than 2% of all household members were a non-relative (no relation).

Table 35: Population by household composition (relationship to head of household), Tonga: 2011

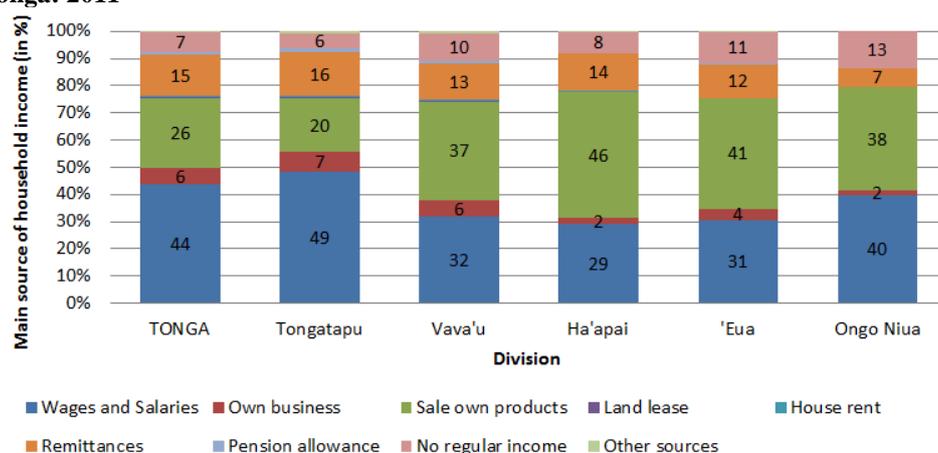
Relationship	Total	Males	Females	Total	Males	Females
	Total number			Percentage		
Head of Household	18,033	13,982	4,051	17.7	27.4	8.0
Spouse	11,681	203	11,478	11.5	0.4	22.5
Biological - child	40,784	21,034	19,750	40.0	41.2	38.8
Adopted - child	2,166	1,160	1,006	2.1	2.3	2.0
Brother / Sister	1,627	827	800	1.6	1.6	1.6
Grandchild	13,069	6,743	6,326	12.8	13.2	12.4
Parent of head of household	531	119	412	0.5	0.2	0.8
Parent of spouse	400	84	316	0.4	0.2	0.6
Child of spouse (step child)	439	223	216	0.4	0.4	0.4
Other relatives	11,426	5,667	5,759	11.2	11.1	11.3
No relation	1,813	1,013	800	1.8	2.0	1.6
Total	101,969	51,055	50,914	100.0	100.0	100.0

5.3 Household income

5.3.1 Main source of household income

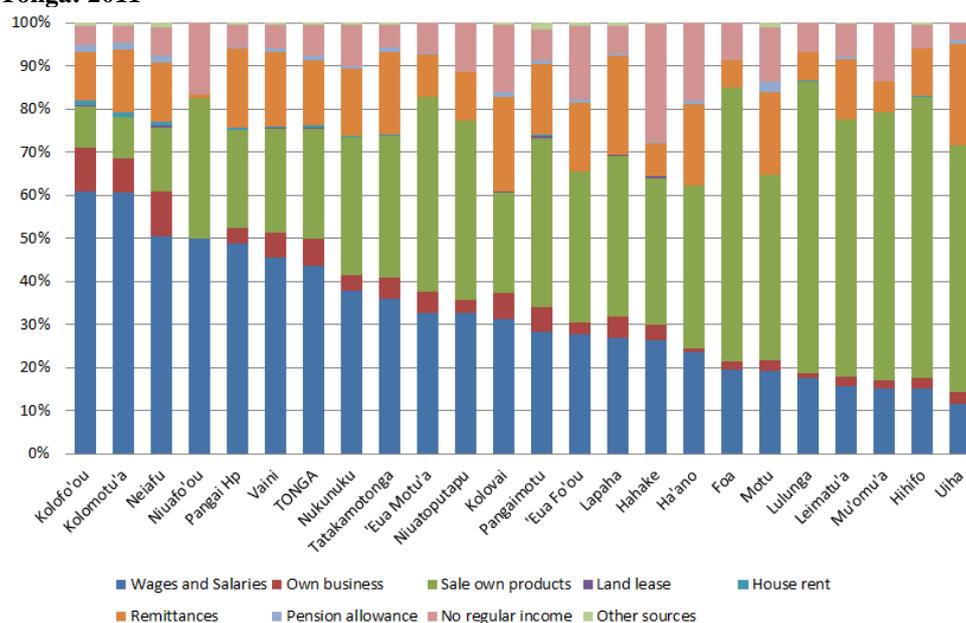
Wages and/or salaries were the main source (44 percent) of household incomes during the 12 months prior to the 2011 census (Fig. 45). The second most common source was income from selling own products such as fish, crops or handicrafts (26 percent – down from 29 percent in the 2006 census). Income from remittances was the main source of income for 15 per cent of households, a decline from 20% of households relying on remittances in the 12 months preceding the 2006 census. A small proportion (six percent) of households relied on income from their own business in the 12 months preceding the 2011 census. Seven percent of households in Tonga reported that they had no regular source of income in the 12 months preceding the 2011 census.

Figure 45: Private households by division and main source of household income (in % of total household income), Tonga: 2011



There were large differences in the main income source of households between divisions. While 49% of all households in Tongatapu mainly relied on income from wages and salaries, this proportion was much lower in all other divisions. Income generated through sale of own products was highest in Ha'apai division (46 percent) and in some districts such as Hihifo, Uiha, Lulunga, Leimatu'a and Mu'omu'a up to 68% of all households mainly relied on income from sale of own products (Fig. 46). Almost one-quarter of all households in Kolovai, Lapaha and 'Uiha relied primarily on remittances as their main source of income in the 12 months preceding the 2011 census.

Figure 46: Private households by district and main source of household income (in % of total household income), Tonga: 2011



5.3.2 Remittances

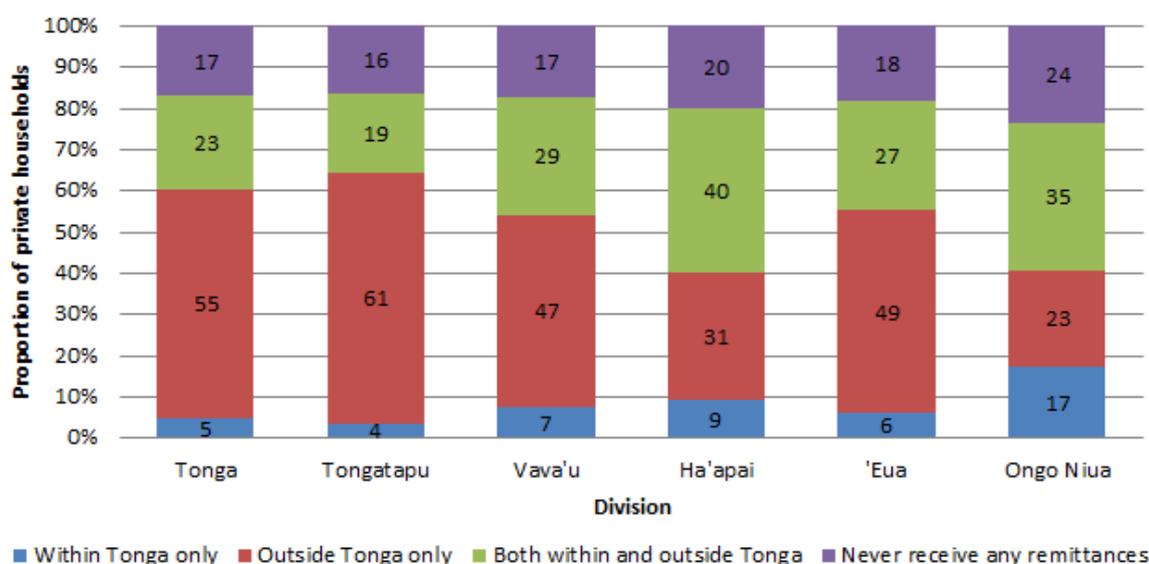
About 83% of households received remittances during the 12 months prior to the census (Fig. 47), and only 17% did not receive any remittances.

More than half (55 percent) of all households received remittances from outside of Tonga only, and another 23% received them from within and outside of Tonga. Five percent of all households only received remittances from inside of Tonga.

The importance and source of remittances varies by division. While 24% of all households in Ongo Niua did not receive any remittances, this was only 16% in Tongatapu. Ongo Niua had the highest proportion of households receiving remittances from within Tonga only (17 percent), and Tongatapu had the highest proportion of households receiving remittances from outside Tonga only (61 percent).

There have been significant changes in remittances between the 2006 and 2011 censuses. There was a general decline in the percentage of households that did not receive any remittances in all divisions except for Tongatapu and Ha'apai. The largest increase in households receiving remittances was in Ongo Niua (from 67 percent to 76 percent). In Vava'u, the increase was from 78% to 83%. The changes reflect outmigration from the outer islands of Tonga.

Figure 47: Source of remittances for private households (by division in % of households), Tonga: 2011



5.4 Amenities and capital goods

The data presented in this section are numbers or percentages of private households by division (Table 36). Since several households may live in the same dwelling, the information presented does not refer to the number or percentage of dwellings.

Table 36: Total number of private households by division, Tonga: 2011

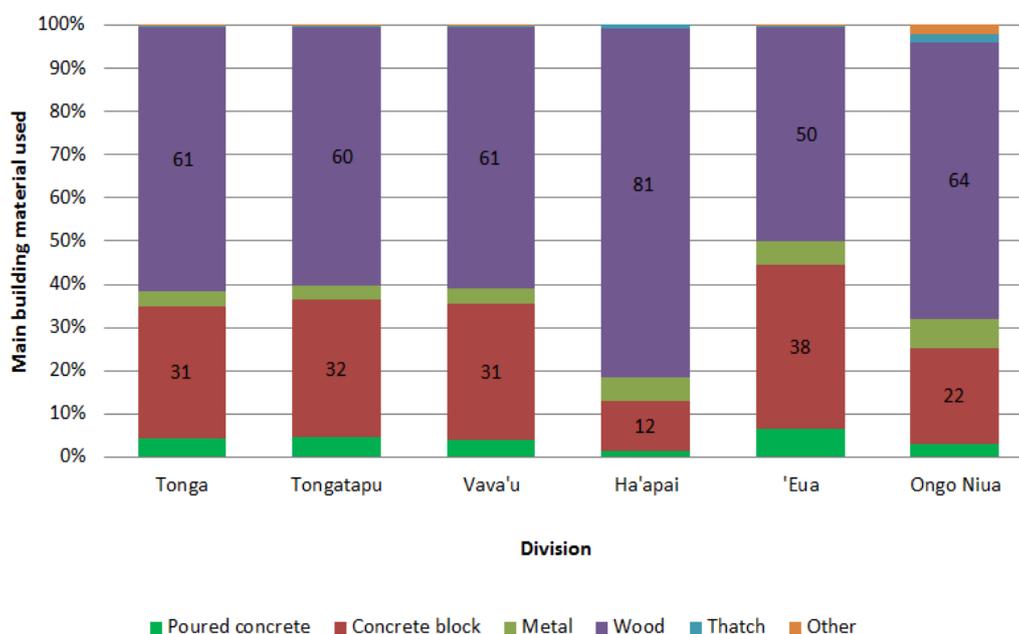
	Division					
	TONGA	Tongatapu	Vava'u	Ha'apai	'Eua	Ongo Niua
Total number of private households	18,033	12,818	2,813	1,258	862	282

5.4.1 Private households by building material used for dwelling

Figures 48 to 50 present data on the building materials used to construct dwellings by division. About 61% of private households occupied dwellings with wooden outside walls, and 31% of private households occupied dwellings with outside walls of concrete blocks (Fig. 48). In Ha'apai, the proportion of private households that occupied dwellings with wooden outside walls was 81%, as compared to only 12% occupying dwellings with outside walls constructed of concrete blocks. In 'Eua, half of private households occupied dwellings with wooden outside walls and 38% of private households occupied dwellings with outside walls constructed of concrete blocks.

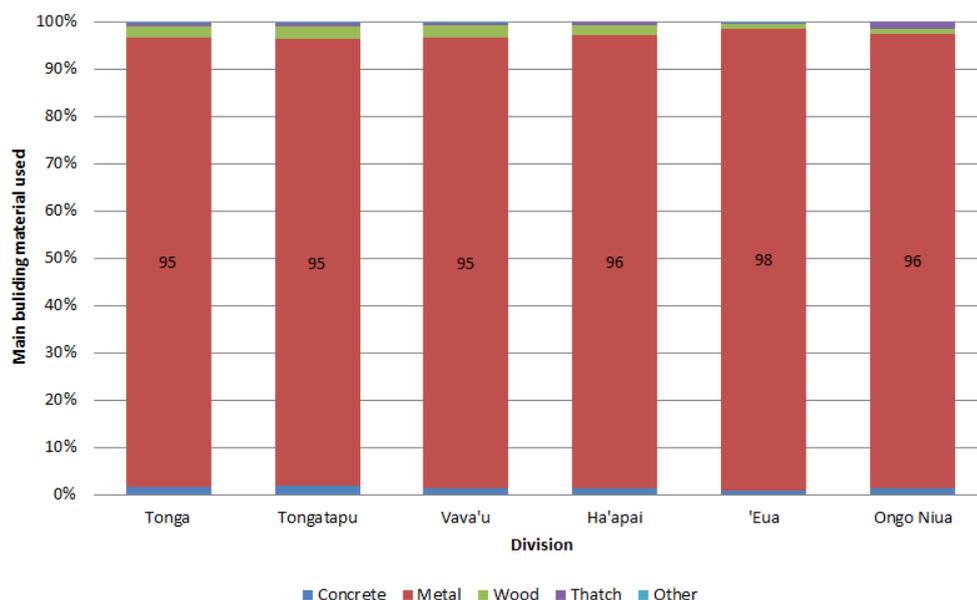
Between the 2006 and 2011 censuses, concrete blocks increased as a material used for outside walls (from 27 percent to 31 percent), while wood has decreased in use (from 65 percent to 61 percent). This trend is followed in all divisions except for Ongo Niua, where concrete block and metal outside walls have been replaced with wood during reconstruction of dwellings damaged in the Tsunami which occurred on 30 September 2009.

Figure 48: Proportion of private households by division and the main type of material used for the outside walls of dwellings, Tonga: 2011



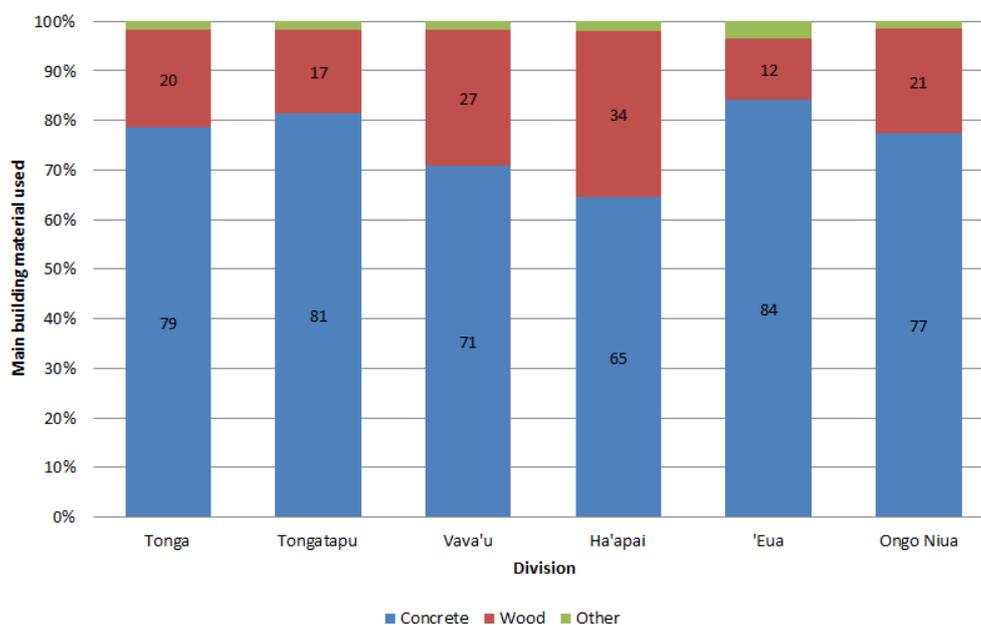
Between the 2006 and 2011 censuses, the percentage of private households occupying dwellings with metal roofs increased from 93% to 95% (Fig. 49).

Figure 49: Proportion of private households by division and the main type of material used for the roofs of dwellings, Tonga: 2011



Since 2006, the percentage of private households occupying dwellings with concrete floors increased by 3% so that by 2011, almost four-fifths (79 percent) of all private households in Tonga had concrete floors in their dwelling (Fig. 50). The percentage of private households with wooden floors in their dwelling declined from 23% in 2006 to 20% in the 2011 census. However, the proportion of private households occupying dwellings with wooden floors ranged between 34% in Vava'u and 12% in 'Eua in 2011. In 'Eua, the percentage of private households residing in dwellings with wooden floors declined most since 2006 (by six percent from 18 percent).

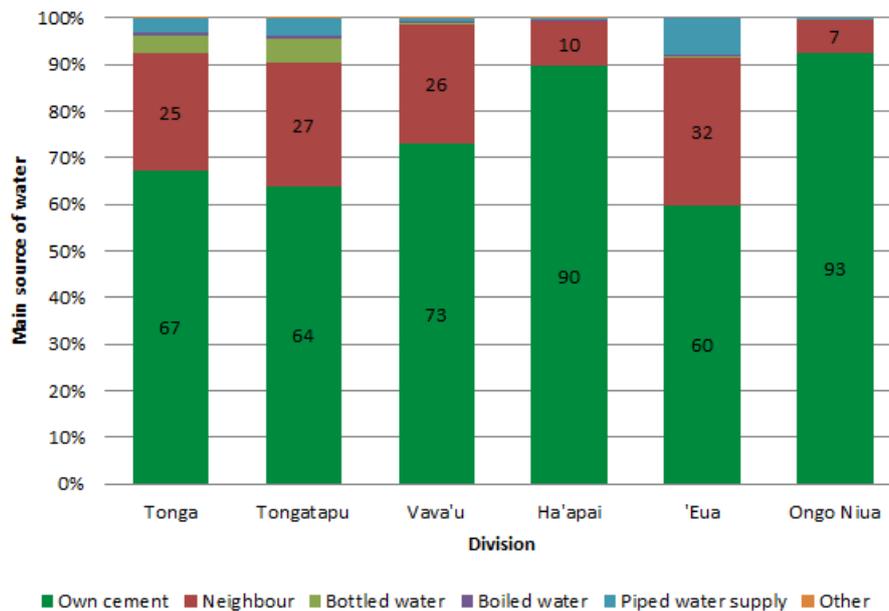
Figure 50: Proportion of private households by division and the main type of material used for the floors of dwellings, Tonga: 2011



5.4.2 Private households by water source

Sixty-seven percent of all private households in Tonga in 2011 occupied dwellings with a cement tank for drinking water (Fig. 51). Between 2006 and 2011, the option to state that drinking water was obtained from a neighbour was added to the census questionnaire. As a result, the second most important source (25 percent) was water obtained from a neighbour. Bottled water was the main source of drinking water for 4% of private households and piped water was used by 3% of private households in Tonga in 2011. Bottled water was only a significant source of drinking water in Tongatapu and piped water was more readily used for drinking in 'Eua (eight percent of private households) than elsewhere.

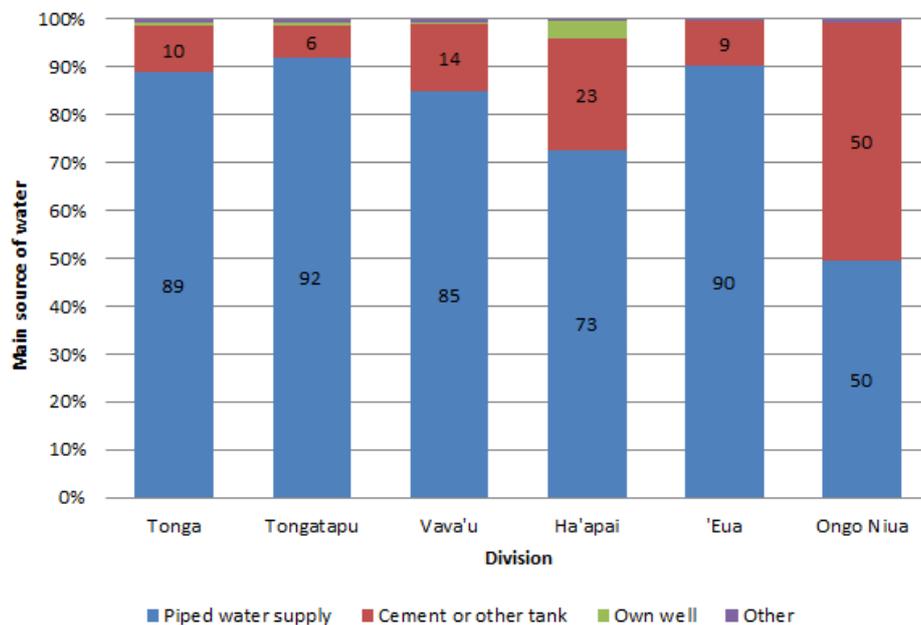
Figure 51: Proportion of private households by division and the main source of drinking water, Tonga: 2011



The main source of water apart from drinking water was piped water (89 percent of all private households), or a tank (10% of all private households) (Fig. 52). The proportion of households relying on a tank was 23% in Ha’apai and 50% in Ongo Niua. In Ha’apai, 4% of all households obtained their water from a well.

Between the 2006 and 2011 census, the percentage of households in Tonga obtaining their water from a piped supply increased by 6% (from 83%). Piped water supplies to households increased in all divisions except for Ongo Niua, where the number of private households mainly relying on piped water fell from 52% to 50% in 2011, presumably as a result of the upheavals caused by the Tsunami in 2009. The largest increase was in Ha’apai (from 52 percent to 73 percent).

Figure 52: Proportion of private households by division and the main source of water apart from drinking water, Tonga: 2011

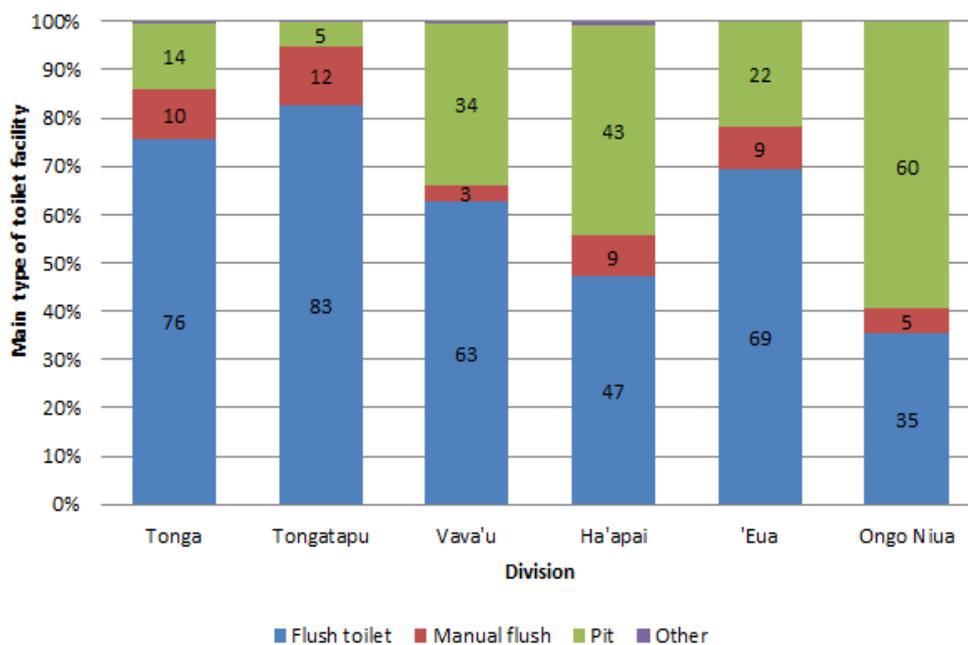


5.4.3 Private households by main toilet facility

While flush toilets were the most common type of toilet facility in Tonga, used by 76% of all private households, there were significant differences by division (Fig. 53). While 83% of all private households in Tongatapu occupied dwellings with a flush toilet, this percentage was much lower in Ha’apai (47 percent) and Onga Niua (35 percent). In Ha’apai, the percentage of private households occupying dwellings with a pit toilet was 43% and in Onga Niua it was 60%. On average, 10% of all private households in Tonga occupied dwellings with a manual flush toilet.

Between the 2006 and 2011 censuses, the proportion of private households occupying dwellings with flush toilets increased by 6% and the proportion of private households occupying dwellings with pit toilets decreased by 4%. The largest percentage decline in use of pit toilets was in Ha’apai (from 56 percent to 43 percent), where use of manual flush toilets increased by 3% and flush toilets by 9%. Tongatapu and Ongo Niua had the least amount of change in the type of facilities used between the 2006 and 2011 censuses.

Figure 53: Proportion of private households by division and main toilet facility, Tonga: 2011

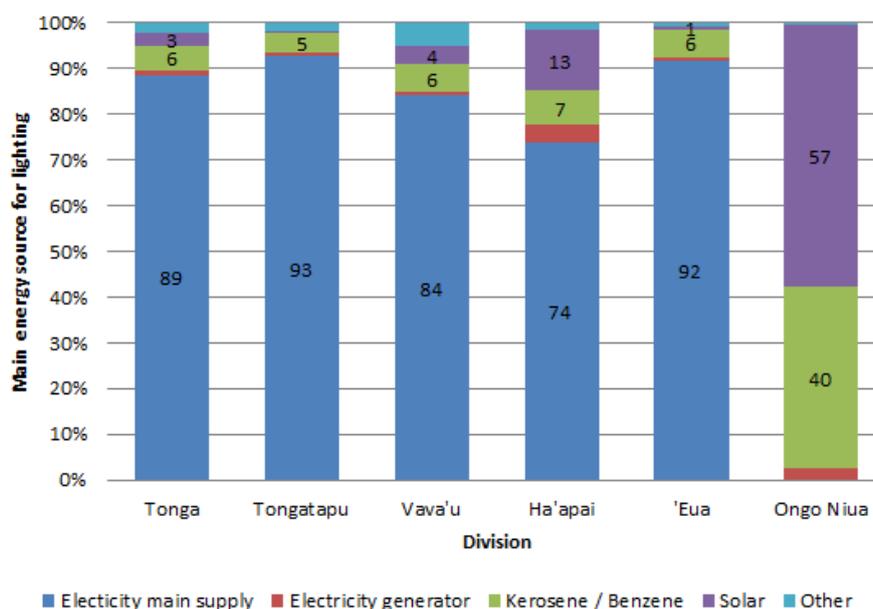


5.4.4 Private households by main energy source

The main energy source for lighting in Tonga was mains electricity supply (89% of all private households). The percentage using this source was highest in Tongatapu (93 percent) and lowest in Ha’apai (74 percent) (Fig. 54). In Ongo Niua mains electricity is not supplied. Instead, 57% of all households relied on solar panels and 40% on kerosene or benzene.

Between the 2006 and 2011 censuses, there were small decreases in use of kerosene or benzene. In Ongo Niua, use of solar panels increased by 13% while use of kerosene or benzene decreased by 10%. In ‘Eua use of kerosene or benzene decreased by 4% (mains electricity supply increased by three percent).

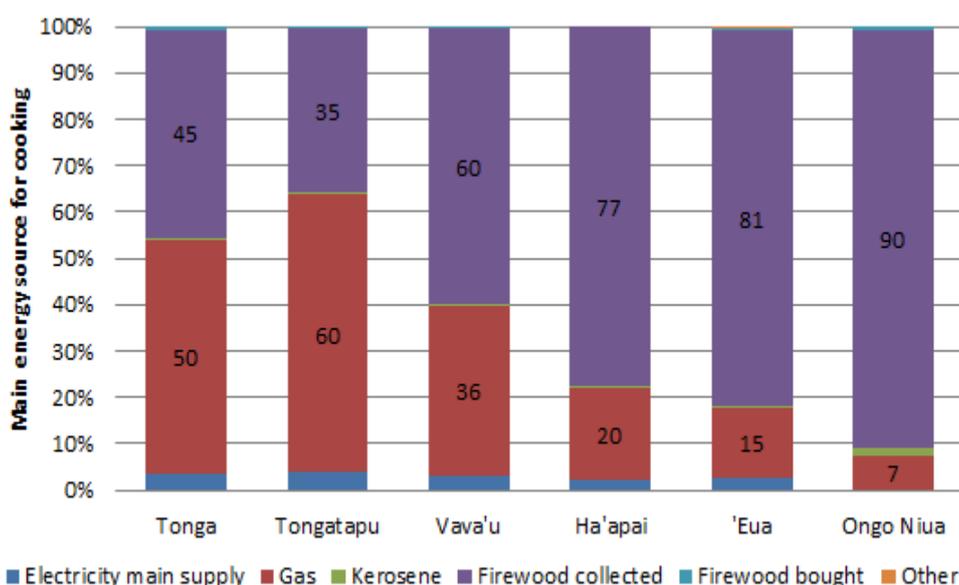
Figure 54: Proportion of private households by division and main source of lighting, Tonga: 2011



At the time of the 2011 census, half of all private households in Tonga used gas as the main fuel for cooking (Fig. 55). Gas was most commonly used in Tongatapu where 60% of all private households relied on this fuel for cooking. This percentage was much lower in all other divisions, where collected firewood was the main energy source for cooking, ranging from 60% of households in Vava'u to 90% of households in Ongo Niua relying on collected firewood.

Between the 2006 and 2011 censuses, reliance on collected firewood as a cooking fuel increased, while use of gas declined in all divisions of Tonga. The percentage of households using mains electricity supply did not change between the 2006 and 2011 censuses. Use of kerosene also declined in Ongo Niua. The shift towards collected firewood as a cooking fuel may be attributable to the increasing burden of the cost of gas on household expenditures.

Figure 55: Proportion of private households by division and main fuel for cooking, Tonga: 2011

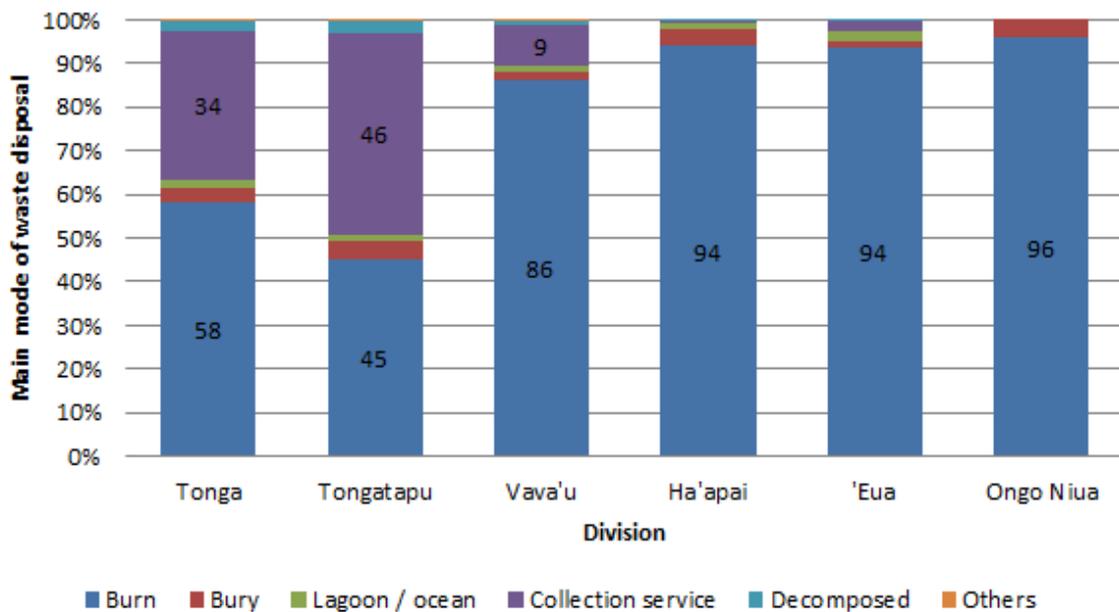


5.4.5 Private households by main means of waste disposal

Burning was the most common means of waste disposal in Tonga, practiced by 58% of all private households, followed by commercial collection (34 percent of households) (Fig. 56). In Tongatapu, the percentage of households using commercial waste collection was higher (46 percent) than the percentage of households burning waste (45 percent). Nine percent of households in Vava'u had waste collected.

Between the 2006 and 2011 censuses, the percentage of private households whose main means of waste disposal was burning fell by 27% (from 85 percent in 2006). This change has been greatest in Tongatapu and to a lesser extent in Vava'u as a result of policy directives. In other divisions, the percentage of households burning waste has not declined by the same proportion or has not declined at all.

Figure 56: Proportion of private households by division and main mode of waste disposal, Tonga: 2011

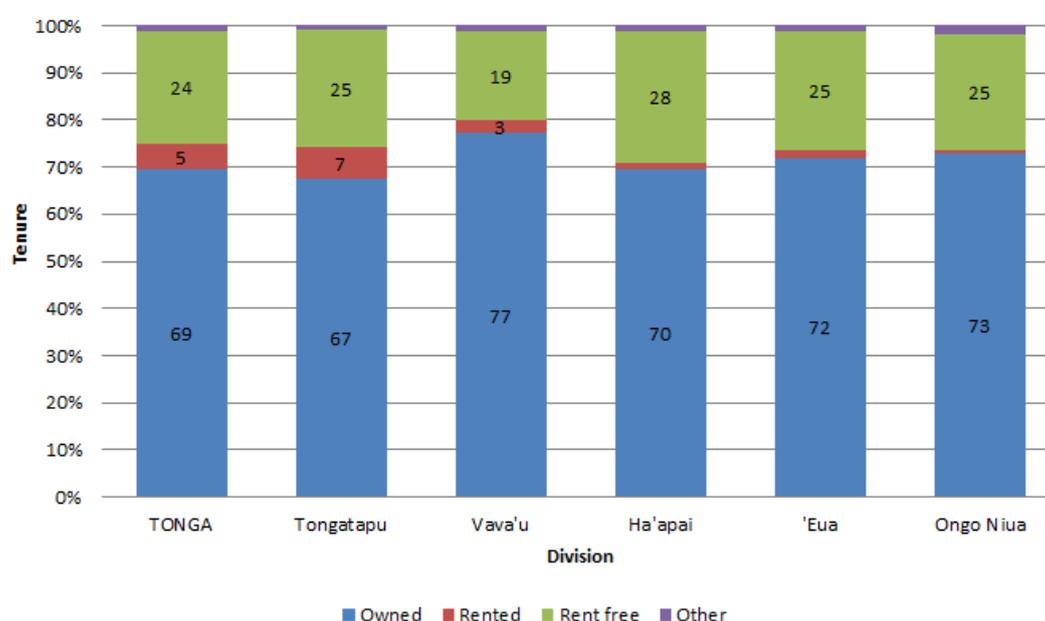


5.4.6 Private households by tenure

The majority of private households (69 percent) owned their dwelling (Fig. 57), 5% rented their dwelling, and another 24% stayed in their dwelling rent-free. About 7% of households in Tongatapu rented their dwelling, which was the highest percentage of households in any division. Owner-occupancy was highest in Vava'u (77 percent).

Between the 2006 and 2011 censuses, the percentage of private households that owned the dwelling they occupied declined by 3% (from 72 percent), while rent-free tenancy increased by 1% and rented tenancy decreased by 1%. The largest shifts in tenure occurred in Vava'u, where owner-occupancy declined by 7% and rent-free tenancy increased by 5%. These changes may have resulted from out-migration of owner-occupiers and their dwellings becoming available to relatives for rent-free occupancy.

Figure 57: Proportion of private households by division and tenure, Tonga: 2011



5.4.7 Private households and availability of various household items

This section briefly summarizes the availability of a variety of household items (Table 37). In general, in 2011, a higher proportion of households in Tongatapu (compared to all other divisions) used items such as a hot water system, a motor vehicle, refrigerator, washing machine, television, video/DVD player, computer, and have access to the internet. A bath or shower was available in all private households across Tonga. Over 90% of households used mobile telephones in all divisions except for Ongo Niua, where mobile telephones were used by 61% of households. Ownership of a boat was more common in Vava'u, Ha'apai and Ongo Niua than in Tongatapu.

Between the 2006 and 2011 censuses, the use of most household items has increased across Tonga. Most notably, mobile telephones (from 73 percent to 94 percent), computers (from 16 percent to 25 percent) and internet access outside of the home (from 21 percent to 48 percent). As access to mobile telephones has increased, connection to landline telephones has decreased. The percentage of households with a boat, a hot water system and a motor vehicle declined (boat: one percent decline; hot water system: two percent decline; motor vehicle: four percent decline). This is perhaps attributable to those in extended families sharing such items. There was a decline in differences in access to most household items between Tongatapu and the other divisions.

Table 37: Proportion of private households by division and availability of household items (as % of all households), Tonga: 2006 and 2011

Item	TONGA		Tongatapu		Vava'u		Ha'apai		'Eua		Ongo Niua	
	2006	2011	2006	2011	2006	2011	2006	2011	2006	2011	2006	2011
Boat	6.0	5.0	4.0	3.0	10.0	9.0	13.0	11.0	3.0	2.0	9.0	4.0
Hot water system	9.0	7.0	11.0	8.0	6.0	5.0	3.0	2.0	3.0	1.0	0.0	0.0
Bath or shower	95.0	100.0	95.0	100.0	96.0	100.0	94.0	100.0	98.0	100.0	91.0	100.0
Motor vehicle	58.0	54.0	66.0	61.0	46.0	44.0	28.0	25.0	48.0	39.0	19.0	23.0
Refrigerator	65.0	67.0	73.0	73.0	51.0	52.0	46.0	50.0	53.0	55.0	6.0	14.0
Washing Machine	58.0	66.0	64.0	71.0	51.0	57.0	41.0	52.0	49.0	61.0	6.0	15.0
Television	72.0	77.0	83.0	83.0	45.0	69.0	45.0	50.0	70.0	74.0	11.0	23.0
Video/DVD Player	58.0	67.0	61.0	70.0	55.0	65.0	55.0	59.0	45.0	57.0	16.0	35.0
Landline telephone	51.0	45.0	56.0	49.0	37.0	32.0	35.0	31.0	53.0	55.0	63.0	27.0
Mobile telephone	73.0	94.0	83.0	95.0	59.0	94.0	46.0	94.0	56.0	92.0	0.0	61.0
Computer	16.0	25.0	20.0	30.0	8.0	16.0	4.0	11.0	5.0	14.0	1.0	4.0
Internet access:												
at home	5.0	9.0	7.0	11.0	3.0	5.0	1.0	3.0	1.0	3.0	0.0	0.0
elsewhere	21.0	48.0	26.0	56.0	13.0	36.0	8.0	18.0	8.0	35.0	1.0	3.0
no access	73.0	55.0	67.0	48.0	84.0	64.0	91.0	82.0	91.0	66.0	99.0	97.0
Number of households	17,462	18,033	11,971	12,818	2,871	2,813	1,372	1,258	899	862	349	282

6 Population Projections

6.1 Introduction

Population projections are procedures involving numerical calculation of future populations' size and their characteristics based on assumptions made about future trends of fertility, mortality and migration. Population projections are important tools used to provide better understanding of the determinants of future population change.

National population projections provide information on likely future population size, age-sex structure, fertility and mortality rates, annual population growth rates, and other demographic structures and summary indicators. Changes in population size and composition have many social, economic, environmental, and political implications. For this reason, population projections serve as a basis for providing future population estimates required for sectoral planning and development policies and programs.

6.2 Methodology

The cohort component projection method was employed in preparing the population projections presented in this chapter. The method uses a base population disaggregated by five-year age group (or cohort) and sex. Mortality and migration experienced year by year are accounted for. People who die or emigrate are subtracted. Births are added to the youngest age group after accounting for infant mortality. The population is aged year by year, for the duration of the projection period.

6.3 Projection Inputs and Assumptions

6.3.1 Input data

In order to project the future Tongan population, the following inputs were utilized:

- Base population by five-year age group and sex;
- Assumptions of future fertility;
- Assumptions of future mortality;
- Assumptions of future net migration.

6.3.2 Base population and projection period

The 2011 census enumerated population by age and sex was the base used in the population projections. This base population was adjusted to mid-year 2011 (1 July 2011) taking into account changes in the three population components of fertility, mortality and migration. The United Nation's package PAS, procedure MOVEPOP was used to adjust the base population. The result is shown in Table 38. The evaluation of the 2011 Tonga census age and sex distribution data showed that age-sex reporting is reliable.

Table 38: Enumerated and adjusted population by age group and sex, Tonga: 2011

Age group	Enumerated population (10 November 2011)			Adjusted mid-year population (30 June 2011)		
	Total	Males	Females	Total	Males	Females
0-1	2,743	1,444	1,299	2,706	1,442	1,300
1-4	10,758	5,642	5,115	10,807	5,651	5,130
5-9	12,875	6,672	6,203	12,869	6,678	6,190
10-14	12,087	6,362	5,725	12,106	6,366	5,739
15-19	10,969	5,676	5,293	10,906	5,650	5,256
20-24	8,230	4,131	4,099	8,298	4,167	4,131
25-29	7,591	3,576	4,015	7,566	3,581	3,982
30-34	6,412	3,095	3,317	6,406	3,099	3,306
35-39	5,756	2,784	2,972	5,791	2,807	2,984
40-44	5,754	2,890	2,864	5,680	2,859	2,820
45-49	4,583	2,368	2,214	4,522	2,320	2,200
50-54	3,718	1,796	1,921	3,694	1,781	1,913
55-59	3,159	1,522	1,637	3,130	1,506	1,623
60-64	2,528	1,220	1,308	2,523	1,216	1,308
65-69	2,143	1,010	1,133	2,146	1,016	1,129
70-74	1,725	836	889	1,712	831	881
75-79	1,128	520	608	1,122	517	605
80+	1,093	434	659	1,087	432	655
Total	103,252	51,979	51,273	103,069	51,919	51,152

Further into the future, certainty on population size and structure becomes more difficult. Therefore to reduce uncertainty the projections are restricted to a 20 year period (2011–2031).

6.3.3 Fertility assumptions

Fertility, measured as the total fertility rate (TFR) and the corresponding age-specific fertility rates (ASFRs) are required to develop population projections. These rates were derived in Chapter 3.

Assumptions made about changes in future TFR and ASFRs are based on careful examination of historical and current rates. These data show that fertility decline has been experienced in Tonga with a high TFR of about 7.8 births per woman in 1971 down to about 4.8 births per woman in 1991. In 2011, fertility is estimated to have fallen to a TFR of 3.9 births per woman (Fig. 58). Similar fertility declines from high to low levels have been observed around the world. It is likely that Tongan fertility will continue to decline in the future.

Three possible scenarios on future fertility rates in Tonga have been developed (Figure 58):

Assumption 1 – No decline from current TFR

The 2011 census estimated fertility rate of 3.9 live births per woman is kept constant to 2031, to provide a benchmark against which impacts of different fertility scenarios on population growth can be assessed.

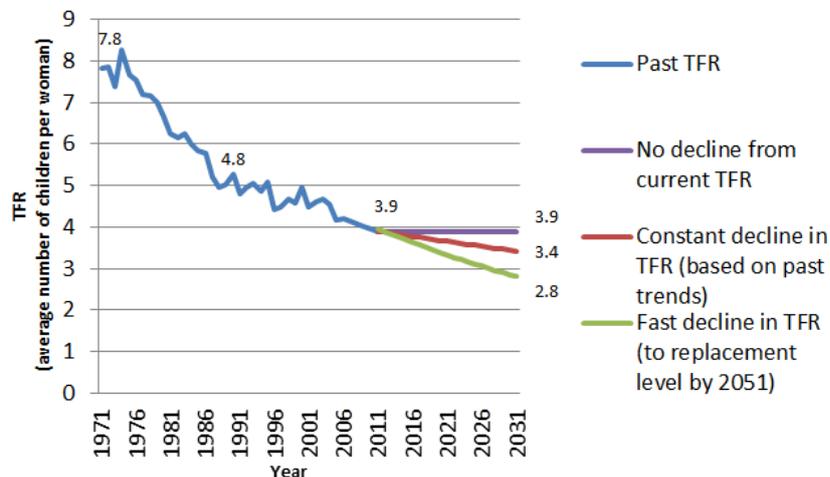
Assumption 2 – Constant decline in TFR (based on past trends)

Fertility is assumed to decline from 3.9 births per woman to 3.0 births per woman in 2051, reaching 3.4 by the end of the projection period (2031).

Assumption 3 – Fast decline in TFR

The current level of 3.9 births per woman is assumed to decline to replacement level (two births per woman) by 2051, reaching 2.8 births per woman by the end of the projection period (2031).

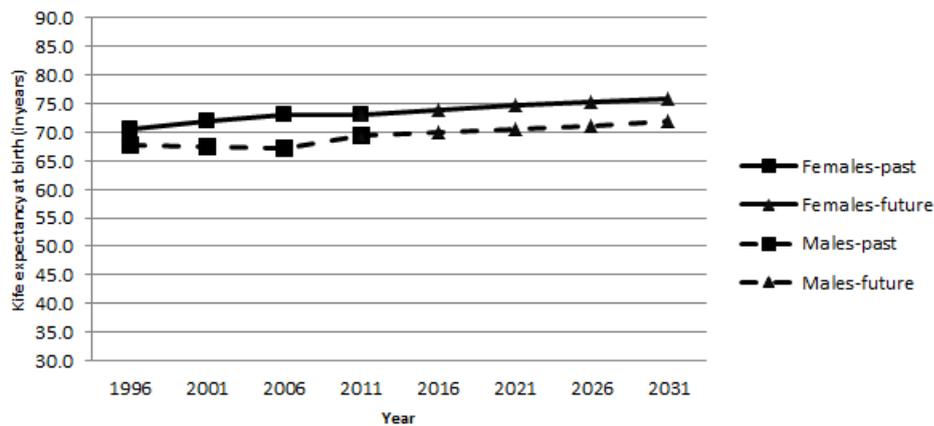
Figure 58: Estimated past levels of fertility and future fertility assumptions for projections, Tonga: 1971–2031



6.3.4 Mortality assumptions

Tonga's population has high incidence of Non-Communicable Diseases (NCD) which played a part in constraining improvement in life expectancy over the past two decades. Given prevailing morbidity and mortality conditions in Tonga, life expectancy is unlikely to increase sharply over the projection period. In light of this, the best assumption is a very-slow change scenario between 2011 and 2031. Using the United Nations' 'very-slow pace' model for mortality improvement, life expectancy values for males gradually improve from 69.3 to 71.8 years by 2031, and for females from 73.1 to 75.9 years by 2031 (Fig. 59). These very-slow pace increases are considered most prudent, because they provide the closest match of all UN models to improvements in life expectancy experienced between 1996 to 2011.

Figure 59: Past and future estimated life expectancies: Tonga 1996–2031



6.3.5 Migration assumptions

A net migration rate of -1970 persons per annum for the 2006 to 2011 intercensal period was established using the balancing equation (Chapter 3). Hence, the following three assumptions are used for the Tonga population projections:

Assumption 1 – Net migration will be held at zero (counts of immigrants equal counts of emigrants). This scenario is presented for comparative purposes, to provide a benchmark against which impacts of different migration scenarios on population growth can be assessed.

Assumption 2 – Net migration is assumed to be constant at -1970 persons per year until 2021 and gradually decrease from -1970 to reach -985 persons per year by 2031.

Assumption 3 – Net migration is assumed to be constant at -1970 persons per year throughout the projection period.

6.4 Projections scenarios

Nine population projection scenarios were prepared, each with a different combination of assumptions of future fertility, mortality and migration (Table 39).

Table 39: Summary of prepared population projection scenarios, Tonga: 2011 to 2031

Projection scenarios	Fertility (TFR in 2031)	Mortality (2011 - 2031)	Migration (2011 - 2031)
Scenario 1	No decline from current TFR (3.9)	71.8 years for males and 75.9 years for females by 2031	Zero net migration (immigrants equal emigrants)
Scenario 2	No decline from current TFR (3.9)	71.8 years for males and 75.9 years for females by 2031	Net migration: -1970 (until 2021); -1970 slowly declining to -985 (2022 to 2031)
Scenario 3	No decline from current TFR (3.9)	71.8 years for males and 75.9 years for females by 2031	Net migration: -1970 (2011-2031)
Scenario 4	Constant decline in TFR to 3.4 by 2031	71.8 years for males and 75.9 years for females by 2031	Zero net migration (immigrants equal emigrants)
Scenario 5	Constant decline in TFR to 3.4 by 2031	71.8 years for males and 75.9 years for females by 2031	Net migration: -1970 (until 2021); -1970 slowly declining to -985 (2022 to 2031)
Scenario 6	Constant decline in TFR to 3.4 by 2031	71.8 years for males and 75.9 years for females by 2031	Net migration: -1970 (2011-2031)
Scenario 7	Fast TFR decline in TFR to 2.8 by 2031	71.8 years for males and 75.9 years for females by 2031	Zero net migration (immigrants equal emigrants)
Scenario 8	Fast TFR decline in TFR to 2.8 by 2031	71.8 years for males and 75.9 years for females by 2031	Net migration: -1970 (until 2021); -1970 slowly declining to -985 (2022 to 2031)
Scenario 9	Fast TFR decline in TFR to 2.8 by 2031	71.8 years for males and 75.9 years for females by 2031	Net migration: -1970 (2011-2031)

6.5 Projections results

Table 40 summarises nine population projection scenario outcomes for Tonga. In Scenario 1 the population of Tonga would increase most, reaching 162 thousand by 2031. By contrast, under Scenario 9, the Tongan population is projected to decline to 98 thousand by 2031.

Table 40: Summary of population projection scenarios (in '000s), Tonga: 2011 to 2031

	2011	2013	2016	2021	2026	2031
Scenario 1	103.1	107.6	114.9	128.8	144.7	162.3
Scenario 2	103.1	103.4	103.7	103.8	105.4	110.6
Scenario 3	103.1	103.4	103.7	103.8	103.7	104.1
Scenario 4	103.1	107.6	114.8	128.0	142.8	158.5
Scenario 5	103.1	103.3	103.6	103.3	104.3	108.5
Scenario 6	103.1	103.4	103.6	103.3	102.7	102.2
Scenario 7	103.1	107.6	114.6	126.9	139.9	152.3
Scenario 8	103.1	103.4	103.6	103.0	103.7	107.4
Scenario 9	103.1	103.4	103.4	102.3	100.3	97.8

In order to measure the impact of change in fertility on Tonga's future population, three scenarios (1, 4 and 7), including migration assumption 1 (zero net migration) are examined. Thereafter, the impact of migration is measured by comparing Scenarios 1, 2 and 3, which combine all three migration assumptions with fertility assumption 1 (constant TFR of 3.9).

6.5.1 The impact of fertility

The three different fertility assumptions combined with zero net migration resulted in three different projections outcomes (Table 41 and Fig. 60). These different projections highlight the impact of different levels of fertility on the future size of the Tongan population. The higher the assumed fertility level, the higher the population outcome.

Table 41: Projected populations (in '000s) based on three fertility scenarios and zero net migration, Tonga: 2011 to 2031

	Projection scenarios ¹	2011	2013	2016	2021	2026	2031
Fertility assumptions							
No decline from current TFR (3.9)	(Scenario 1)	103.1	107.6	114.9	128.8	144.7	162.3
Constant decline in TFR to 3.4 by 2031	(Scenario 4)	103.1	107.6	114.8	128.0	142.8	158.5
Fast TFR decline in TFR to 2.8 by 2031	(Scenario 7)	103.1	107.6	114.6	126.9	139.9	152.3

¹ All scenarios based on zero net migration from 2011 to 2031.

The three population projection outcomes are as follows.

Scenario 1: Assuming that the current level of fertility of 3.9 births per woman continues for the entire projection period, a population of 129 thousand would result by 2021 and 162 thousand by 2031.

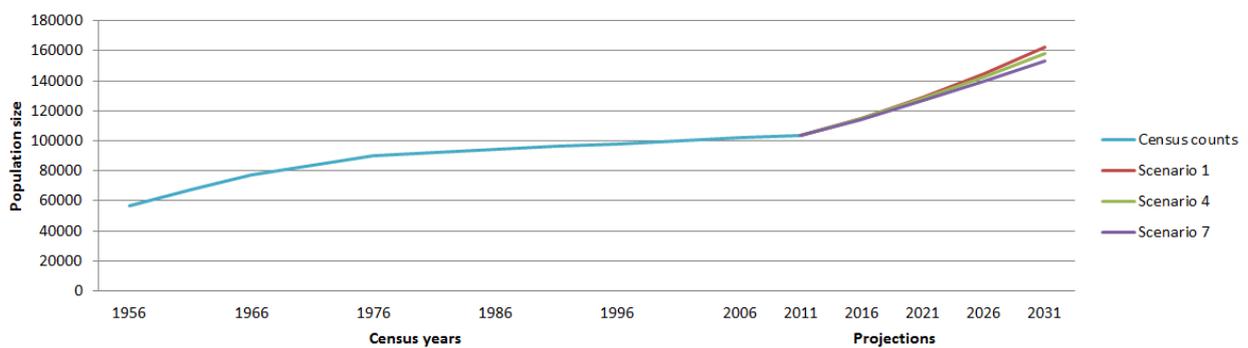
Scenario 4: Applying a constant decline in TFR births per woman to 3.4 by 2031 results in a population of 128 thousand by 2021 and 158 thousand by 2031.

Scenario 7: Applying a fast TFR decline to 2.8 births per woman by 2031 results in a population of 127 thousand by 2021 and 152 thousand by 2031.

Scenario 1 (162 thousand people by 2031) results in ten thousand more people in the Tongan population by 2031 as compared to Scenario 7 (152 thousand people by 2031).

Figure 60 shows that in the past, the rate of population increase was higher before 1976 and very low after 1976. Figure 60 shows the future impact of different fertility scenarios by removing the effect of migration (zero net migration). The rate of increase in Scenario 7, where fertility rates fall to 2.8 births per woman by 2031 provides the closest match to pre-1976 rates of growth because of zero net migration. By contrast, the no change in current TFR of 3.9 projection scenario and the constant TFR decline to 3.4 by 2031 projection scenario would constitute additional increases in population growth rates because fertility is higher than in Scenario 7. This exercise demonstrates that without migration, even if fertility declines by one child per woman over the next 20 years, the population will increase by about 48% on its current level.

Figure 60: Past and future population trends based on three fertility assumptions and zero net migration, Tonga: 1956–2031



6.5.2 The impact of migration

The three different migration assumptions combined with constant fertility resulted in three different projections (Table 42 and Fig. 61). Emigration limits population growth and so, these different projections highlight the impact of different levels of migration on the future size of the Tongan population.

Table 42: Projected populations (in '000s) based on TFR of 3.9 births per woman and three net migration assumptions, Tonga: 2011 to 2031

	Projection scenarios ¹	2011	2013	2016	2021	2026	2031
Migration assumptions							
Net migration: Zero	(Scenario 1)	103.1	107.6	114.9	128.8	144.7	162.3
Net migration: -1970 (until 2021); -1970 slowly declining to -985 (2022 to 2031)	(Scenario 2)	103.1	103.4	103.7	103.8	105.4	110.6
Net migration: -1970 (2011-2031)	(Scenario 3)	103.1	103.4	103.7	103.8	103.7	104.1

¹ All scenarios based on TFR of 3.9 from 2011 to 2031.

The three population projection scenarios are as follows:

Zero net migration (Scenario 1). Assuming that immigration and emigration are balanced at zero during the entire projection period, a population of 129 thousand would occur by 2021 and 162 thousand by 2031.

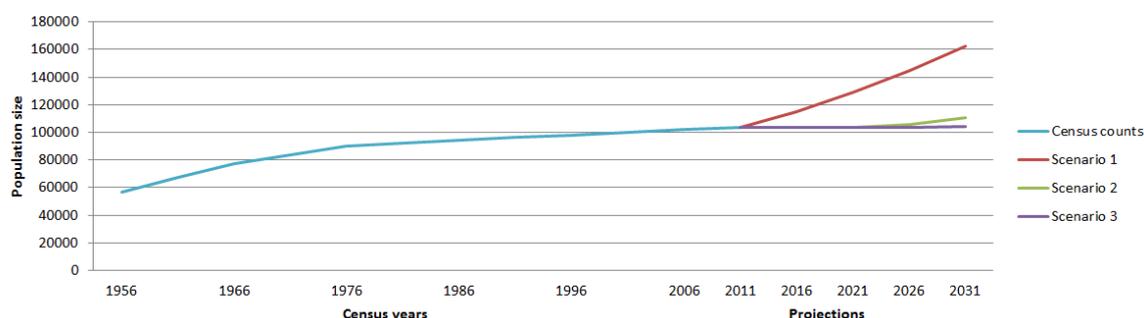
Medium migration (Scenario 2). Applying constant net migration of -1970 persons per year until 2021 and gradually decreasing migration to -985 persons per year by the end of the 20 year projection period results in no population growth by 2021, followed by an increase of nearly seven thousand people to over 110 thousand by 2031.

High migration (Scenario 3). Applying constant net migration of -1970 persons per year until 2031 results in population growth of only one thousand people by the end of the 20 year projection period.

Scenario 1 (162 thousand people by 2031) results in 58 thousand more people in the Tongan population by 2031 as compared to Scenario 3 (104 thousand people by 2031).

Figure 61 presents, past and future population trends produced from census data and the three projection scenarios (Scenarios 1, 2 and 3) based on different migration assumptions and no decline in TFR from its present level of 3.9 births per woman. Figure 61 shows that with zero net migration and fertility of 3.9 births per woman over the 2011 to 2031 period, the rate of population growth is far higher with no loss of population through migration than for the other two migration scenarios. Indeed, the average annual growth rate for the zero net migration scenario would be 2.3% as opposed to 0.04% for Scenario 3, where emigration is constant at -1970 persons per year.

Figure 61: Past and future population trends based on constant TFR of 3.9 births per woman and three net migration assumptions: Tonga: 2011–2031



It can be concluded from Tables 41 and 42 and Figures 60 and 61 that were the levels of emigration and fertility experienced in the recent past to be maintained, the population would grow only very slowly, because out-migration offsets the effect on population growth of fertility rates well above the level of replacement (about two children per woman). However, it needs to be considered that levels of fertility are likely to decline in future, as they have in the past and that levels of migration are also subject to change.

6.6 Most likely outcome (Projection Scenario 5)

The ability of a projection scenario to accurately determine probable future population size and structure becomes more tenuous the further into the future the projection goes. Therefore, several projection scenarios need to be produced to allow demographers and planners to choose an outcome that seems most plausible and suited to planning strategies. Projection Scenario 5 constitutes the most likely outcome for Tonga.

Population changes aligned with those presented in Scenario 5 appears to be the most likely outcome because:

- The current fertility level of 3.9 births per woman is expected to decline as it has in Tonga's recent past, and based on historical worldwide observations of countries with similar fertility rates in the past. A slow decline in TFR, reaching a TFR of 3.0 births per woman by 2051 is probable, based on the past trend in fertility decline that has been achieved. A fast TFR decline to 2.0 births per woman by 2051 seems to be overly optimistic for Tonga.
- Although future migration patterns and levels are impossible to predict, net migration of -1970 people per year until 2021 and thereafter, declining gradually to reach -985 people per year by 2031 appears to be the most realistic assumption for Tonga. This is because net migration rates have been estimated at -1800 people per year for the period 1996–2006 and at -1970 people per year for the period 2006–2011. It is logical to assume that since this magnitude of outmigration has been sustained for 15 years, this trend is likely to continue for at least another ten years (to 2021). However, Scenario 6 demonstrates that population decline would result even if fertility declined at a constant rate as experienced in the recent past because of sustained longterm out-migration of -1970 persons per year until 2031. Such high levels of migration are not without their costs in terms of skills shortages and ageing of the population structure. Therefore, in the longer term it is logical to assume that demand for skilled labour in Tonga would drive down migration rates. Reaching a net migration rate of -985 people per annum by 2031 is, therefore, a plausible outcome.

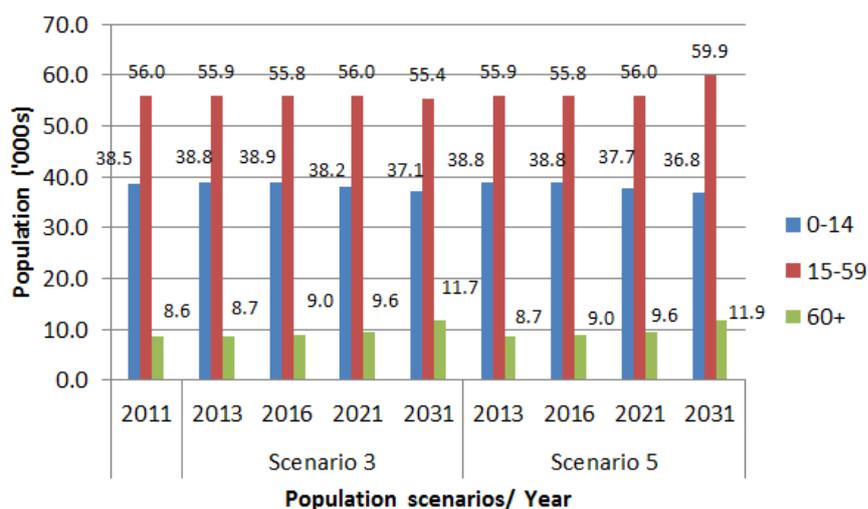
In the following analysis, the most likely population projection scenario (Scenario 5) is compared to Scenario 3, which represents sustained experience of current conditions: a TFR of 3.9 births per woman and a net migration rate of -1970 persons per annum. Table 43 presents future population indicators from these two scenarios.

As shown in Table 43, in the most likely scenario (Scenario 5), the population would increase to 108 thousand people by 2031. Scenario 5 results in about 4,400 more people in the Tongan population in 2031 as compared to experience of currently prevailing fertility and migration circumstances into the future, under Scenario 3.

Table 43: Population indicators, Projection Scenarios 3 & 5, Tonga: 2011 to 2031

Population indicators	2011	Scenario 3				Scenario 5			
		2013	2016	2021	2031	2013	2016	2021	2031
Population ('000s)	103.1	103.4	103.7	103.8	104.1	103.4	103.6	103.3	108.5
Population by broad age groups (%)									
0-14 years	37.3	37.6	37.5	36.8	35.6	37.5	37.4	36.5	33.9
15-59 years	54.3	54.0	53.8	54.0	53.2	54.0	53.9	54.2	55.2
60 years and over	8.3	8.4	8.7	9.2	11.2	8.4	8.7	9.3	10.9
Deoendency ratio	84.1	85.1	85.8	85.2	88.1	85.1	85.6	84.4	81.2
Median age	21.3	21.0	20.8	20.9	21.5	21.0	20.8	21.0	22.4
Crude Birth Rate (per 1000 population)	28	27	26	25	27	27	26	25	26
Crude Death Rate (per 1000 population)	7	7	7	7	7	7	6	6	6
Average annual growth rate (%)	0.2	0.2	0.1	0.0	0.0	0.2	0.1	-0.1	0.5

Figure 62: Projected populations by age group, Scenarios 3 & 5, Tonga: 2011 to 2031



In Scenario 5, the proportion of the population aged 0–14 years (as part of the total population) would decline by 3.4% (about 1,700 people) by 2031 as a result of fertility decline to 3.4 births per woman (Table 43 and Fig. 62). By contrast, in Scenario 3, with a constant fertility rate of 3.9 births per woman, the proportion of the population aged 0–14 years would decline by 1.7% (about 1,400 people). In the latter case, even though fertility remained constant, the decline would occur because of outmigration of some 0–14 year old children.

The proportion of the population of working age (15–59 years) would increase by around 1% to 55% by 2031 under Scenario 5, but would fall to around 53% under Scenario 3 (Table 43). The size of the working age population would increase under Scenario 5 and decline under Scenario 3 (Fig. 62). In Scenario 5, there would be around 60 thousand by 2031. In Scenario 3, the population of working age would decline to around 55 thousand by 2031.

The proportion of the population aged 60 years and over would increase by around 3% under Scenario 3 and 2.6% under Scenario 5 (Table 43). Similarly, the size of the population aged 60 years and older would increase under both scenarios, reaching almost 12 thousand people by 2031 in Scenario 5 (Fig. 62).

The median age would increase by just over one year, from 21.3 years in 2011 to 22.4 years by 2031 under Scenario 5, due to lower fertility rates and increasing life expectancy (Table 43).

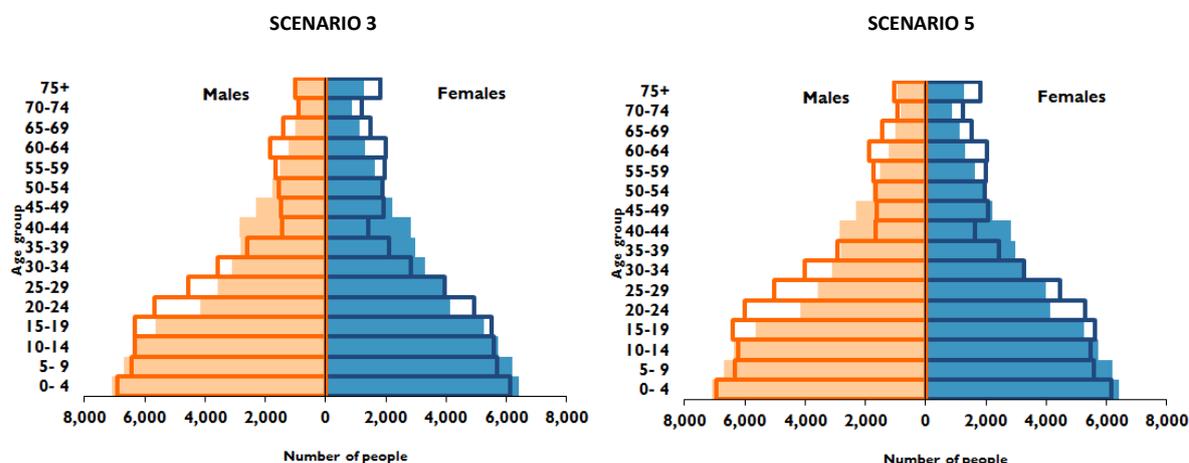
The two scenarios have different trends of change in age dependency ratios (Table 43): Scenario 5, the most likely scenario, has a volatile dependency ratio (due to declining future fertility and changing levels of out-migration). Overall, the dependency ratio would decline under Scenario 5, from 84 in 2011 to 81 by 2031. By contrast, Scenario 3 has constant high fertility and out migration, so that the dependency ratio would increase to 88 by 2031. Youth dependency would place greater demands on a proportionately smaller working age population under Scenario 3, whereas under the most likely scenario (Scenario 5), a proportionately larger working age population would support a smaller dependent population in the future.

In the most likely scenario (Scenario 5), the projected crude birth rate (Table 43) would decline from 28 births per 1,000 population (reported in 2011) to 26 births per 1,000 population by 2031. This is a result of declining fertility rates. The crude death rate would decline slightly to around 6 deaths per 1,000 population by 2031 as a result of increases in life expectancy.

Tonga's average annual population growth rate would be very low, though volatile under Scenario 5. Overall, under Scenario 5 the growth rate would increase from 0.2% in 2011 to 0.5% by 2031 (Table 43). Low growth rates are more manageable for government planners aiming to house, educate, feed and provide employment, health care facilities and other services for their population.

The different impacts on the population size and structure are further illustrated using population pyramids (Fig. 63). The shaded areas represent the enumerated 2011 population size by sex and five-year age group, and the outlined areas represent the estimated (projected) population size in 2031. Scenario 3 is presented on the left and Scenario 5 (the most likely scenario) is presented on the right of Figure 63.

Figure 63: Tonga Population pyramids, Scenarios 3 & 5: 2011 (shaded) and 2031 (outlined)



The different shape of the two pyramids shows the difference in the population size and structure by 2031. Declining fertility (Scenario 5) results in a smaller population in younger age groups as compared to constant fertility (Scenario 3). In addition, the impact of emigration on the future population size and structure of both population scenarios can be clearly seen by comparing the working age populations of both pyramids. Constant, high out-migration of almost 200 people per year results in a smaller working aged population (Scenario 3) than the reducing migration rates after 2021 factored into Scenario 5. There is little discernible difference in the populations aged 60 years and older because these age groups are not actively involved in migration.

7 POLICY IMPLICATIONS

7.1 The census and policy formulation

The information in this report provides policy-makers, planners, political parties and community leaders with current, high-quality information on population structure, population processes, and household and socioeconomic characteristics in order to plan for a sustainable future.

Effective policy-making should provide the framework for sustainable development within which the interrelationship of population, environment, and all possible socio-economic aspects of a country can prosper cohesively.

This chapter provides a synopsis of the information contained in the other chapters of the report and considers their policy implications.

7.2 Fertility

Tonga's annual population growth of 0.2%, 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 rates. The average number of children per woman (TFR) dropped marginally from 4.3 to 4.2 during the ten-year period from 1996 to 2006 and decreased to 3.9 children per woman by 2011.

Fertility levels remain high. 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.

7.3 Mortality

Estimates on the level of mortality presented in this analysis suggest that infant mortality rates declined by two deaths per 1000 births and life expectancy at birth improved by two years for males and 0.1 years for females during the period 2006–2011. The advantage in life expectancy of females over males declined by 1.9 years (from 5.7 years to 3.8 years) during the period 2006 to 2011.

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;
- 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;
- discourage smoking and excessive alcohol consumption; and
- prevent HIV/AIDS and STDs.

7.4 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 maintained that records the number of deaths by age and sex, and the number of births by sex and by age of mother. Effective coordination between all agencies involved is required.

Accurate birth and death registration data is required to maintain an understanding of changes in Tonga's population size and structure between censuses. Such information is crucial for inter-censal policy planning purposes and to develop meaningful population projections.

7.5 Internal migration

Levels of out migration from the outer Islands were slightly higher in the 2001 to 2006 intercensal period (-1193 net migrants) than were experienced during the 2006 to 2011 intercensal period (-1125 net migrants). However, almost every district in the divisions of 'Eua, Vava'u, Ha'apai, and Ongo Niua have shown negative population growth rates (i.e. a population decline) during the 2006 to 2011 intercensal period, which points to a possible sustained dissatisfaction with living conditions there relative to those in Tongatapu. The reasons may include the lack of post-secondary education opportunities (for tertiary or vocational/technical qualifications) and the lack of employment options. Nuku'alofa attracts people by offering higher living standards through the availability and accessibility of services such as medical and educational institutions, entertainment facilities, and a wider range of employment opportunities.

If the government wishes to change this continued trend of population decline outwith Tongatapu, at least some of the perceived disadvantages of living in the outer islands need to be eased by improving services and opportunities there.

7.6 International migration

The Ministry of Foreign Affairs and Immigration collects international migration information on arrival and departure cards. These data show large annual variations across the 2006 to 2011 period, but on average correspond closely with net migration estimated by comparing intercensal population growth with estimated rates of natural increase for the same time period.

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 analyses are needed of information on age, sex and nationality of all arriving and departing passengers in Tonga.

Tonga's 2006 to 2011 intercensal estimates of net migration are -19 migrants per 1000 population. This translates into a net loss of about 1,970 people annually. These relatively high rates of (negative) migration offset to a large extent the otherwise high natural growth rate of Tonga's population. The fact that many people are leaving Tonga points to 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.

7.7 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 nine population projection scenarios presented in this paper demonstrate the different effects on future population size and structure over a 20 year period (2011 to 2031). A range of fertility and migration scenarios were considered: constant or declining fertility with constant net out-migration, declining net out-migration or zero net migration.

The most likely scenario is for fertility to decline to 3.4 births per woman by 2031 (given past trends of fertility decline) and for migration to remain constant at -1970 people per year until 2021 and then

decline from -1970 to -985 people per year by 2031. This scenario results in a stable population until 2021 followed by slow growth to 108,500 people by 2031 in response to declining net out-migration rates.

As a result of declining fertility rates, the proportion of those under the age of 15 years would decline by more than 3%. Emigrants are predominately of working age (15–59 years of age) and consequently, under the most likely future population scenario, the working age population is not expected to increase until the pace of outmigration declines (after 2021). As a result of increasing life expectancy, the proportion of the population aged 60 and older will increase from 8% of the total population to 11% by 2031.

Strategies must be developed to entice current residents to remain in Tonga, otherwise future reductions in fertility will lead to the unwelcome prospect of population decline alongside increasing proportions of elderly dependents in the population structure. Appropriate health and social welfare programs must be in place to cope with the needs of an ageing population. Additional pressure would be placed on these resources by Tongans who had previously emigrated to other countries returning to Tonga to retire, which is a common feature of international migration behaviour.

7.8 Households

It is not just population growth that contributes to an increased demand for water and energy supply, waste disposal, sewage connections and general infrastructure, but an increase in the number of households. Almost 850 new households were formed in Tongatapu between 2006 and 2011. The largest increases were in Kolofu'ua (300 households) and Nukunuku (215 households). 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, such as single person households, single-parent households and households made up of unrelated individuals.

7.9 Education

The population's educational level is a key indicator of the 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 and mortality: 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.

With over 90% of all Tongans achieving secondary and tertiary education compared to about 80% in 2006 and only 57% in 1986, these data illustrate almost a quarter of a century of consistent and solid improvement in educational attainment. Compared with 2006, when men had slightly higher educational attainment than women, gender parity had been achieved by 2011.

Since higher proportions of school-leavers have secondary education (and post-secondary qualifications), this has positive implications for Tonga's labour market for both the private and public sectors. Moreover, whilst it is a benefit that young people leave the country to attend higher educational institutions, it is in Tonga's interest that suitable employment opportunities are available so that some graduates have the opportunity to return to Tonga to work. Policy must ensure that employment opportunities are generated both in Tongatapu and the outer islands for an increasingly qualified youth.

7.10 Economic activity and the 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 percent) of the Tonga population aged 15 and older was economically active (in the labour force), only a relatively small proportion (37 percent) 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 employed person supports, on average, about 3.5 other people.

Government and business officials are encouraged to collaborate in developing innovative strategies that will promote economic diversification and growth which could increase employment opportunities for Tongan people.

7.11 The environment

Because natural resources of the land and sea form the basis of a healthy life for Tonga's communities and people, maintaining a healthy and sustainable living environment should be a top priority for the Government of Tonga.

Due to high rates of out-migration, the population of Tonga is growing at only 0.2% per annum. However, the distribution of the population is changing, with growth rates in Tongatapu of 0.9%, 1.5% in Kolomotu'a and 2.5% in Nukunuku.

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.

Between the 2006 and 2011 censuses, reliance on collected firewood as a cooking fuel has increased (40 percent of households collected firewood for cooking in 2006 compared with 45 percent of households in 2011), while use of gas has declined in all divisions of Tonga (54 percent of households used gas for cooking in 2006 compared with 50 percent of households in 2011). The shift towards firewood as a cooking fuel may be attributable to the increasing burden of the cost of gas on household expenditures. In a country with a small environmental resource base, this is a concern for future sustainability of tree cover and return of nutrients to the soil through decomposition of wood and leaves.

Significant changes in waste handling have occurred in Tongatapu between the 2006 and 2011 censuses, with the 45% of households utilising commercial collection as compared to 5% using collection services in 2006. Waste can be a resource, rather than an environmental hazard, particularly through recycling. Therefore, a shift towards professional waste handling is a positive development in environmental terms over burning of waste, which was practiced by 80% of households in Tongatapu in 2006. However, there is still room for improvement in waste management across Tonga, with between 86% and 96% of households in the outer islands continuing to dispose of waste through burning in 2011.

Whilst the lifestyles of Tonga's population may present an environmental threat, the environment may also pose a hazard to Tonga's population. One example of this is evident in differences between the 2006 and 2011 censuses in Ongo Niua following the 2009 Tsunami, where the percentage of households living in dwellings with walls (re)-constructed of wood has increased and the percentage of households living in dwellings with piped water supplies has decreased. In light of the effects of climate change, it is worth noting that such environmental risks to the Tongan population are likely to increase in the future.

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	Approximation of average age at marriage, based on the proportion of population never married (single)
Balance equation	Population growth = births – deaths + net migration
Child mortality rate (4q1)	The probability of dying between age 1 and age 5
Crude birth rate (CBR)	Estimated number of births per 1,000 population
Crude death rate (CDR)	Estimated number of deaths per 1,000 population
Crude net migration rate	Rate of growth minus rate of natural increase
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 (work for pay, produce goods for sale or own consumption, and subsistence work) and unemployed (excludes those not seeking or available for 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 X 100
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 2006–2011 $\ln(\text{TotPop}2011/\text{TotPop}2006)/5 \times 100$
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 Kolofou, Ma'ufanga and Kolomotu'a villages

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 2006											
Fertility pattern by age of woman at enumeration											
Age Group of Woman	Children Ever Born	Age Specific Fertility Pattern (A.S.F.P.)	Fertility Consistent with C.E.B. (A.S.F.R.)	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		
						A.S.F.R.	Fertility Pattern by Age at Birth		20 - 25	25 - 30	30 - 35
November 2006 to November 2007											
				Recorded	Calculated						
15 - 20	0.030	0.016	0.028	0.016	0.021	0.028	0.021	1.331	0.025	0.026	0.025
20 - 25	0.435	0.124	0.157	0.124	0.135	0.185	0.156	1.188	0.160	0.161	0.161
25 - 30	1.418	0.188	0.230	0.188	0.192	0.416	0.348	1.196	0.228	0.229	0.228
30 - 35	2.597	0.197	0.207	0.197	0.195	0.623	0.543	1.148	0.232	0.233	0.232
35 - 40	3.640	0.154	0.124	0.154	0.146	0.747	0.689	1.084	0.173	0.174	0.174
40 - 45	4.228	0.055	0.061	0.055	0.048	0.808	0.737	1.095	0.058	0.058	0.058
45 - 50	4.433	0.014	0.022	0.014	0.011	0.830	0.748	1.110	0.013	0.013	0.013
Total Fertility Rate:			4.1		3.7				4.4	4.5	4.5
First Enumeration: Nov 2011											
Fertility pattern by age of woman at enumeration											
Age Group of Woman	Children Ever Born	Age Specific Fertility Pattern (A.S.F.P.)	Fertility Consistent with C.E.B. (A.S.F.R.)	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		
						A.S.F.R.	Fertility Pattern by Age at Birth		20 - 25	25 - 30	30 - 35
November 2010 to November 2011											
				Recorded	Calculated						
15 - 20	0.034	0.021	0.031	0.021	0.027	0.031	0.027	1.127	0.031	0.029	0.030
20 - 25	0.475	0.134	0.163	0.134	0.147	0.194	0.174	1.115	0.164	0.156	0.160
25 - 30	1.460	0.213	0.219	0.213	0.214	0.414	0.389	1.064	0.239	0.228	0.234
30 - 35	2.497	0.177	0.179	0.177	0.171	0.593	0.560	1.059	0.191	0.182	0.187
35 - 40	3.404	0.123	0.118	0.123	0.116	0.711	0.676	1.052	0.130	0.124	0.127
40 - 45	4.085	0.049	0.069	0.049	0.043	0.781	0.719	1.085	0.048	0.045	0.047
45 - 50	4.453	0.008	0.025	0.008	0.006	0.806	0.725	1.112	0.007	0.006	0.006
Total Fertility Rate:			4.0		3.6				4.0	3.9	3.9

* = MORTPAK 4.1, 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
2006 Census									
ASFR corrected for one-half year between birth and reporting.									
15-19	0.029	0.029	0.021	0.021	1.343	0.025	0.025	0.025	0.024
20-24	0.157	0.186	0.135	0.156	1.188	0.161	0.161	0.158	0.155
25-29	0.231	0.416	0.192	0.348	1.195	0.229	0.229	0.225	0.220
30-34	0.207	0.623	0.195	0.543	1.148	0.232	0.233	0.228	0.224
35-39	0.124	0.747	0.146	0.689	1.084	0.174	0.174	0.171	0.167
40-44	0.051	0.797	0.049	0.737	1.081	0.058	0.058	0.057	0.056
45-49	0.014	0.811	0.011	0.748	1.084	0.013	0.013	0.012	0.012
TFR	4.1		3.7			4.5	4.5	4.4	4.3
Mean age at childbearing			30.8						
2011 Census									
ASFR corrected for one-half year between birth and reporting.									
15-19	0.031	0.031	0.027	0.027	1.168	0.029	0.028	0.028	0.028
20-24	0.163	0.195	0.147	0.174	1.121	0.161	0.157	0.156	0.156
25-29	0.219	0.414	0.215	0.388	1.067	0.235	0.229	0.228	0.227
30-34	0.179	0.593	0.172	0.560	1.059	0.189	0.184	0.183	0.182
35-39	0.118	0.712	0.117	0.677	1.051	0.128	0.124	0.124	0.123
40-44	0.067	0.779	0.042	0.719	1.082	0.046	0.045	0.045	0.045
45-49	0.022	0.801	0.006	0.725	1.105	0.006	0.006	0.006	0.006
TFR	4.0		3.6			4.0	3.9	3.9	3.8
Mean age at childbearing			29.9						

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

Appendix 3: Child mortality indices based on number of children ever born and still alive, for males*, Tonga: 2011

Age Group of women	Reference Date	United Nations Models					Reference Date	Coale-Demeny Model			
		(Palloni-Heligman Equations)						(Trussell Equations)			
		Latin Am.	Chilean	So. Asian	Far East	General		West	North	East	South
Infant mortality rate											
15 - 20	Oct 2010	< .028	< .031	< .032	< .015	< .024	Jan 2011	< .013	< .017	< .016	< .036
20 - 25	Nov 2009	< .028	< .031	< .032	< .015	< .024	Jan 2010	0.015	< .017	< .016	< .036
25 - 30	Sep 2008	< .028	< .031	< .032	0.022	< .024	Aug 2008	0.022	0.021	0.023	< .036
30 - 35	Dec 2006	< .028	< .031	< .032	0.019	< .024	Sep 2006	0.02	0.019	0.021	< .036
35 - 40	Oct 2004	< .028	< .031	< .032	0.021	< .024	Jul 2004	0.021	0.02	0.023	< .036
40 - 45	Jan 2002	< .028	< .031	< .032	0.021	< .024	Jan 2002	0.021	0.02	0.023	< .036
45 - 50	Nov 1998	< .028	< .031	< .032	0.024	0.025	Dec 1998	0.023	0.021	0.026	< .036
Probability of dying between ages 1 and 5											
15 - 20	Oct 2010	< .008	< .004	< .008	< .002	< .005	Jan 2011	< .002	< .004	< .002	< .005
20 - 25	Nov 2009	< .008	< .004	< .008	< .002	< .005	Jan 2010	0.002	< .004	< .002	< .005
25 - 30	Sep 2008	< .008	< .004	< .008	0.004	< .005	Aug 2008	0.004	0.005	0.002	< .005
30 - 35	Dec 2006	< .008	< .004	< .008	0.004	< .005	Sep 2006	0.003	0.004	0.002	< .005
35 - 40	Oct 2004	< .008	< .004	< .008	0.004	< .005	Jul 2004	0.004	0.005	0.002	< .005
40 - 45	Jan 2002	< .008	< .004	< .008	0.004	< .005	Jan 2002	0.004	0.004	0.002	< .005
45 - 50	Nov 1998	< .008	< .004	< .008	0.005	0.005	Dec 1998	0.004	0.005	0.003	< .005
Child mortality											
15 - 20	Oct 2010	< .036	< .035	< .040	< .017	< .029	Jan 2011	< .015	< .021	< .018	< .041
20 - 25	Nov 2009	< .036	< .035	< .040	< .017	< .029	Jan 2010	0.017	< .021	< .018	< .041
25 - 30	Sep 2008	< .036	< .035	< .040	0.026	< .029	Aug 2008	0.026	0.026	0.025	< .041
30 - 35	Dec 2006	< .036	< .035	< .040	0.023	< .029	Sep 2006	0.023	0.023	0.023	< .041
35 - 40	Oct 2004	< .036	< .035	< .040	0.025	< .029	Jul 2004	0.025	0.025	0.025	< .041
40 - 45	Jan 2002	< .036	< .035	< .040	0.025	< .029	Jan 2002	0.025	0.024	0.025	< .041
45 - 50	Nov 1998	< .036	< .035	< .040	0.029	0.03	Dec 1998	0.027	0.026	0.029	< .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: 2011

Age Group of women	Reference Date	United Nations Models					Reference Date	Coale-Demeny Model			
		(Palloni-Heligman Equations)						(Trussell Equations)			
		Latin Am.	Chilean	So. Asian	Far East	General		West	North	East	South
Infant mortality rate											
15 - 20	Oct 2010	0.037	0.041	0.037	0.037	0.037	Jan 2011	0.041	0.04	0.041	0.039
20 - 25	Nov 2009	< .028	< .031	< .032	< .015	< .024	Jan 2010	< .013	< .017	< .016	< .036
25 - 30	Aug 2008	< .028	< .031	< .032	< .015	< .024	Jul 2008	< .013	< .017	< .016	< .036
30 - 35	Nov 2006	< .028	< .031	< .032	0.016	< .024	Aug 2006	0.016	< .017	0.017	< .036
35 - 40	Jul 2004	< .028	< .031	< .032	< .015	< .024	May 2004	< .013	< .017	< .016	< .036
40 - 45	Nov 2001	< .028	< .031	< .032	0.018	< .024	Oct 2001	0.017	< .017	0.019	< .036
45 - 50	Aug 1998	< .028	< .031	< .032	0.018	< .024	Sep 1998	0.016	< .017	0.018	< .036
Probability of dying between ages 1 and 5											
15 - 20	Oct 2010	0.012	0.005	0.011	0.01	0.01	Jan 2011	0.012	0.018	0.007	0.005
20 - 25	Nov 2009	< .008	< .004	< .008	< .002	< .005	Jan 2010	< .002	< .004	< .002	< .005
25 - 30	Aug 2008	< .008	< .004	< .008	< .002	< .005	Jul 2008	< .002	< .004	< .002	< .005
30 - 35	Nov 2006	< .008	< .004	< .008	0.003	< .005	Aug 2006	0.002	< .004	0.001	< .005
35 - 40	Jul 2004	< .008	< .004	< .008	< .002	< .005	May 2004	< .002	< .004	< .002	< .005
40 - 45	Nov 2001	< .008	< .004	< .008	0.003	< .005	Oct 2001	0.002	< .004	0.002	< .005
45 - 50	Aug 1998	< .008	< .004	< .008	0.003	< .005	Sep 1998	0.002	< .004	0.002	< .005
Child mortality											
15 - 20	Oct 2010	0.049	0.046	0.048	0.038	0.038	Jan 2011	0.053	0.022	0.048	0.044
20 - 25	Nov 2009	< .036	< .035	> .040	< .017	< .029	Jan 2010	< .015	< .021	< .018	< .041
25 - 30	Sep 2008	< .036	< .035	> .040	< .017	< .029	Aug 2008	< .015	< .021	< .018	< .041
30 - 35	Dec 2006	< .036	< .035	> .040	0.019	< .029	Sep 2006	0.018	< .021	0.018	< .041
35 - 40	Oct 2004	< .036	< .035	> .040	< .017	< .029	Jul 2004	< .015	< .021	< .018	< .041
40 - 45	Jan 2002	< .036	< .035	> .040	0.021	< .029	Jan 2002	0.019	< .021	0.021	< .041
45 - 50	Nov 1998	< .036	< .035	> .040	0.021	< .029	Dec 1998	0.018	< .021	0.02	< .041

*= using procedure CEBCS of MORTPAK 4.1

Appendix 5: Number of deaths by age and sex, Tonga: 2008–2011

Age group	Number of deaths from Ministry of Health									Number of deaths from 2011 Census		
	Dec 2007 - Nov 2008			Dec 2008 - Nov 2009			Dec 2009 - Nov 2010			Dec 2010 - Nov 2011		
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
<1	14	13	27	26	12	38	24	21	45	11	2	13
1-4	9	2	11	9	8	17	3	6	9	2	7	9
5-9	2	2	4	4	1	5	0	2	2	2	0	2
10-14	3	2	5	4	1	5	0	2	2	2	1	3
15-19	8	1	9	4	2	6	3	3	6	5	1	6
20-24	4		4	5	3	8	0	3	3	4	3	7
25-29	6	3	9	5	5	10	1	6	7	9	3	12
30-34	6	6	12	6	4	10	1	7	8	3	3	6
35-39	9	3	12	4	6	10	5	10	15	7	6	13
40-44	14	8	22	7	4	11	8	12	20	13	14	27
45-49	15	5	20	18	6	24	7	11	18	17	8	25
50-54	15	13	28	16	15	31	15	18	33	18	15	33
55-59	24	19	43	20	13	33	18	23	41	24	19	43
60-64	21	22	43	26	21	47	26	22	48	24	12	36
65-69	25	19	44	28	27	55	29	34	63	40	18	58
70-74	40	16	56	35	31	66	16	34	50	45	23	68
75-79	31	15	46	39	29	68	19	40	59	38	25	63
80+	44	56	100	74	53	127	54	53	107	52	46	98
NS	18	7	25	0	0	0	6	11	17	2	1	3
Total	308	212	520	330	241	571	235	318	553	318	207	525

Appendix 6: Estimated number of deaths by age and sex for 2011, based on 2011 Census population and calculated $m(x,n)$ – values from abridged life tables for males and females, Tonga: 2011

Age group	2011 Census population			$m(x,n)$		Number of deaths		
	Male	Female	Total	Male	Female	Male	Female	Total
0	1,444	1,299	2,743	0.0224	0.0152	32	20	52
1	5,642	5,115	10,758	0.0010	0.0005	6	3	8
5	6,672	6,203	12,875	0.0003	0.0002	2	1	3
10	6,362	5,725	12,087	0.0004	0.0003	2	1	4
15	5,676	5,293	10,969	0.0009	0.0003	5	2	7
20	4,131	4,099	8,230	0.0008	0.0005	3	2	5
25	3,576	4,015	7,591	0.0015	0.0011	5	5	10
30	3,095	3,317	6,412	0.0013	0.0016	4	5	9
35	2,784	2,972	5,756	0.0022	0.0021	6	6	12
40	2,890	2,864	5,754	0.0040	0.0036	11	10	22
45	2,368	2,214	4,583	0.0067	0.0035	16	8	24
50	1,796	1,921	3,718	0.0094	0.0083	17	16	33
55	1,522	1,637	3,159	0.0151	0.0120	23	20	43
60	1,220	1,308	2,528	0.0207	0.0151	25	20	45
65	1,010	1,133	2,143	0.0299	0.0225	30	25	56
70	836	889	1,725	0.0429	0.0309	36	27	63
75	520	608	1,128	0.0963	0.0654	50	40	90
80	434	659	1,093	0.2277	0.1726	99	114	213
Total	51,979	51,273	103,252			374	325	699

Appendix 7A: Population aged 15 years and older by labour market activity, sex and urban – rural residence, Tonga: 2011

Region/Sex	Labour Force					Not in labour force				Total
	Paid work	Subsistence work	Work unspecified	Un-employed	Total	Student	Retired, disabled, family responsibilities	Other*	Total	
Total	23,698	9,549	175	373	33,795	9,026	18,496	3,280	30,802	64,597
Urban	6,424	590	53	132	7,199	2,346	5,318	949	8,613	15,812
Rural	17,274	8,959	122	241	26,596	6,680	13,178	2,331	22,189	48,785
Males	13,977	5,612	106	192	19,887	4,403	2,729	4,718	11,850	31,737
Urban	3,862	384	25	73	4,344	1,152	835	1,464	3,451	7,795
Rural	10,115	5,228	81	119	15,543	3,251	3,792	1,356	8,399	23,942
Females	9,721	3,937	69	181	13,908	4,623	12,957	1,372	18,952	32,860
Urban	2,562	206	28	59	2,855	1,194	3,571	397	5,162	8,017
Rural	7,159	3,731	41	122	11,053	3,429	9,386	975	13,790	24,843

* “Other” includes people who did not work because:

They were not willing and available to work (234);

Of poor weather conditions or they could not afford transport (39);

They believed that no work was available (1,901);

Of reasons not specified (1,106).

Appendix 7B: Population aged 15 years and older by labour market activity, sex and urban – rural residence, Tonga: 2011 (according to an adjusted definition of unemployment)

Region/Sex	Labour Force					Not in labour force				Total
	Paid work	Subsistence work	Work unspecified	Un-employed*	Total	Student	Retired, disabled, family responsibilities	Other**	Total	
Total	23,698	9,549	175	2,313	35,735	9,026	18,496	1,340	28,862	64,597
Urban	6,424	590	53	636	7,703	2,346	5,318	445	8,109	15,812
Rural	17,274	8,959	122	1,677	28,032	6,680	13,178	895	20,753	48,785
Males	13,977	5,612	106	1,356	21,051	4,403	5,539	744	10,686	31,737
Urban	3,862	384	25	396	4,667	1,152	1,747	229	3,128	7,795
Rural	10,115	5,228	81	960	16,384	3,251	3,792	515	7,558	23,942
Females	9,721	3,937	69	957	14,684	4,623	12,957	596	18,176	32,860
Urban	2,562	206	28	240	3,036	1,194	3,571	216	4,981	8,017
Rural	7,159	3,731	41	717	11,648	3,429	9,386	380	13,195	24,843

* Unemployed include people who did not work because:

They believed that no work was available (1,901);

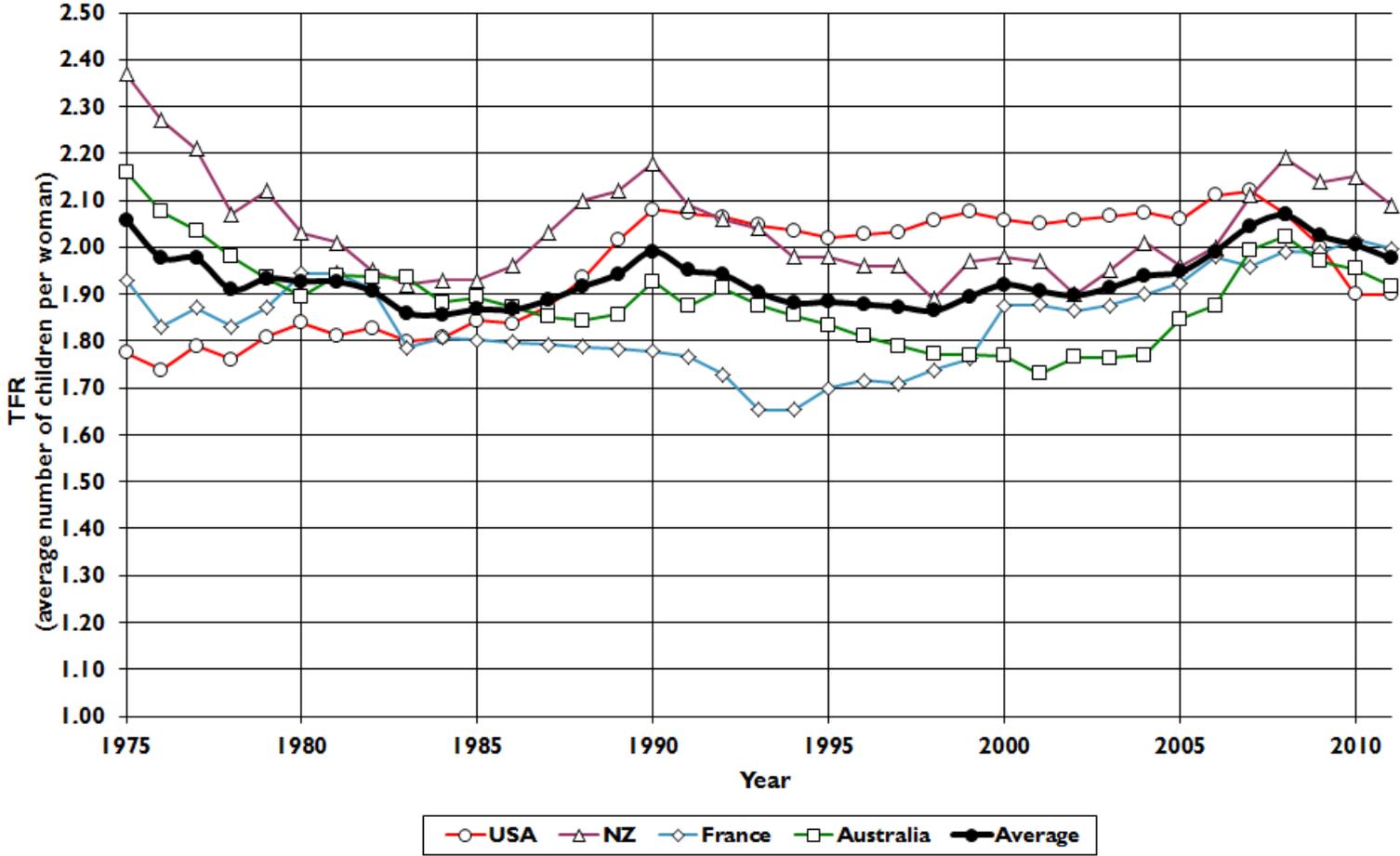
Of poor weather conditions or they could not afford transport (39).

** “Other” includes people who did not work because:

They were not willing and available to work (234);

Of reasons not specified (1,106).

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: 1975-2011



Appendix 9: Projected population size according to nine projection scenarios (combination of three different fertility and migration assumptions), Tonga: 2016, 2021 and 2031

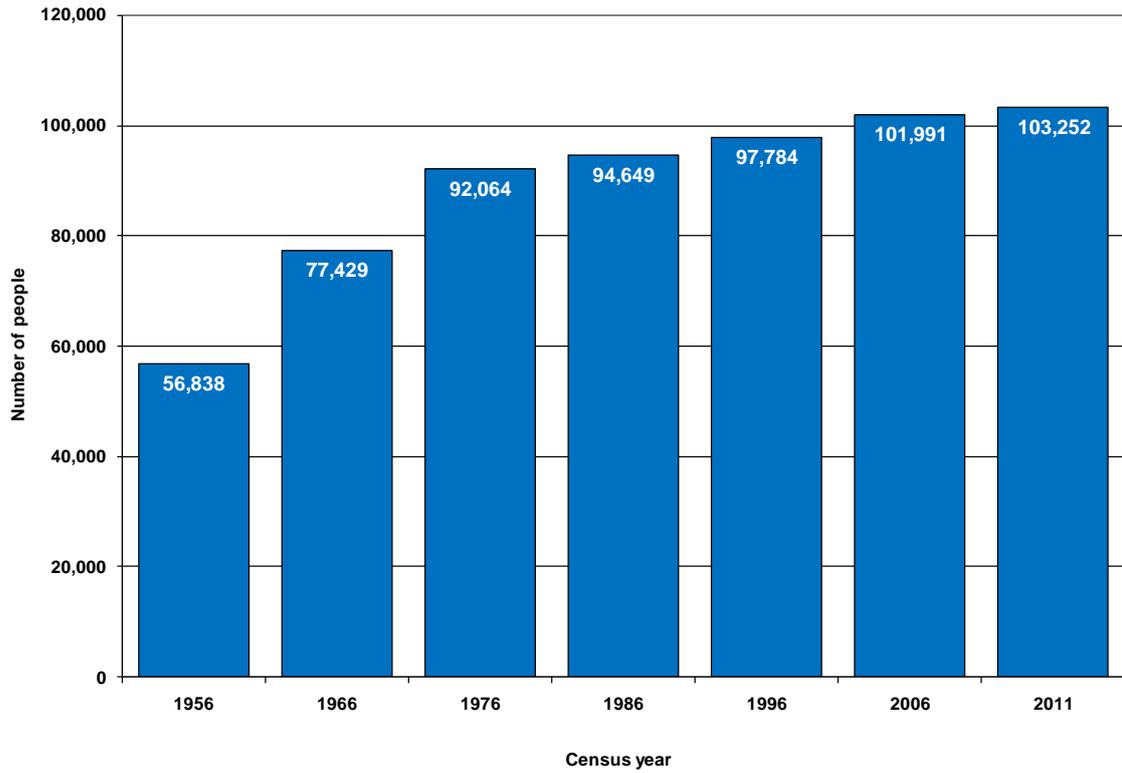
Year 2016			
Fertility assumption	Migration assumption		
(TFR from 2011 to 2031)	Zero migration	Constant (-1970 until 2021); Declining (-985 by 2031)	Constant (-1970)
No decline in TFR (3.9 → 3.9)	114.9	103.7	103.7
Constant decline in TFR (based on past trends) (3.9 → 3.4)	114.8	103.6	103.6
Fast decline in TFR (3.9 → 2.8)	114.6	103.6	103.4
Year 2021			
Fertility assumption	Migration assumption		
(TFR from 2011 to 2031)	Zero migration	Constant (-1970 until 2021); Declining (-985 by 2031)	Constant (-1970)
No decline in TFR (3.9 → 3.9)	128.8	103.8	103.8
Constant decline in TFR (based on past trends) (3.9 → 3.4)	128.0	103.3	103.3
Fast decline in TFR (3.9 → 2.8)	126.9	103.0	102.3
Year 2031			
Fertility assumption	Migration assumption		
(TFR from 2011 to 2031)	Zero migration	Constant (-1970 until 2021); Declining (-985 by 2031)	Constant (-1970)
No decline in TFR (3.9 → 3.9)	162.3	110.6	104.1
Constant decline in TFR (based on past trends) (3.9 → 3.4)	158.5	108.5	102.2
Fast decline in TFR (3.9 → 2.8)	152.3	107.4	97.8

Appendix 10: Divisions and districts summary

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

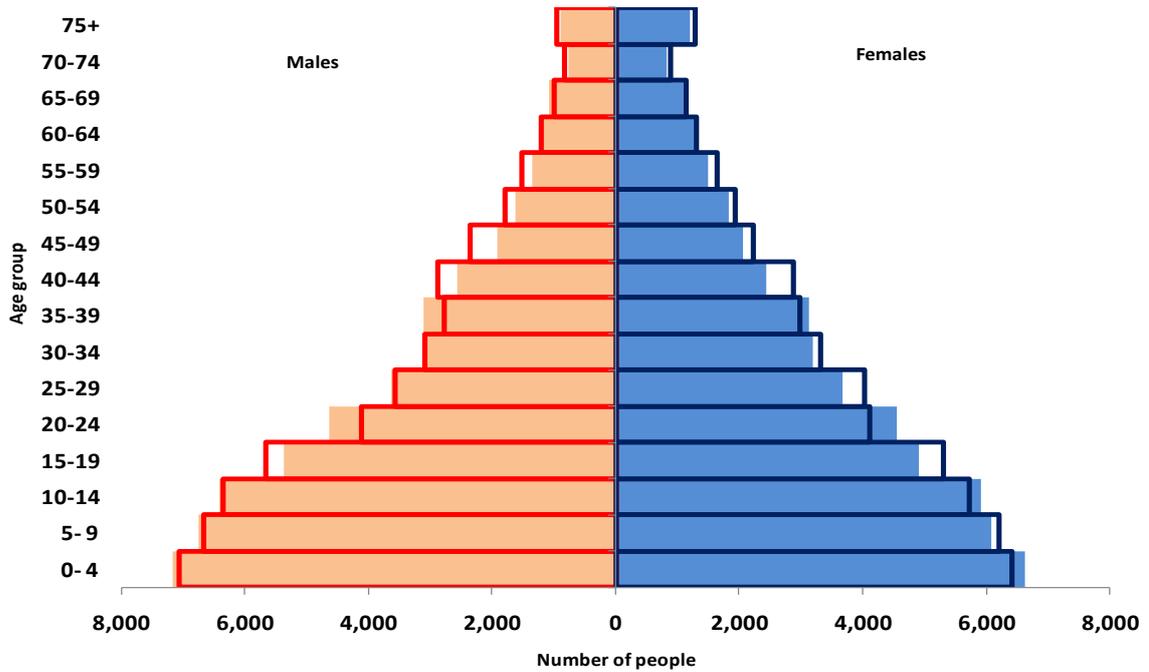
TONGA

Population trend: 1956–2011



Population pyramid by five-year age groups and sex, 2006 and 2011

2006 (shaded area), 2011 (outlined)

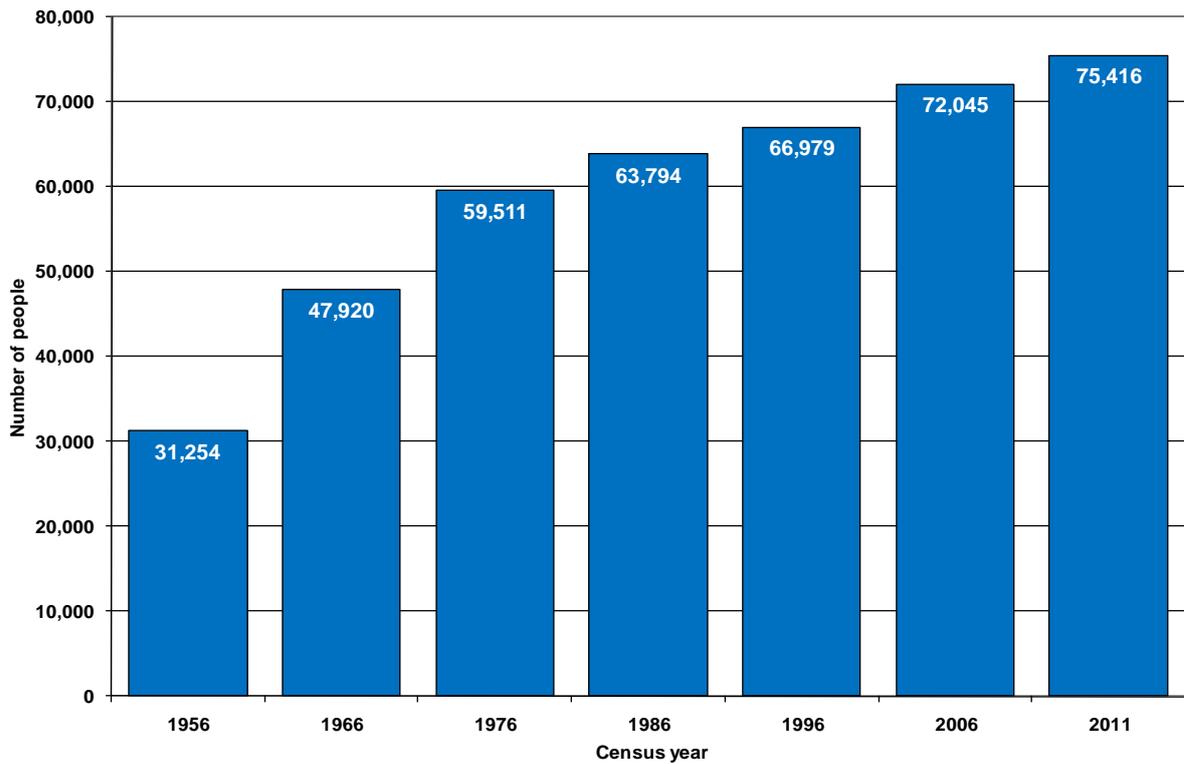


TONGA							
2006				2011*			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	7,186	6,613	13,799	0-4	7,086	6,415	13,501
5-9	6,756	6,063	12,820	5-9	6,672	6,203	12,875
10-14	6,423	5,912	12,335	10-14	6,362	5,725	12,087
15-19	5,392	4,900	10,292	15-19	5,676	5,293	10,969
20-24	4,656	4,546	9,202	20-24	4,131	4,099	8,230
25-29	3,645	3,668	7,313	25-29	3,576	4,015	7,591
30-34	3,151	3,193	6,345	30-34	3,095	3,317	6,412
35-39	3,117	3,119	6,236	35-39	2,784	2,972	5,756
40-44	2,582	2,438	5,020	40-44	2,890	2,864	5,754
45-49	1,926	2,060	3,987	45-49	2,368	2,214	4,583
50-54	1,637	1,832	3,469	50-54	1,796	1,921	3,718
55-59	1,361	1,491	2,852	55-59	1,522	1,637	3,159
60-64	1,171	1,302	2,473	60-64	1,220	1,308	2,528
65-69	1,094	1,083	2,177	65-69	1,010	1,133	2,143
70-74	778	810	1,588	70-74	836	889	1,725
75+	896	1,189	2,084	75+	954	1,267	2,221
Total	51,772	50,219	101,991	Total	51,979	51,273	103,252
Population by broad age groups (in numbers)							
0-14	20,365	18,588	38,953	0-14	20,121	18,342	38,463
15-24	10,048	9,447	19,494	15-24	9,807	9,392	19,199
25-59	17,420	17,801	35,222	25-59	18,030	18,942	36,972
25-64	18,591	19,103	37,695	25-64	19,251	20,250	39,501
60+	3,939	4,383	8,322	60+	4,021	4,597	8,618
65+	2,768	3,081	5,849	65+	2,801	3,289	6,090
Population by broad age groups (in percentages)							
0-14	39	37	38	0-14	39	36	37
15-24	19	19	19	15-24	19	18	19
25-59	34	35	35	25-59	35	37	36
25-64	36	38	37	25-64	37	39	38
60+	8	9	8	60+	8	9	8
65+	5	6	6	65+	5	6	6
Age dependency ratio							
15-59			86	15-59			84
15-64			78	15-64			76
Sex ratio (males per 100 females)							
			103				101
Median age (years)							
Total	20.1	21.8	21.0	Total	20.2	22.4	21.3
Population growth 2006-2011							
Total				Males		Females	Total
Average annual				207		1,054	1,261
Percentage difference %				21		105	252
Average annual growth rate				0.4		2.1	1.2
				0.0		0.2	0.2

* 15 persons with age-not stated were distributed proportionally by known ages in 2011. This may cause some basic tables to differ slightly from numbers shown here.

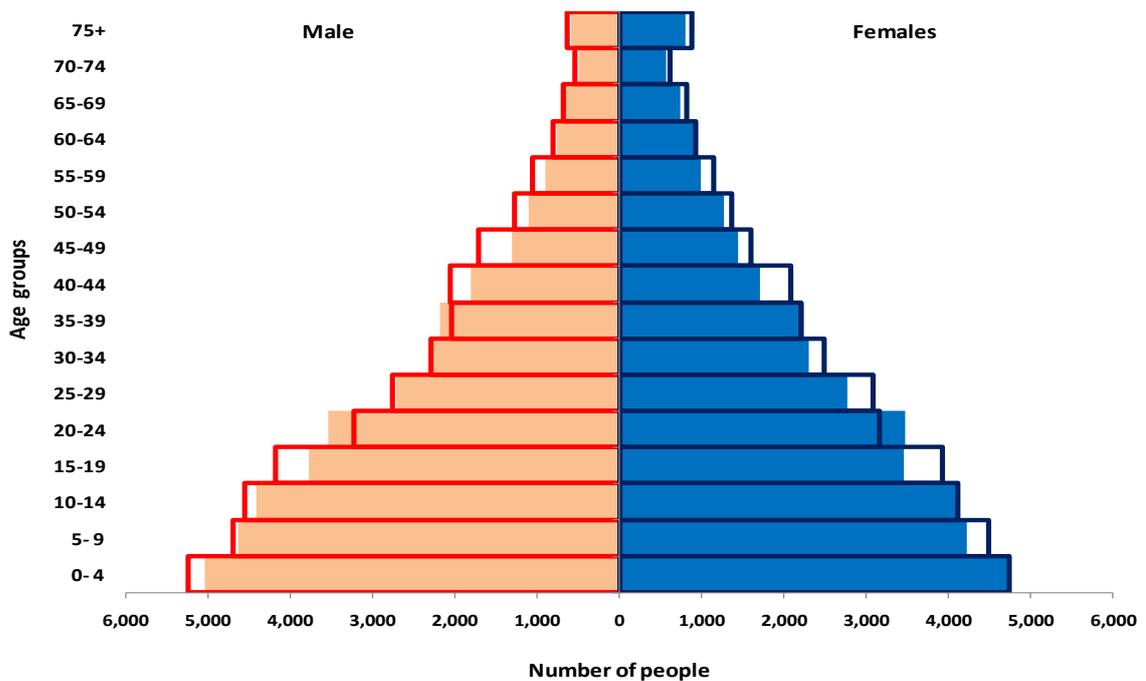
TONGATAPU

Population trend: 1956–2011



Population pyramid by five-year age groups and sex, 2006 and 2011

2006 (shaded area), 2011 (outlined)

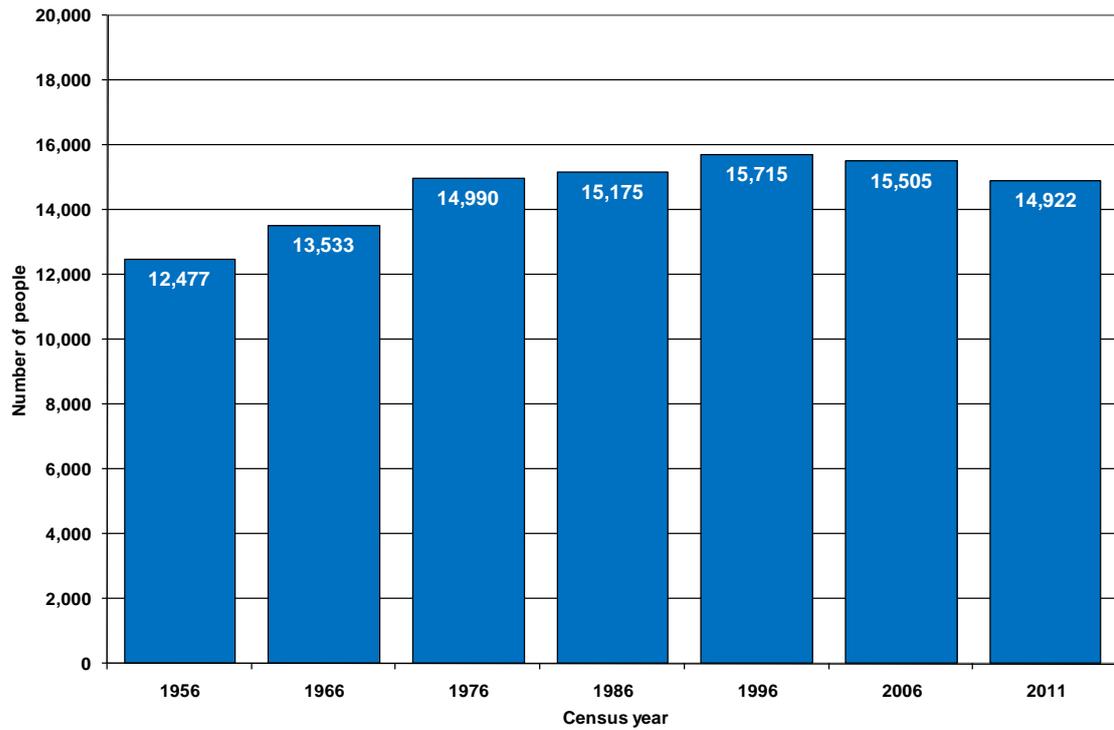


TONGATAPU							
2006				2011*			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	5,042	4,753	9,795	0-4	5,254	4,729	9,983
5-9	4,647	4,211	8,858	5-9	4,697	4,478	9,175
10-14	4,426	4,107	8,534	10-14	4,556	4,104	8,660
15-19	3,777	3,446	7,223	15-19	4,191	3,930	8,121
20-24	3,543	3,465	7,008	20-24	3,235	3,154	6,389
25-29	2,725	2,765	5,490	25-29	2,762	3,080	5,842
30-34	2,303	2,297	4,601	30-34	2,302	2,488	4,790
35-39	2,182	2,230	4,412	35-39	2,042	2,210	4,252
40-44	1,818	1,696	3,514	40-44	2,056	2,080	4,136
45-49	1,316	1,430	2,746	45-49	1,722	1,594	3,317
50-54	1,112	1,265	2,377	50-54	1,274	1,366	2,641
55-59	905	987	1,891	55-59	1,065	1,143	2,208
60-64	768	914	1,682	60-64	805	915	1,720
65-69	713	740	1,454	65-69	685	819	1,504
70-74	500	564	1,064	70-74	552	615	1,167
75+	593	803	1,397	75+	634	877	1,511
Total	36,372	35,673	72,045	Total	37,833	37,583	75,416
Population by broad age groups (in numbers)							
0-14	14,115	13,071	27,187	0-14	14,508	13,310	27,818
15-24	7,320	6,911	14,231	15-24	7,426	7,084	14,510
25-59	12,362	12,669	25,031	25-59	13,222	13,963	27,185
25-64	13,131	13,583	26,713	25-64	14,028	14,878	28,906
60+	2,575	3,022	5,597	60+	2,677	3,226	5,903
65+	1,806	2,108	3,915	65+	1,871	2,311	4,183
Population by broad age groups (in percentages)							
0-14	39	37	38	0-14	38	35	37
15-24	20	19	20	15-24	20	19	19
25-59	34	36	35	25-59	35	37	36
25-64	36	38	37	25-64	37	40	38
60+	7	8	8	60+	7	9	8
65+	5	6	5	65+	5	6	6
Age dependency ratio							
15-59			83	15-59			81
15-64			76	15-64			74
Sex ratio (males per 100 females)							
			102				101
Median age (years)							
Total	20.4	21.9	21.2	Total	20.3	22.5	21.4
Population growth 2006-2011							
Total				Males		Females	Total
Average annual				1,461		1,910	3,371
Percentage difference %				292		382	674
Average annual growth rate				4.0		5.4	4.7
				0.4		0.5	0.9

* 15 persons with age-not stated were distributed proportionally by known ages in 2011. This may cause some basic tables to differ slightly from numbers shown here.

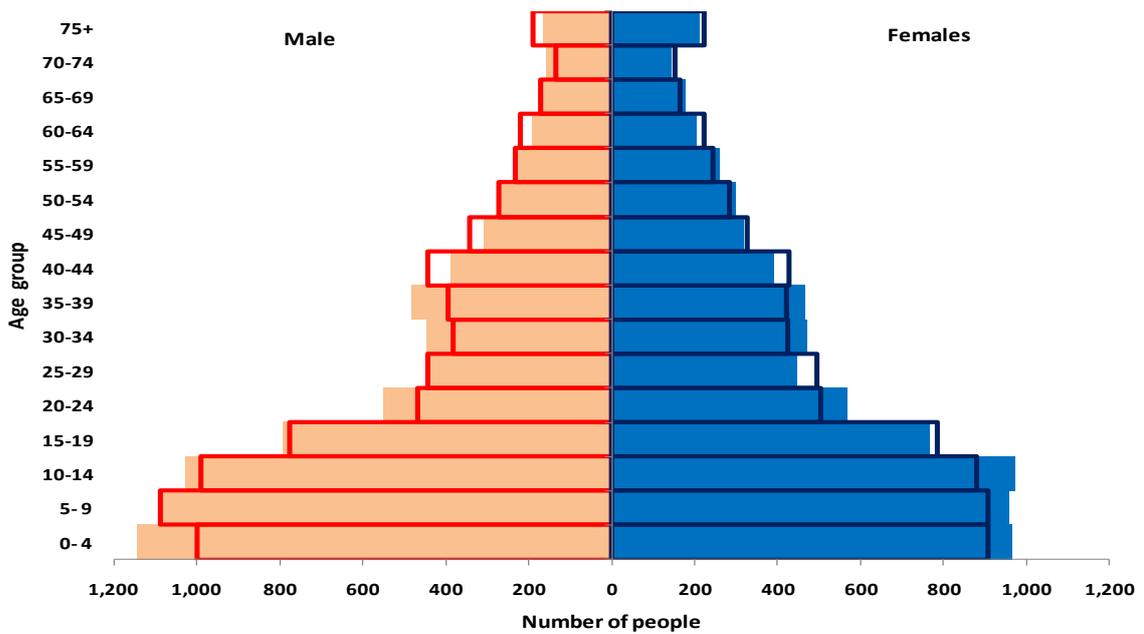
VAVA'U

Population trend: 1956–2011



Population pyramid by five-year age groups and sex, 2006 and 2011

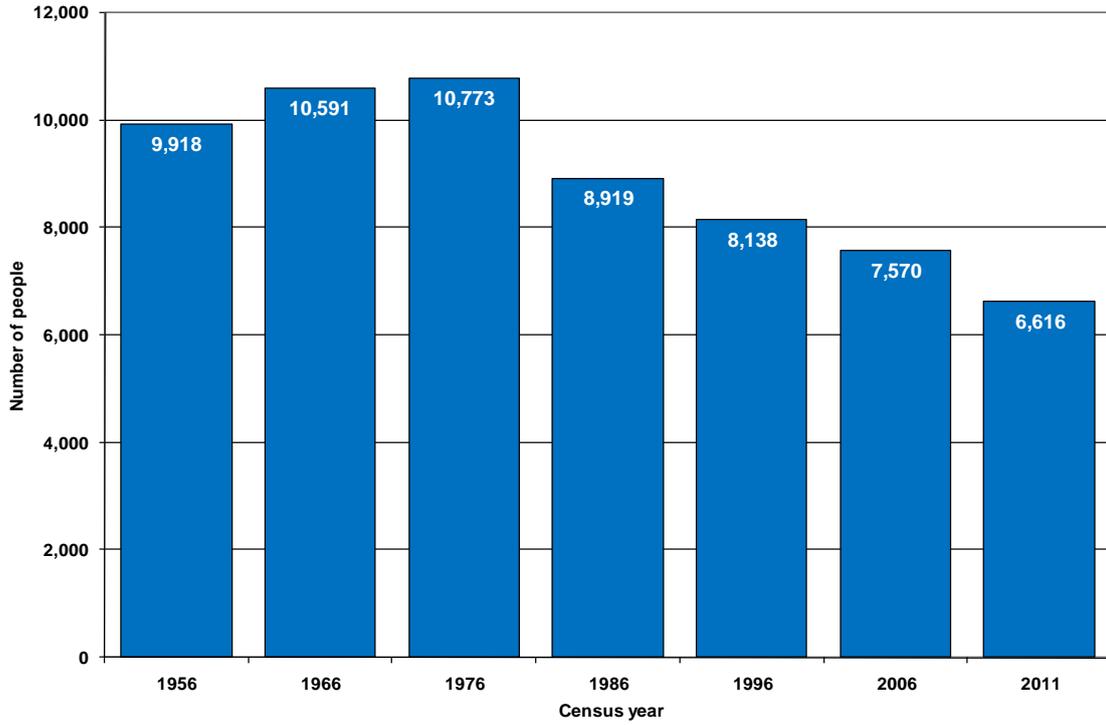
2006 (shaded area), 2011 (outlined)



VAVA'U							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	1,144	964	2,108	0-4	999	907	1,906
5-9	1,095	959	2,054	5-9	1,088	906	1,994
10-14	1,028	971	1,999	10-14	991	878	1,869
15-19	794	766	1,559	15-19	777	786	1,563
20-24	550	569	1,119	20-24	467	505	972
25-29	450	446	897	25-29	444	493	937
30-34	446	470	917	30-34	384	423	807
35-39	483	466	950	35-39	396	420	816
40-44	389	390	780	40-44	443	426	869
45-49	310	317	627	45-49	342	326	668
50-54	273	298	571	50-54	274	285	559
55-59	239	259	498	55-59	234	245	479
60-64	194	203	397	60-64	222	224	446
65-69	179	176	355	65-69	173	163	336
70-74	158	142	300	70-74	135	152	287
75+	164	210	374	75+	190	224	414
Total	7,897	7,608	15,505	Total	7,559	7,363	14,922
Population by broad age groups (in numbers)							
0-14	3,266	2,894	6,160	0-14	3,078	2,691	5,769
15-24	1,344	1,334	2,678	15-24	1,244	1,291	2,535
25-59	2,592	2,648	5,240	25-59	2,517	2,618	5,135
25-64	2,786	2,852	5,637	25-64	2,739	2,842	5,581
60+	695	732	1,427	60+	720	763	1,483
65+	501	528	1,030	65+	498	539	1,037
Population by broad age groups (in percentages)							
0-14	41	38	40	0-14	41	37	39
15-24	17	18	17	15-24	16	18	17
25-59	33	35	34	25-59	33	36	34
25-64	35	37	36	25-64	36	39	37
60+	9	10	9	60+	10	10	10
65+	6	7	7	65+	7	7	7
Age dependency ratio							
15-59			96	15-59			95
15-64			86	15-64			84
Sex ratio (males per 100 females)							
			104				103
Median age (years)							
Total	19.3	21.3	20.2	Total	19.5	22.0	20.7
Population growth 2006-2011							
Total				Males	Females		Total
Average annual				-338	-245		-583
Percentage difference %				-68	-49		-117
Average annual growth rate				-4.3	-3.2		-3.8
				-0.9	-0.7		-0.8

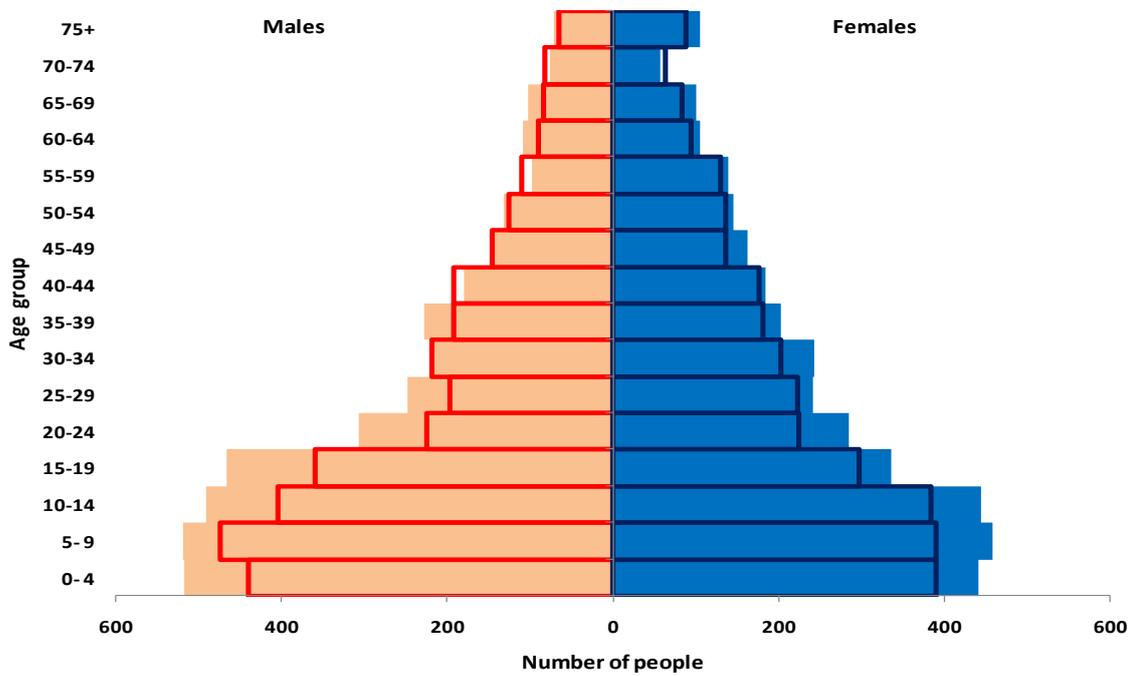
HA'APAI

Population trend: 2006–2011



Population pyramid by five-year age groups and sex, 2006 and 2011

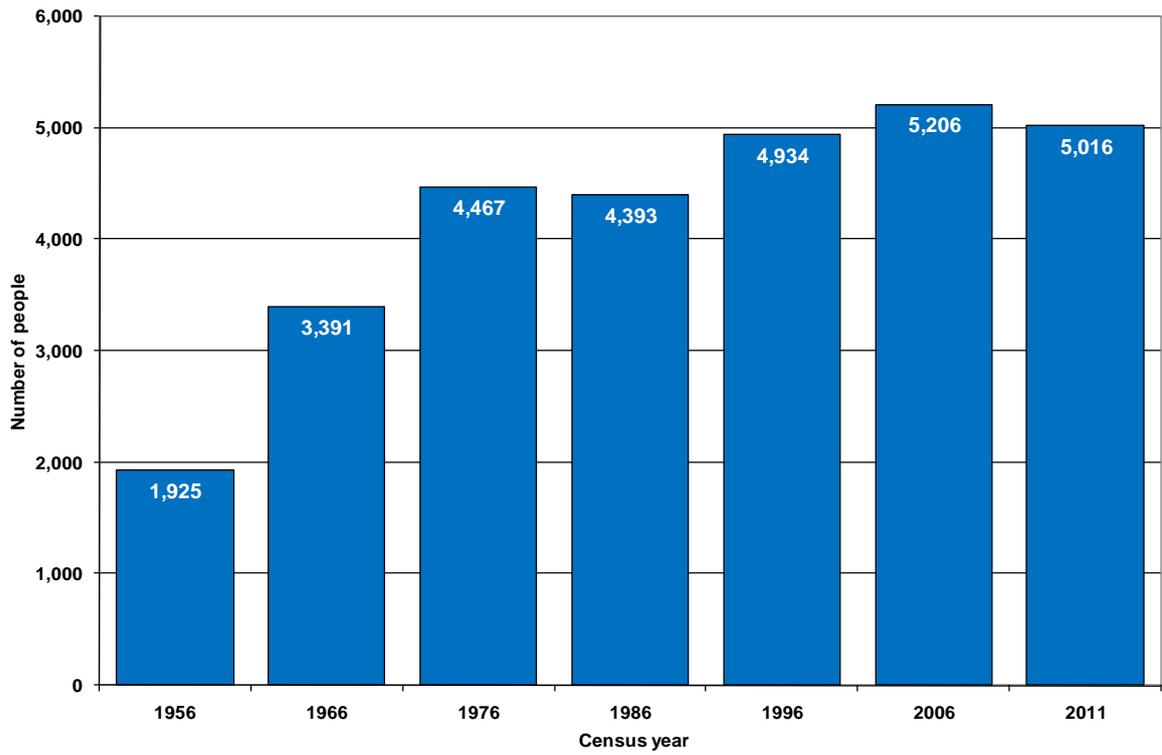
2006 (shaded area), 2011 (outlined)



HA'APAI							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	517	442	959	0-4	440	391	831
5-9	519	459	978	5-9	474	391	865
10-14	492	445	937	10-14	405	385	790
15-19	466	337	803	15-19	359	298	657
20-24	307	285	592	20-24	225	225	450
25-29	248	242	490	25-29	197	223	420
30-34	219	243	463	30-34	219	203	422
35-39	228	203	432	35-39	192	182	374
40-44	179	184	364	40-44	193	177	370
45-49	148	163	312	45-49	146	137	283
50-54	131	145	277	50-54	126	137	263
55-59	97	139	236	55-59	110	131	241
60-64	109	105	214	60-64	90	94	184
65-69	102	101	203	65-69	83	83	166
70-74	76	58	134	70-74	82	64	146
75+	71	106	177	75+	65	89	154
Total	3,911	3,659	7,570	Total	3,406	3,210	6,616
Population by broad age groups (in numbers)							
0-14	1,528	1,345	2,873	0-14	1,319	1,167	2,486
15-24	773	622	1,395	15-24	584	523	1,107
25-59	1,252	1,321	2,573	25-59	1,183	1,190	2,373
25-64	1,361	1,426	2,787	25-64	1,273	1,284	2,557
60+	359	371	729	60+	320	330	650
65+	250	265	515	65+	230	236	466
Population by broad age groups (in percentages)							
0-14	39	37	38	0-14	39	36	38
15-24	20	17	18	15-24	17	16	17
25-59	32	36	34	25-59	35	37	36
25-64	35	39	37	25-64	37	40	39
60+	9	10	10	60+	9	10	10
65+	6	7	7	65+	7	7	7
Age dependency ratio							
15-59			91	15-59			90
15-64			81	15-64			81
Sex ratio (males per 100 females)							
			107				106
Median age (years)							
Total	19.6	22.6	20.9	Total	20.6	23.1	21.8
Population growth 2006-2011							
				Males	Females		Total
Total				-505	-449		-954
Average annual				-101	-90		-191
Percentage difference %				-12.9	-12.3		-12.6
Average annual growth rate				-2.8	-2.6		-2.7

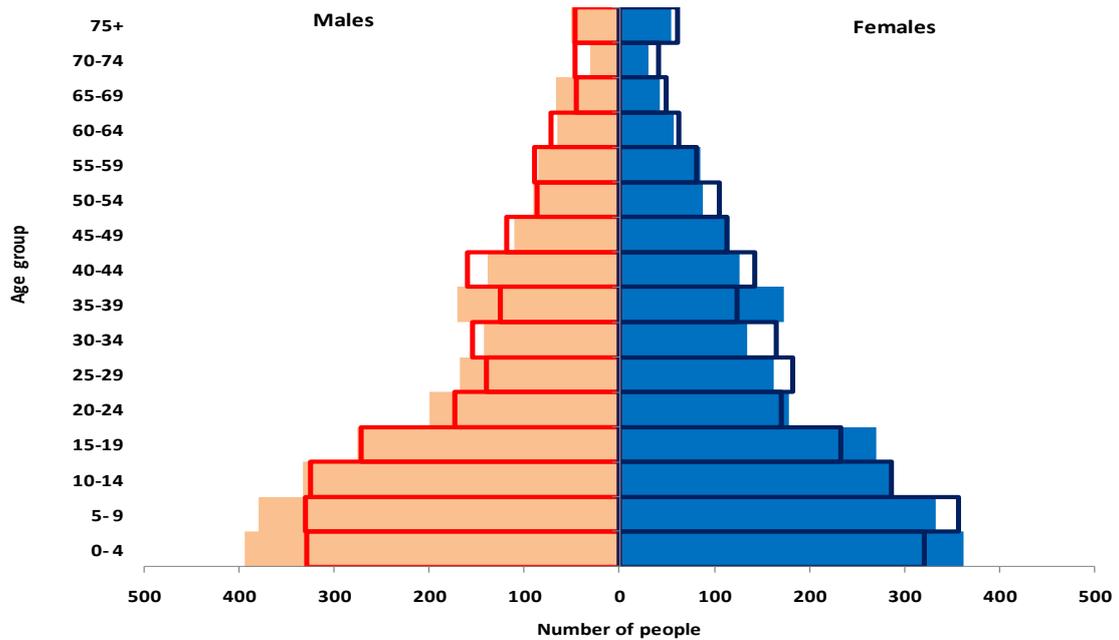
'EUA

Population trend: 2006–2011



Population pyramid by five-year age groups and sex, 2006 and 2011

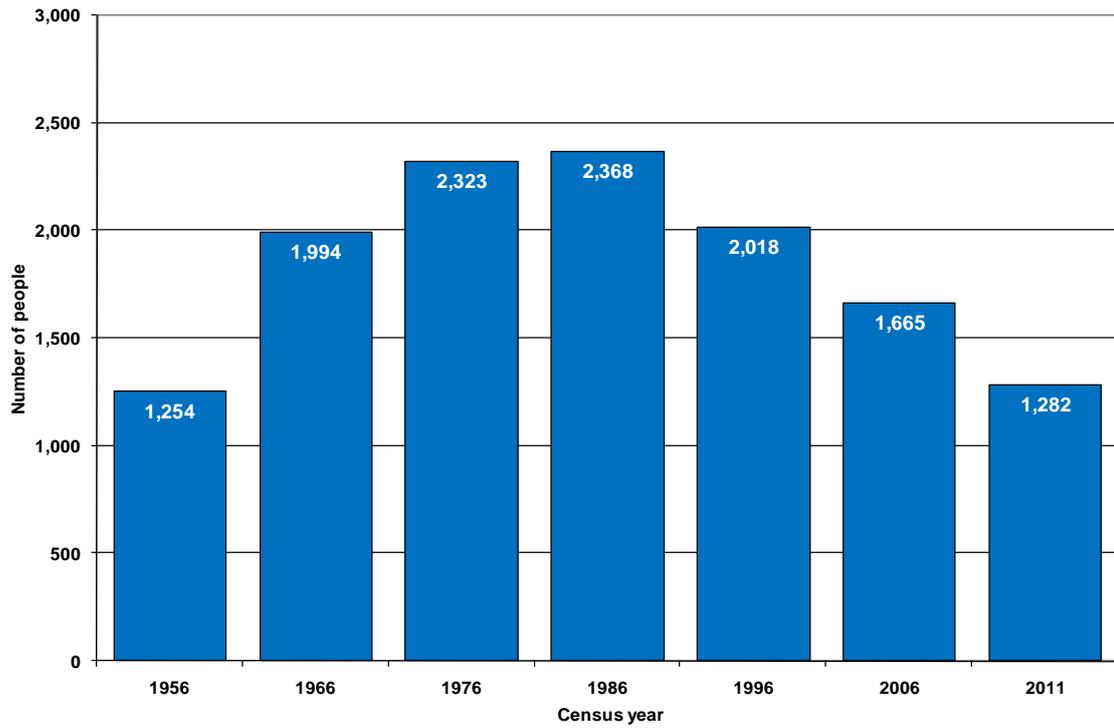
2006 (shaded area), 2011 (outlined)



'EUA							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	395	363	758	0-4	329	321	650
5-9	381	333	714	5-9	330	358	688
10-14	333	288	622	10-14	325	287	612
15-19	276	270	547	15-19	272	233	505
20-24	200	179	379	20-24	173	171	344
25-29	168	163	331	25-29	140	183	323
30-34	142	135	277	30-34	155	166	321
35-39	170	173	343	35-39	125	124	249
40-44	138	127	265	40-44	160	143	303
45-49	110	116	226	45-49	118	114	232
50-54	91	88	179	50-54	87	105	192
55-59	85	85	170	55-59	89	82	171
60-64	65	57	122	60-64	72	63	135
65-69	66	42	108	65-69	45	50	95
70-74	30	30	60	70-74	47	41	88
75+	50	54	104	75+	47	61	108
Total	2,702	2,504	5,206	Total	2,514	2,502	5,016
Population by broad age groups (in numbers)							
0-14	1,109	984	2,093	0-14	984	966	1,950
15-24	477	449	926	15-24	445	404	849
25-59	905	887	1,793	25-59	874	917	1,791
25-64	970	944	1,915	25-64	946	980	1,926
60+	211	183	394	60+	211	215	426
65+	146	126	272	65+	139	152	291
Population by broad age groups (in percentages)							
0-14	41	39	40	0-14	39	39	39
15-24	18	18	18	15-24	18	16	17
25-59	34	35	34	25-59	35	37	36
25-64	36	38	37	25-64	38	39	38
60+	8	7	8	60+	8	9	8
65+	5	5	5	65+	6	6	6
Age dependency ratio							
15-59			91	15-59			90
15-64			83	15-64			81
Sex ratio (males per 100 females)							
			108				100
Median age (years)							
Total	19.4	20.0	19.7	Total	20.0	21.5	20.8
Population growth 2006-2011							
Total				Males	-188	Females	-2
Average annual					-38		0
Percentage difference %					-7.0		-0.1
Average annual growth rate					-1.4		0.0

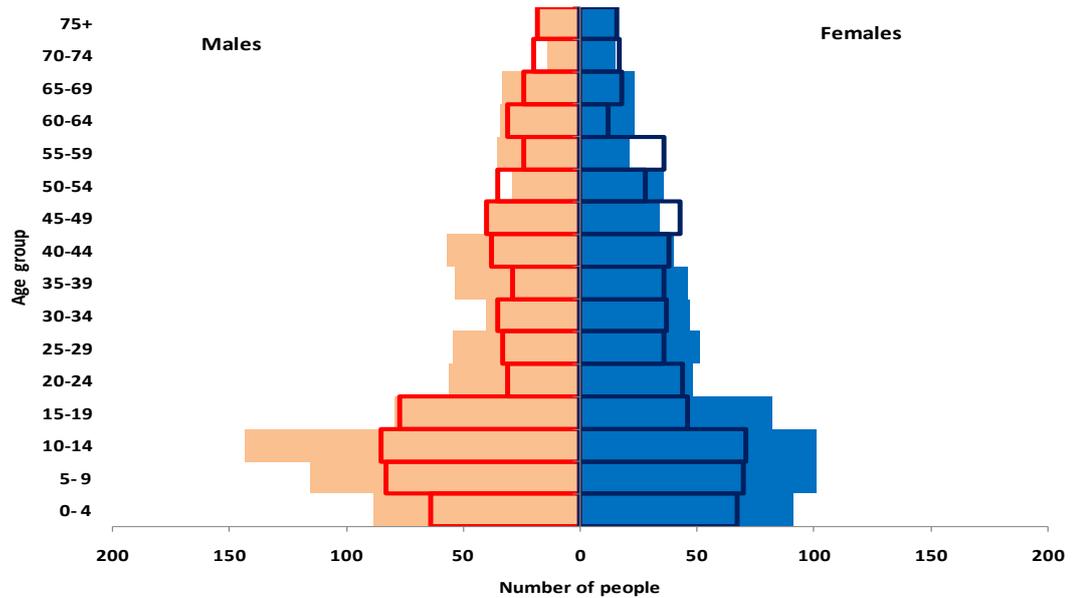
ONGO NIUA

Population trend: 2006–2011



Population pyramid by five-year age group and sex, 2006 and 2011

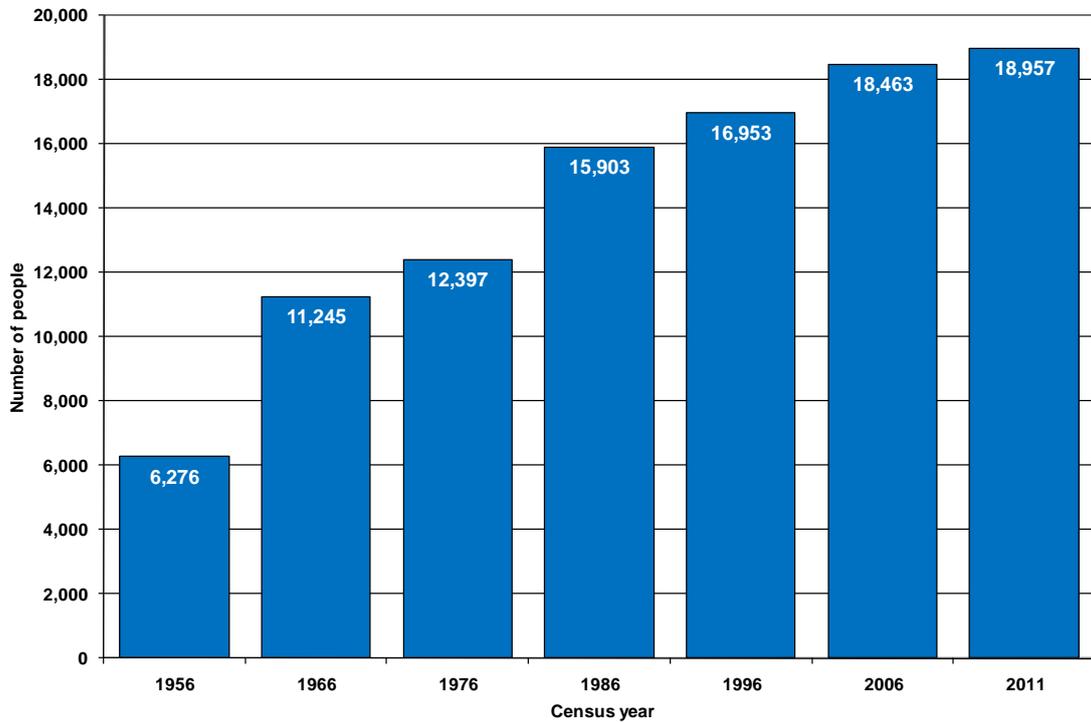
2006 (shaded area), 2011 (outlined)



ONGO NIUA							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	88	91	179	0-4	64	67	131
5-9	115	101	216	5-9	83	70	153
10-14	143	101	244	10-14	85	71	156
15-19	79	82	161	15-19	77	46	123
20-24	56	48	104	20-24	31	44	75
25-29	54	51	105	25-29	33	36	69
30-34	40	47	87	30-34	35	37	72
35-39	53	46	99	35-39	29	36	65
40-44	57	40	97	40-44	38	38	76
45-49	41	34	75	45-49	40	43	83
50-54	29	36	65	50-54	35	28	63
55-59	35	21	56	55-59	24	36	60
60-64	34	23	57	60-64	31	12	43
65-69	33	23	56	65-69	24	18	42
70-74	14	15	29	70-74	20	17	37
75+	17	15	32	75+	18	16	34
Total	890	775	1,665	Total	667	615	1,282
Population by broad age groups (in numbers)							
0-14	347	293	640	0-14	232	208	440
15-24	135	130	265	15-24	108	90	198
25-59	310	275	585	25-59	234	254	488
25-64	344	298	642	25-64	265	266	531
60+	98	76	174	60+	93	63	156
65+	64	53	117	65+	62	51	113
Population by broad age groups (in percentages)							
0-14	39	38	38	0-14	35	34	34
15-24	15	17	16	15-24	16	15	15
25-59	35	36	35	25-59	35	41	38
25-64	39	39	39	25-64	40	43	41
60+	11	10	10	60+	14	10	12
65+	7	7	7	65+	9	8	9
Age dependency ratio							
15-59			96	15-59			87
15-64			83	15-64			76
Sex ratio (males per 100 females)							
			115				108
Median age (years)							
Total	21.7	21.3	21.5	Total	24.0	26.4	25.3
Population growth 2006-2011							
Total				Males	-223	-160	-383
Average annual					-45	-32	-77
Percentage difference %					-25.1	-20.6	-23.0
Average annual growth rate					-5.8	-4.6	-5.2

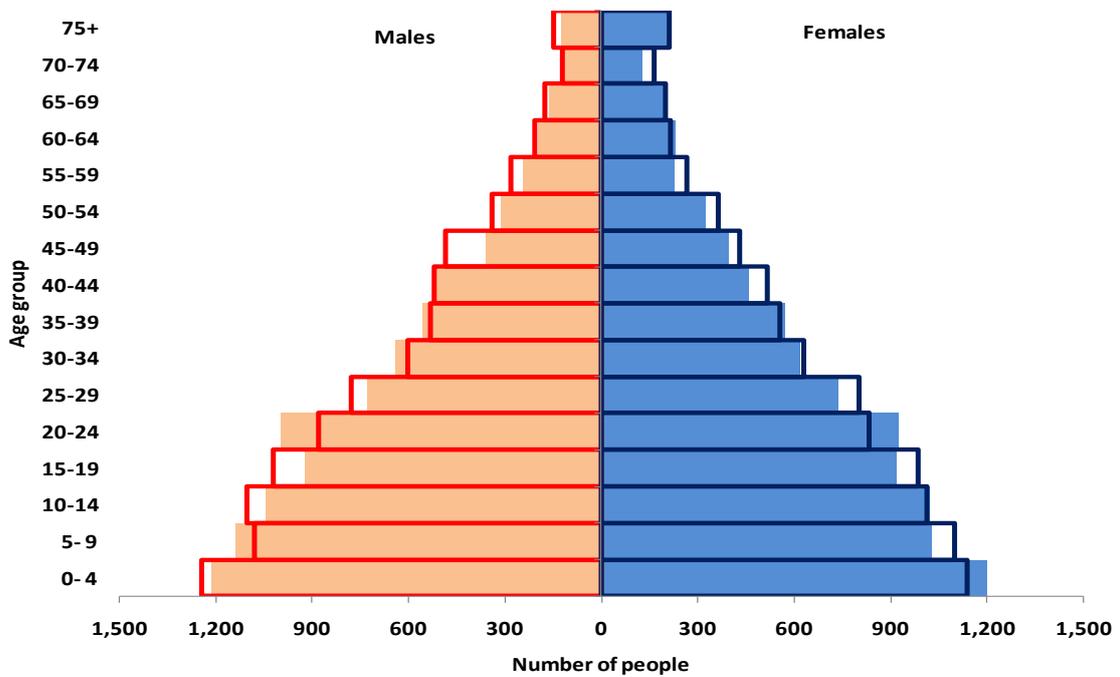
Kolofo'ou

Population trend: 1956–2011



Population pyramid by five-year age group and sex, 2006 and 2011

2006 (shaded area), 2011 (outlined)

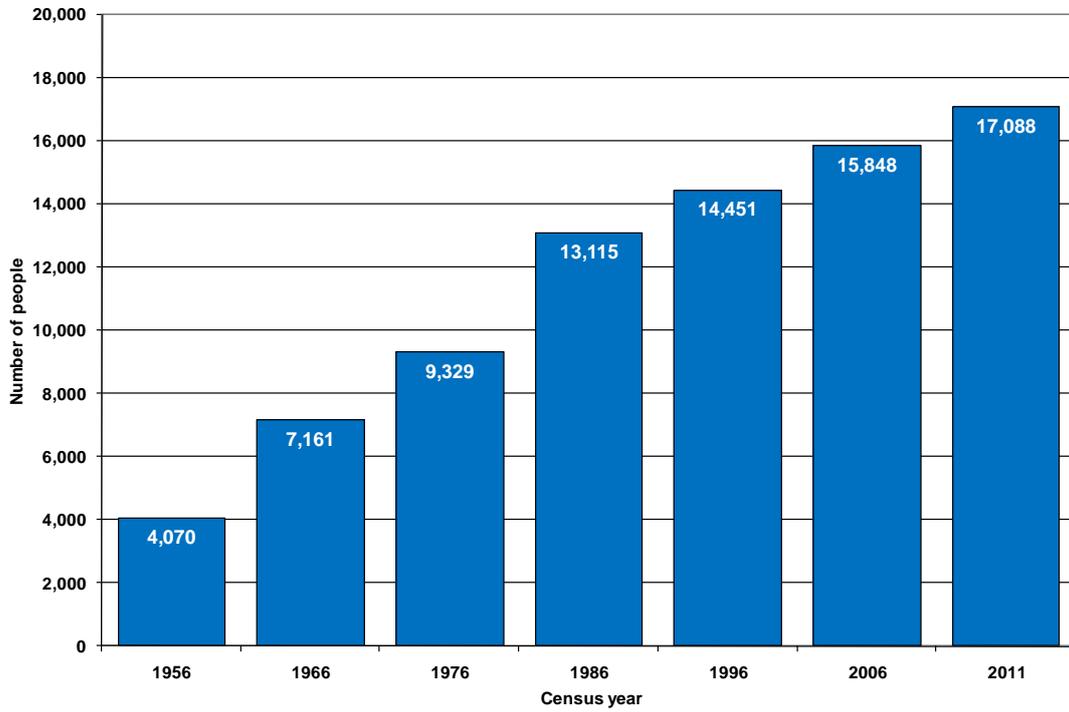


Kolofo'ou							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	1,214	1,201	2,415	0-4	1,246	1,138	2,385
5-9	1,140	1,031	2,171	5-9	1,079	1,099	2,179
10-14	1,046	1,022	2,068	10-14	1,103	1,014	2,118
15-19	924	919	1,843	15-19	1,023	986	2,010
20-24	999	924	1,923	20-24	879	835	1,715
25-29	727	736	1,463	25-29	780	804	1,585
30-34	640	618	1,259	30-34	602	630	1,232
35-39	557	571	1,129	35-39	532	554	1,086
40-44	517	460	978	40-44	520	516	1,036
45-49	358	396	754	45-49	486	431	917
50-54	313	324	637	50-54	340	365	705
55-59	243	227	470	55-59	280	265	545
60-64	196	231	427	60-64	208	215	423
65-69	159	198	357	65-69	174	201	375
70-74	115	125	240	70-74	121	164	285
75+	124	204	328	75+	150	211	361
Total	9,273	9,190	18,463	Total	9,526	9,431	18,957
Population by broad age groups (in numbers)							
0-14	3,400	3,255	6,655	0-14	3,429	3,252	6,681
15-24	1,922	1,844	3,766	15-24	1,903	1,822	3,724
25-59	3,357	3,333	6,690	25-59	3,541	3,566	7,107
25-64	3,553	3,564	7,117	25-64	3,749	3,781	7,530
60+	594	758	1,353	60+	653	791	1,444
65+	398	527	925	65+	445	576	1,021
Population by broad age groups (in percentages)							
0-14	37	35	36	0-14	36	34	35
15-24	21	20	20	15-24	20	19	20
25-59	36	36	36	25-59	37	38	37
25-64	38	39	39	25-64	39	40	40
60+	6	8	7	60+	7	8	8
65+	4	6	5	65+	5	6	5
Age dependency ratio							
15-59			77	15-59			75
15-64			70	15-64			68
Sex ratio (males per 100 females)							
			101				101
Median age (years)							
Total	21.6	22.3	21.9	Total	21.8	22.9	22.3
Population growth 2006-2011							
Total				Males		Females	Total
				253		241	494
Average annual				51		48	99
Percentage difference %				2.7		2.6	2.7
Average annual growth rate				0.5		0.5	0.5

* 6 persons with age-not stated were distributed proportionally by known ages in 2011. This may cause some basic tables to differ slightly from numbers shown here.

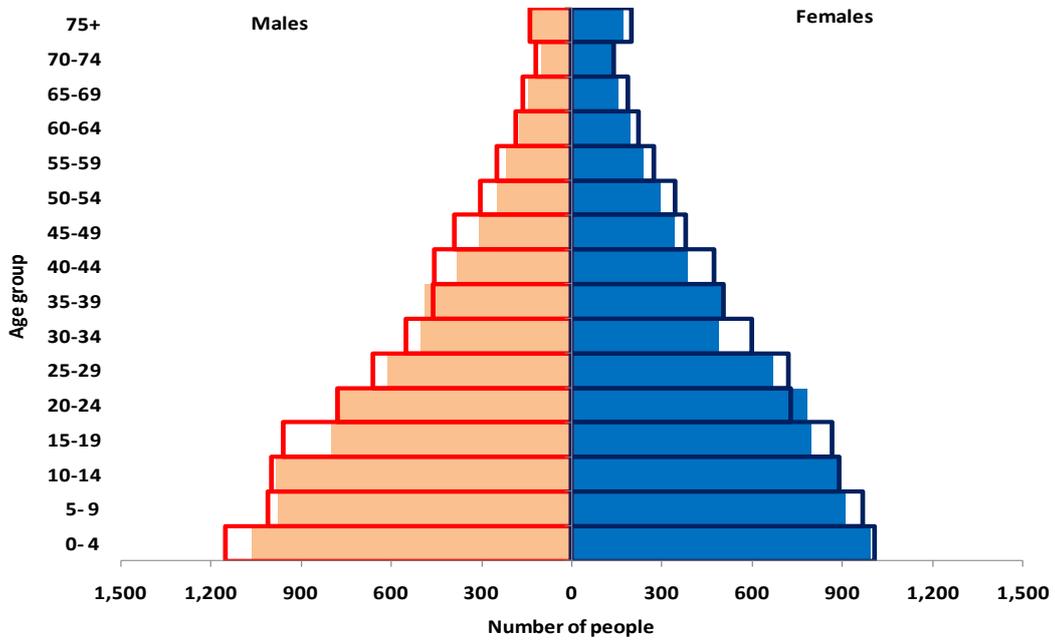
Kolomotu'a

Population trend: 1956–2011



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

2006 (shaded area), 2011 (outlined)

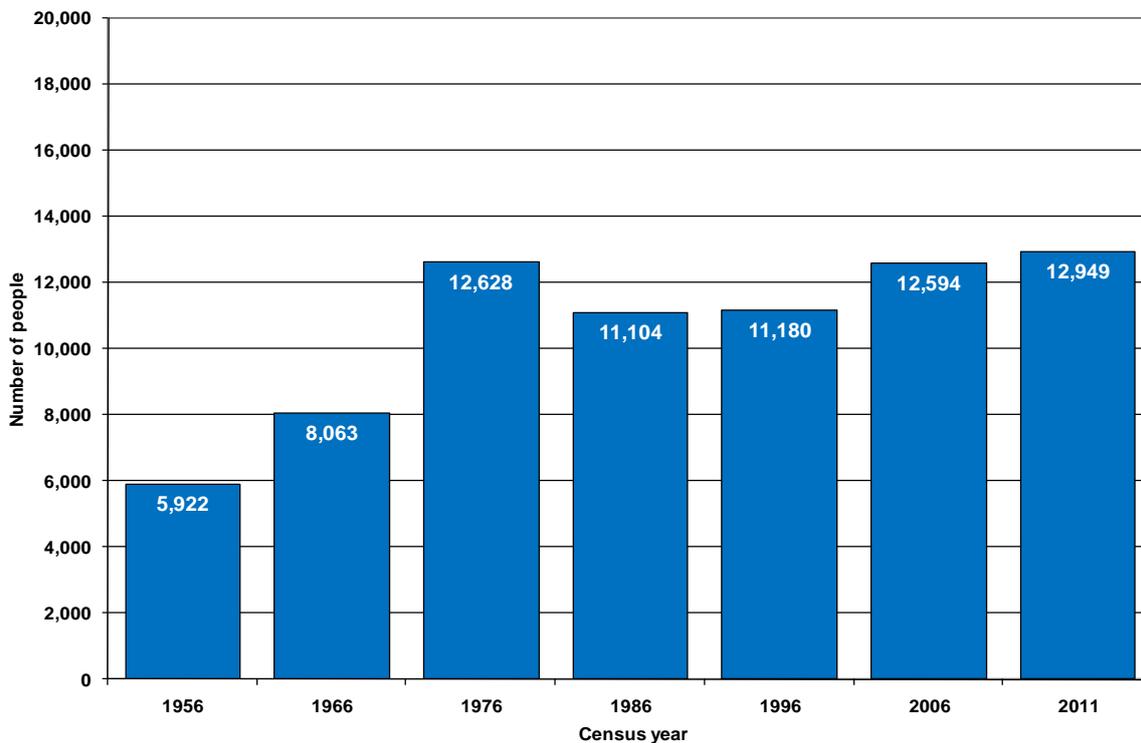


Kolomotu'a							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	1,062	992	2,054	0-4	1,151	1,007	2,158
5-9	973	908	1,881	5-9	1,012	968	1,980
10-14	983	883	1,866	10-14	998	892	1,890
15-19	797	797	1,594	15-19	959	865	1,824
20-24	778	785	1,563	20-24	780	730	1,510
25-29	610	669	1,279	25-29	659	721	1,380
30-34	498	491	989	30-34	552	601	1,153
35-39	487	499	986	35-39	459	507	966
40-44	382	386	768	40-44	457	475	932
45-49	307	340	647	45-49	390	380	770
50-54	247	295	542	50-54	304	345	649
55-59	218	239	457	55-59	248	275	523
60-64	172	197	370	60-64	186	222	408
65-69	140	155	296	65-69	160	187	347
70-74	99	143	242	70-74	118	139	257
75+	141	173	315	75+	140	200	340
Total	7,894	7,954	15,848	Total	8,574	8,514	17,088
Population by broad age groups (in numbers)							
0-14	3,017	2,784	5,801	0-14	3,160	2,867	6,027
15-24	1,575	1,582	3,157	15-24	1,738	1,595	3,333
25-59	2,748	2,919	5,667	25-59	3,071	3,304	6,375
25-64	2,921	3,116	6,037	25-64	3,257	3,526	6,783
60+	553	669	1,222	60+	604	748	1,352
65+	381	472	853	65+	418	526	944
Population by broad age groups (in percentages)							
0-14	38	35	37	0-14	37	34	35
15-24	20	20	20	15-24	20	19	20
25-59	35	37	36	25-59	36	39	37
25-64	37	39	38	25-64	38	41	40
60+	7	8	8	60+	7	9	8
65+	5	6	5	65+	5	6	6
Age dependency ratio							
15-59			80	15-59			76
15-64			72	15-64			69
Sex ratio (males per 100 females)							
			99				101
Median age (years)							
Total	20.9	22.5	21.7	Total	21.1	23.6	22.3
Population growth 2006-2011							
Total				Males	680	560	1,240
Average annual					136	112	248
Percentage difference %					8.6	7.0	7.8
Average annual growth rate					1.7	1.4	1.5

* 6 persons with age-not stated were distributed proportionally by known ages in 2011. This may cause some basic tables to differ slightly from numbers shown here.

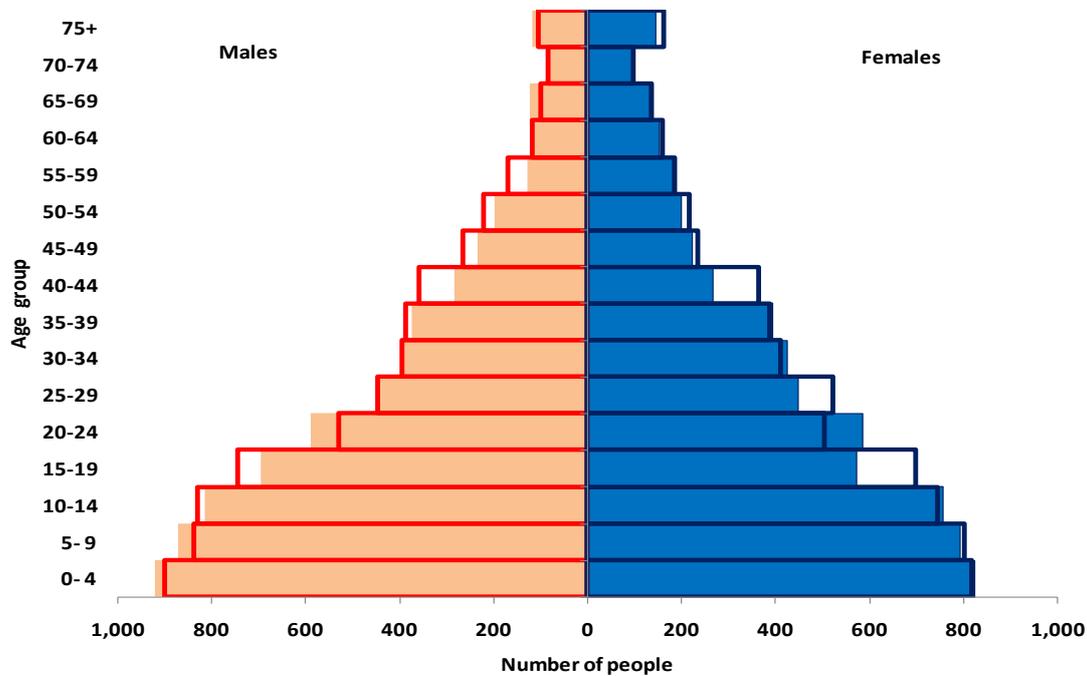
Vaini

Population trend: 1956–2011



Population pyramid by five-year age group and sex, 2006 and 2011

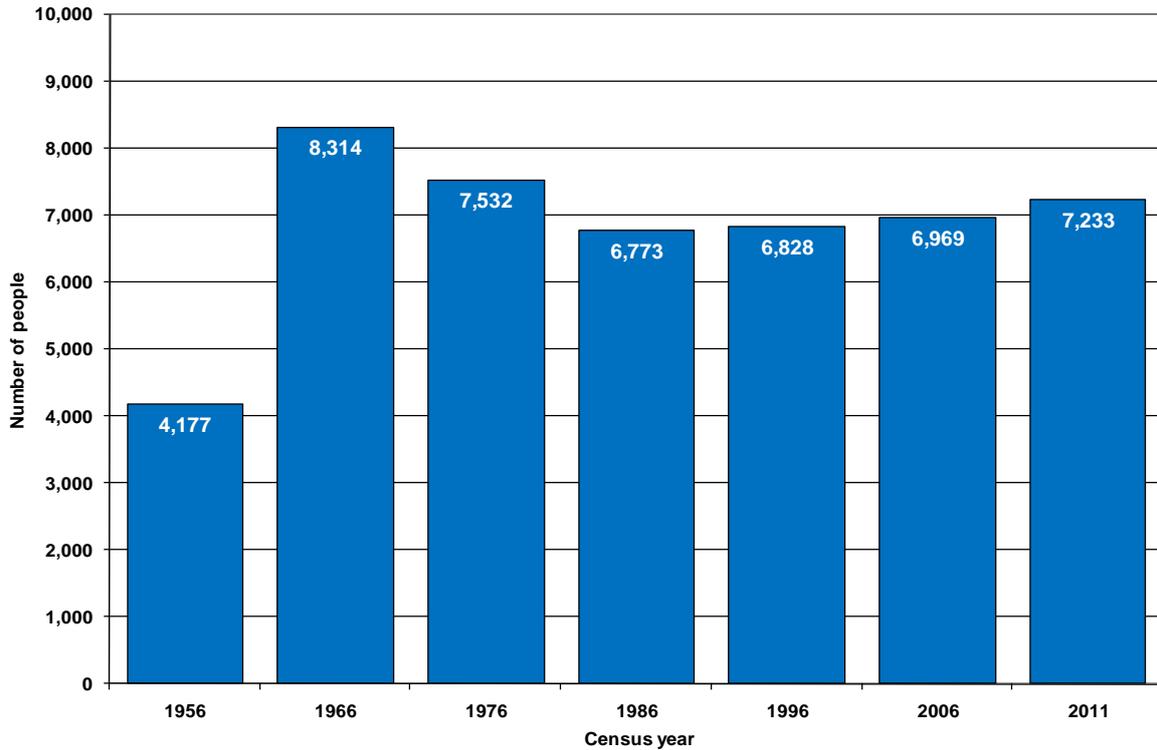
2006 (shaded area), 2011 (outlined)



Vaini							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	922	824	1,746	0-4	902	819	1,721
5-9	872	792	1,664	5-9	839	802	1,641
10-14	815	757	1,572	10-14	831	747	1,578
15-19	696	572	1,268	15-19	745	700	1,445
20-24	589	585	1,175	20-24	530	505	1,035
25-29	448	449	897	25-29	447	522	969
30-34	394	426	820	30-34	396	410	806
35-39	374	395	769	35-39	388	388	776
40-44	283	267	550	40-44	359	365	724
45-49	235	222	457	45-49	265	236	501
50-54	198	200	398	50-54	223	216	439
55-59	129	181	310	55-59	171	186	357
60-64	118	153	271	60-64	117	159	276
65-69	123	131	254	65-69	99	135	234
70-74	83	97	180	70-74	84	98	182
75+	117	145	262	75+	104	161	265
Total	6,397	6,197	12,594	Total	6,500	6,449	12,949
Population by broad age groups (in numbers)							
0-14	2,608	2,373	4,981	0-14	2,572	2,368	4,940
15-24	1,285	1,157	2,442	15-24	1,275	1,205	2,480
25-59	2,063	2,140	4,203	25-59	2,249	2,323	4,572
25-64	2,181	2,293	4,474	25-64	2,366	2,482	4,848
60+	441	526	967	60+	404	553	957
65+	323	373	696	65+	287	394	681
Population by broad age groups (in percentages)							
0-14	41	38	40	0-14	40	37	38
15-24	20	19	19	15-24	20	19	19
25-59	32	35	33	25-59	35	36	35
25-64	34	37	36	25-64	36	38	37
60+	7	8	8	60+	6	9	7
65+	5	6	6	65+	4	6	5
Age dependency ratio							
15-59			90	15-59			84
15-64			82	15-64			77
Sex ratio (males per 100 females)							
			103				101
Median age (years)							
Total	19.2	21.3	20.2	Total	19.6	21.6	20.4
Population growth 2006-2011							
				Males	Females		Total
Total				103	252		355
Average annual				21	50		71
Percentage difference %				1.6	4.1		2.8
Average annual growth rate				0.3	0.8		0.6

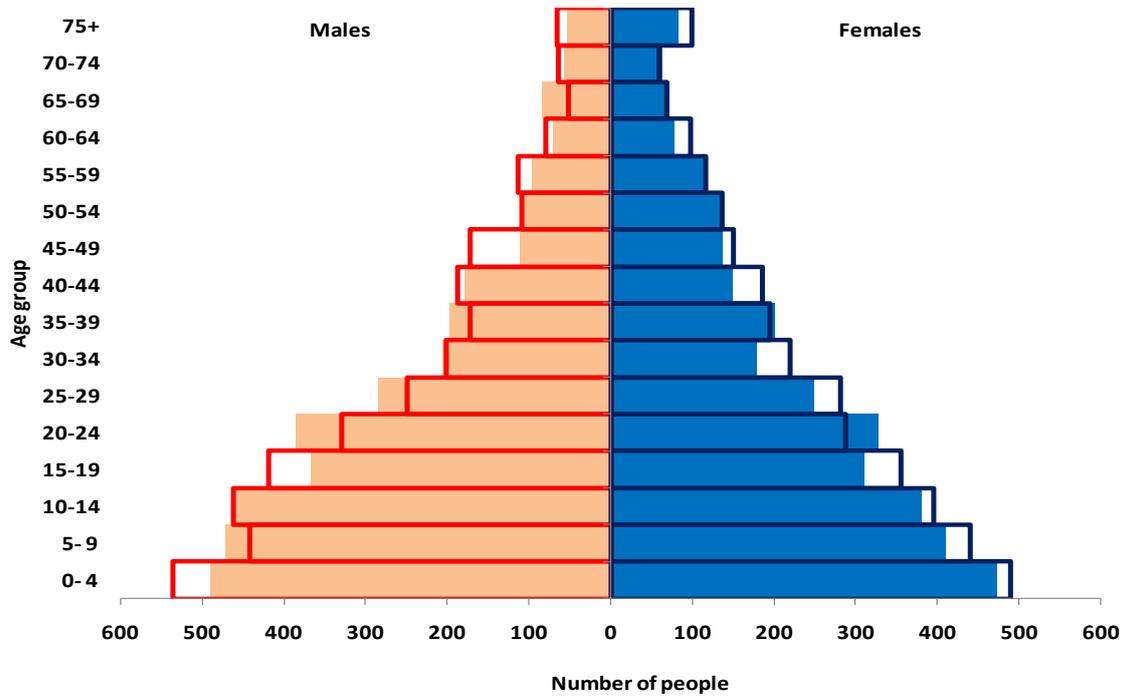
Tatakamotonga

Population trend: 2006–2011



Population pyramid by five-year age group and sex, 2006 and 2011

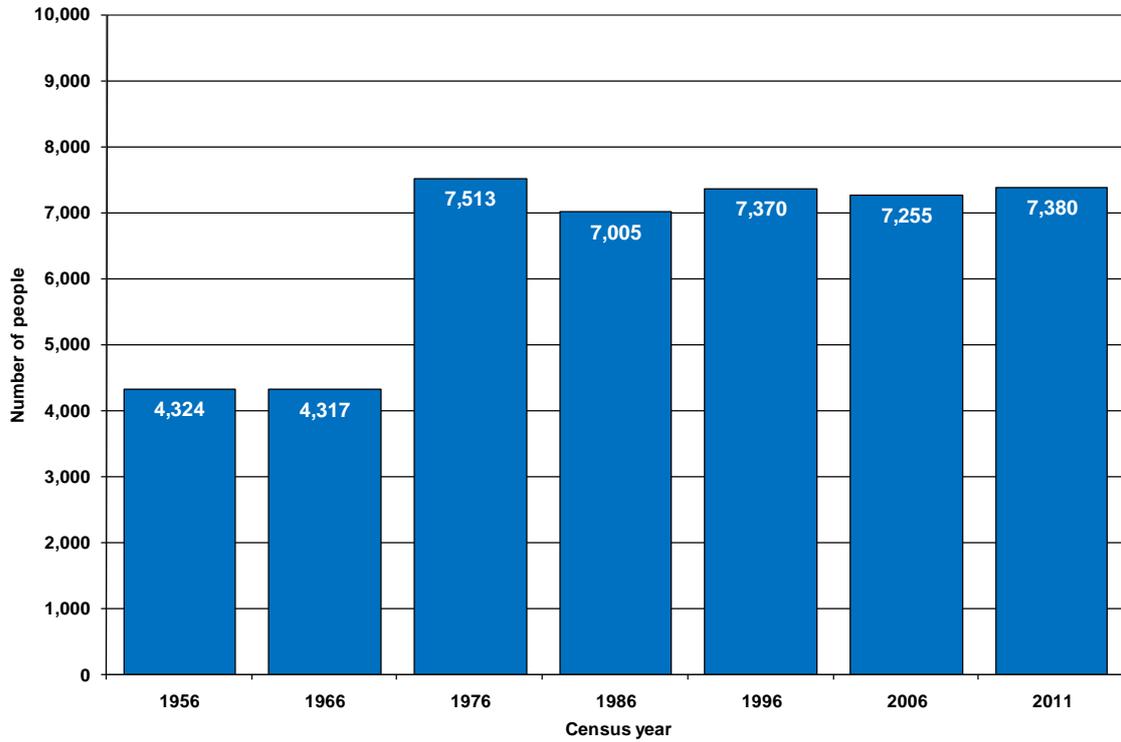
2006 (shaded area), 2011 (outlined)



Tatakamotonga							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	490	473	963	0-4	536	490	1,026
5-9	472	409	881	5-9	442	440	882
10-14	459	379	838	10-14	463	395	858
15-19	367	310	677	15-19	419	355	774
20-24	386	327	713	20-24	329	288	617
25-29	285	248	533	25-29	249	282	531
30-34	207	178	385	30-34	201	220	421
35-39	197	201	398	35-39	172	195	367
40-44	179	149	328	40-44	188	185	373
45-49	110	136	247	45-49	173	150	323
50-54	105	133	239	50-54	109	136	245
55-59	96	114	210	55-59	113	116	229
60-64	70	77	147	60-64	80	98	178
65-69	84	71	155	65-69	52	68	120
70-74	56	62	118	70-74	65	59	124
75+	53	82	135	75+	66	99	165
Total	3,618	3,351	6,969	Total	3,657	3,576	7,233
Population by broad age groups (in numbers)							
0-14	1,421	1,262	2,683	0-14	1,441	1,325	2,766
15-24	752	637	1,390	15-24	748	643	1,391
25-59	1,180	1,160	2,340	25-59	1,205	1,284	2,489
25-64	1,251	1,237	2,487	25-64	1,285	1,382	2,667
60+	264	292	556	60+	263	324	587
65+	194	215	409	65+	183	226	409
Population by broad age groups (in percentages)							
0-14	39	38	38	0-14	39	37	38
15-24	21	19	20	15-24	20	18	19
25-59	33	35	34	25-59	33	36	34
25-64	35	37	36	25-64	35	39	37
60+	7	9	8	60+	7	9	8
65+	5	6	6	65+	5	6	6
Age dependency ratio							
15-59			87	15-59			86
15-64			80	15-64			78
Sex ratio (males per 100 females)							
			108				102
Median age (years)							
Total	20.3	21.6	20.9	Total	19.6	21.9	20.6
Population growth 2006-2011							
Total				Males	39	225	264
Average annual					8	45	53
Percentage difference %					1.1	6.7	3.8
Average annual growth rate					0.2	1.3	0.7

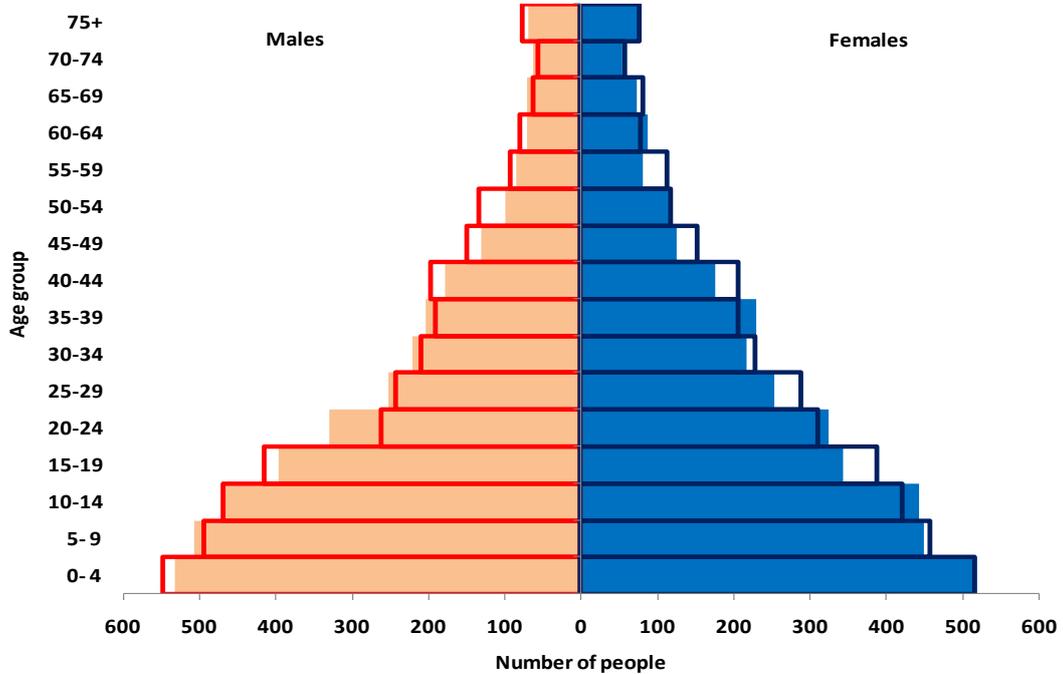
Lapaha

Population trend: 1956–2011



Population pyramid by five-year age group and sex, 2006 and 2011

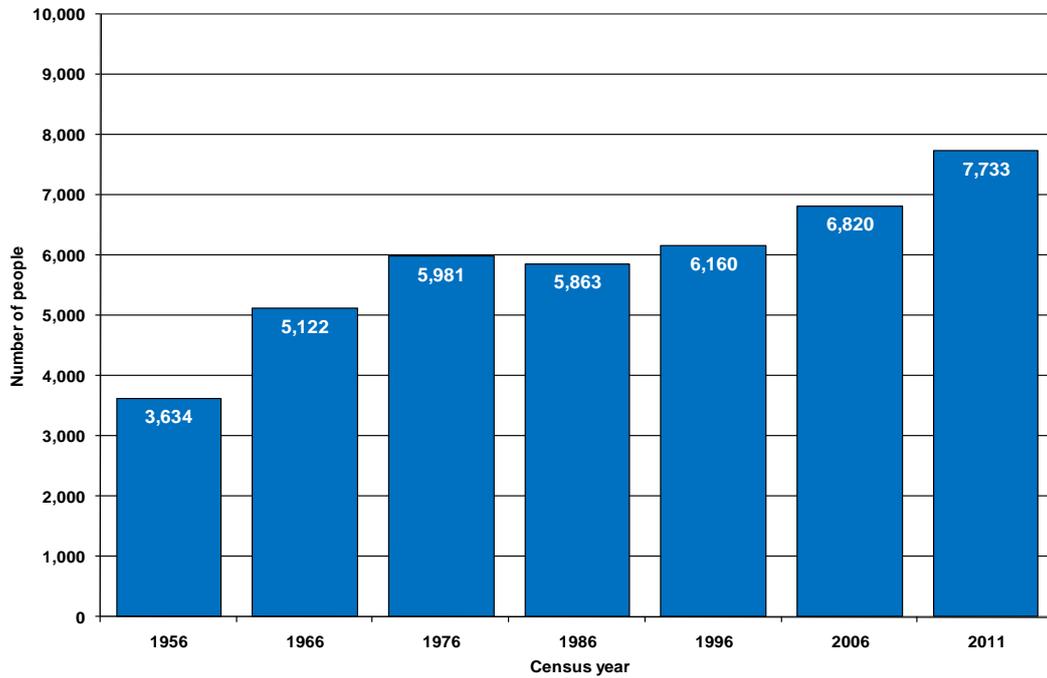
2006 (shaded area), 2011 (outlined)



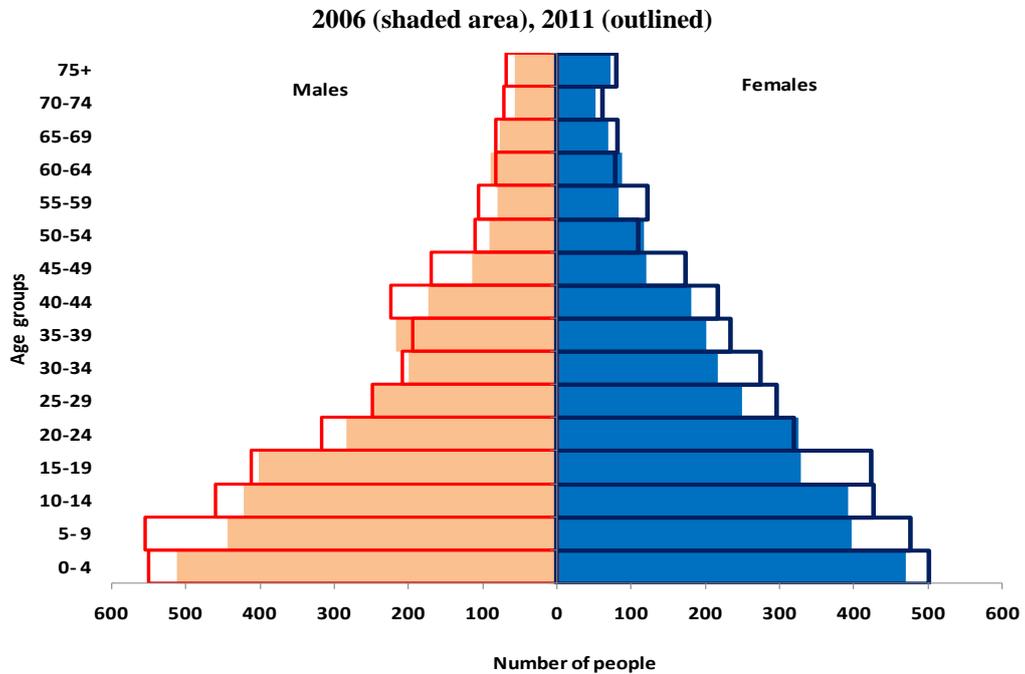
Lapaha							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	532	519	1,051	0-4	548	516	1,064
5-9	506	449	955	5-9	494	457	951
10-14	472	444	916	10-14	469	421	890
15-19	396	343	739	15-19	415	388	803
20-24	330	325	655	20-24	262	310	572
25-29	252	254	506	25-29	242	288	530
30-34	221	217	438	30-34	209	228	437
35-39	203	230	433	35-39	191	207	398
40-44	178	177	355	40-44	196	207	403
45-49	131	125	256	45-49	149	153	302
50-54	98	118	216	50-54	133	117	250
55-59	84	82	166	55-59	93	113	206
60-64	70	88	158	60-64	80	78	158
65-69	71	74	145	65-69	63	82	145
70-74	63	54	117	70-74	56	58	114
75+	68	79	147	75+	77	77	154
Total	3,676	3,579	7,255	Total	3,678	3,702	7,380
Population by broad age groups (in numbers)							
0-14	1,510	1,412	2,923	0-14	1,511	1,395	2,906
15-24	726	668	1,394	15-24	677	698	1,376
25-59	1,167	1,203	2,371	25-59	1,213	1,314	2,527
25-64	1,237	1,291	2,529	25-64	1,293	1,392	2,685
60+	272	295	567	60+	276	295	571
65+	202	207	409	65+	196	217	413
Population by broad age groups (in percentages)							
0-14	41	39	40	0-14	41	38	39
15-24	20	19	19	15-24	18	19	19
25-59	32	34	33	25-59	33	35	34
25-64	34	36	35	25-64	35	38	36
60+	7	8	8	60+	8	8	8
65+	5	6	6	65+	5	6	6
Age dependency ratio							
15-59			93	15-59			89
15-64			85	15-64			82
Sex ratio (males per 100 females)							
			103				99
Median age (years)							
Total	19.1	20.5	19.8	Total	19.0	21.1	19.9
Population growth 2006-2011							
Total				Males	2	Females	123
Average annual					0		25
Percentage difference %					0.1		3.4
Average annual growth rate					0.0		0.7

Nukunuku

Population trend: 1956–2011



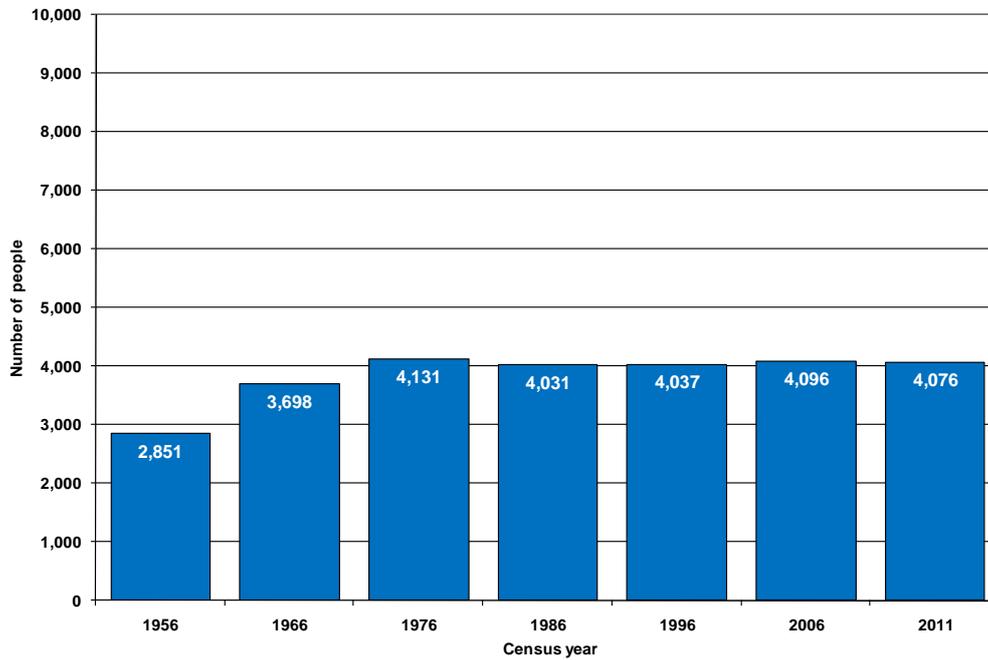
Population pyramid by five-year age group and sex, 2006 and 2011



Nukunuku							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	512	469	981	0-4	551	501	1,052
5-9	444	396	840	5-9	555	476	1,031
10-14	422	392	814	10-14	460	426	886
15-19	401	328	729	15-19	412	423	835
20-24	283	325	608	20-24	317	319	636
25-29	248	249	497	25-29	249	296	545
30-34	199	216	415	30-34	209	274	483
35-39	216	201	417	35-39	194	233	427
40-44	174	180	354	40-44	224	216	440
45-49	113	120	234	45-49	169	173	342
50-54	91	117	208	50-54	111	110	221
55-59	80	83	163	55-59	105	122	227
60-64	89	87	176	60-64	82	79	161
65-69	77	69	146	65-69	83	82	165
70-74	56	52	108	70-74	71	62	133
75+	56	72	128	75+	69	80	149
Total	3,462	3,358	6,820	Total	3,861	3,872	7,733
Population by broad age groups (in numbers)							
0-14	1,378	1,258	2,635	0-14	1,566	1,403	2,969
15-24	684	653	1,337	15-24	729	742	1,471
25-59	1,122	1,167	2,288	25-59	1,261	1,424	2,685
25-64	1,211	1,254	2,465	25-64	1,343	1,503	2,846
60+	279	280	559	60+	305	303	608
65+	190	193	383	65+	223	224	447
Population by broad age groups (in percentages)							
0-14	40	37	39	0-14	41	36	38
15-24	20	19	20	15-24	19	19	19
25-59	32	35	34	25-59	33	37	35
25-64	35	37	36	25-64	35	39	37
60+	8	8	8	60+	8	8	8
65+	5	6	6	65+	6	6	6
Age dependency ratio							
15-59			88	15-59			86
15-64			79	15-64			79
Sex ratio (males per 100 females)							
			103				100
Median age (years)							
Total	19.4	21.4	20.4	Total	19.4	21.7	20.5
Population growth 2006-2011							
Total				Males	399	514	913
Average annual					80	103	183
Percentage difference %					11.5	15.3	13.4
Average annual growth rate					2.2	2.8	2.5

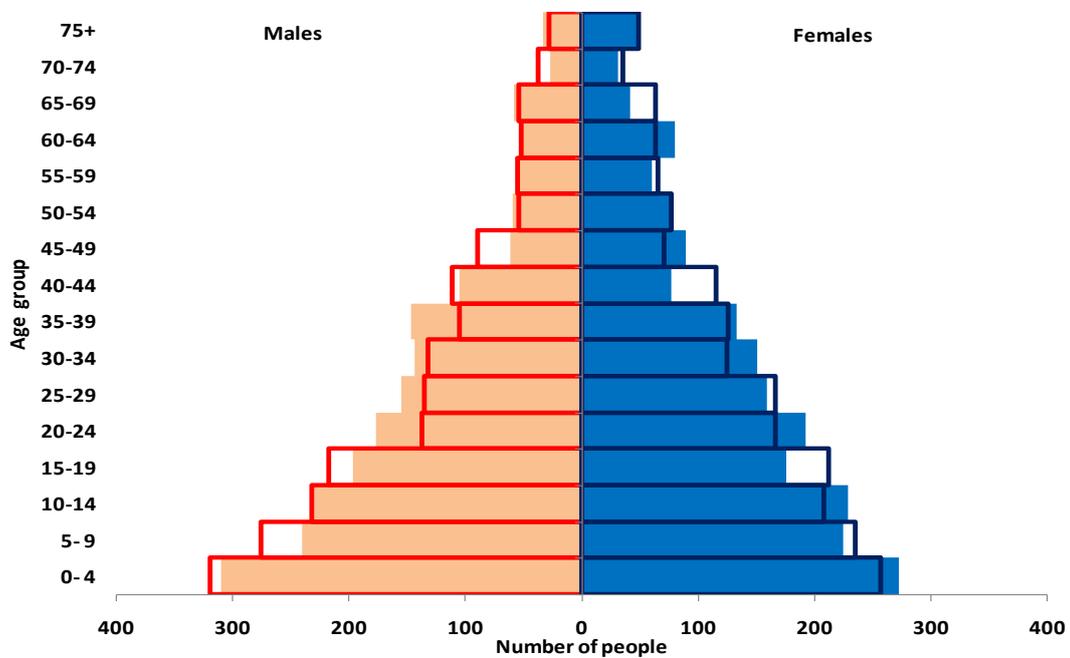
Kolovai

Population trend: 1956–2011



Population pyramid by five-year age group and sex, 2006 and 2011

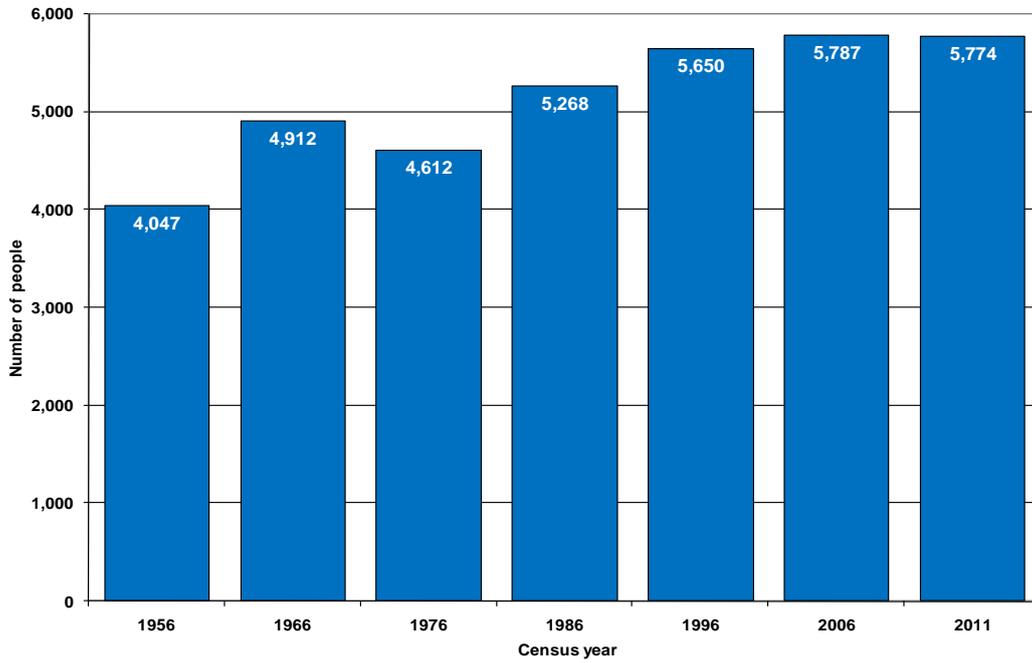
2006 (shaded area), 2011 (outlined)



Kolovai							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	311	273	584	0-4	320	257	577
5-9	240	225	465	5-9	276	235	511
10-14	230	229	459	10-14	232	208	440
15-19	197	176	373	15-19	218	212	430
20-24	177	193	370	20-24	138	167	305
25-29	155	159	314	25-29	135	167	302
30-34	143	151	294	30-34	132	125	257
35-39	147	133	280	35-39	105	126	231
40-44	105	77	182	40-44	111	116	227
45-49	61	90	151	45-49	90	71	161
50-54	59	77	136	50-54	54	77	131
55-59	54	60	114	55-59	55	66	121
60-64	52	80	132	60-64	52	64	116
65-69	58	42	100	65-69	54	64	118
70-74	27	31	58	70-74	37	35	72
75+	33	48	81	75+	28	49	77
Total	2,052	2,044	4,096	Total	2,037	2,039	4,076
Population by broad age groups (in numbers)							
0-14	782	727	1,509	0-14	828	700	1,528
15-24	375	369	744	15-24	356	379	735
25-59	725	747	1,472	25-59	682	748	1,430
25-64	778	827	1,605	25-64	734	812	1,546
60+	170	201	371	60+	171	212	383
65+	118	121	239	65+	119	148	267
Population by broad age groups (in percentages)							
0-14	38	36	37	0-14	41	34	37
15-24	18	18	18	15-24	17	19	18
25-59	35	37	36	25-59	33	37	35
25-64	38	40	39	25-64	36	40	38
60+	8	10	9	60+	8	10	9
65+	6	6	6	65+	6	7	7
Age dependency ratio							
15-59			85	15-59			88
15-64			74	15-64			79
Sex ratio (males per 100 females)							
			100				100
Median age (years)							
Total	21.3	23.1	22.2	Total	19.4	23.2	21.3
Population growth 2006-2011							
Total				Males	-15	-5	-20
Average annual					-3	-1	-4
Percentage difference %					-0.7	-0.2	-0.5
Average annual growth rate					-0.1	0.0	-0.1

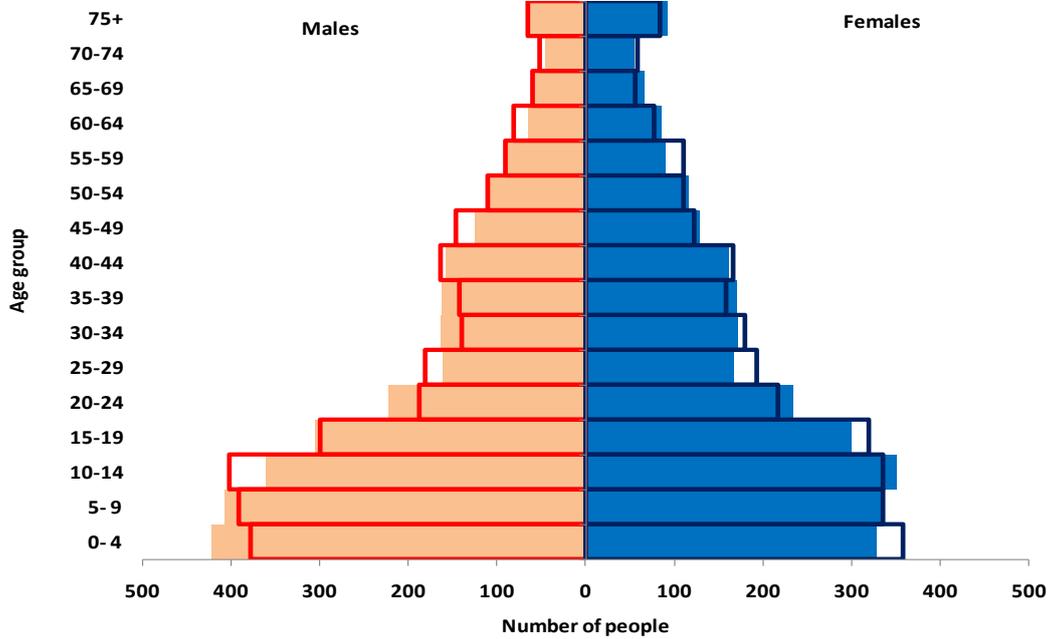
Neiafu

Population trend: 1956–2011



Population pyramid by five-year age group and sex, 2006 and 2011

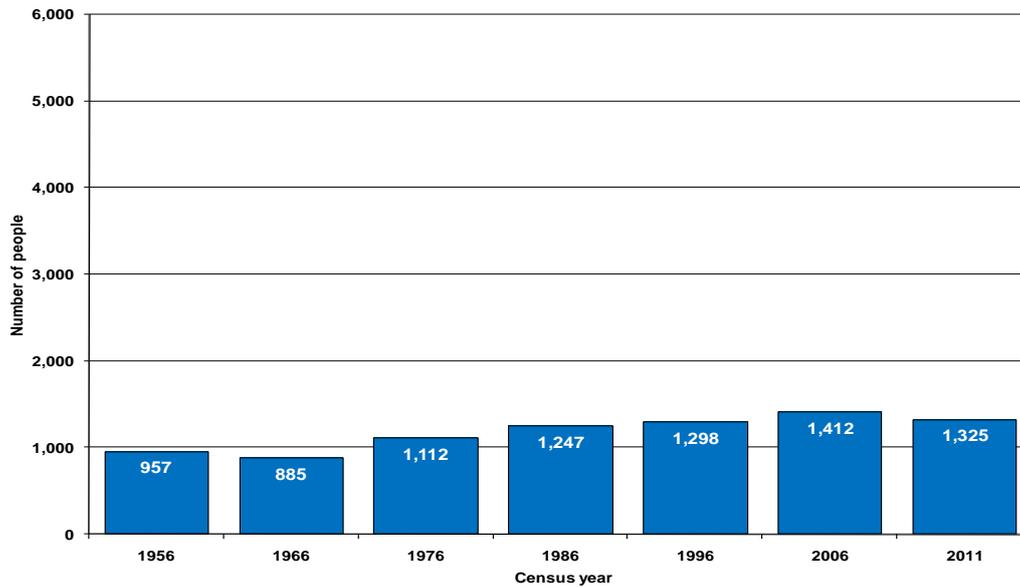
2006 (shaded area), 2011 (outlined)



Neiafu							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	422	329	751	0-4	379	358	737
5-9	408	337	745	5-9	392	335	727
10-14	361	351	712	10-14	402	335	737
15-19	305	300	605	15-19	300	319	619
20-24	222	234	456	20-24	188	217	405
25-29	161	168	329	25-29	181	193	374
30-34	164	172	336	30-34	140	180	320
35-39	163	170	333	35-39	142	159	301
40-44	159	161	320	40-44	164	166	330
45-49	125	129	254	45-49	146	122	268
50-54	109	116	225	50-54	110	111	221
55-59	91	91	182	55-59	91	110	201
60-64	65	85	150	60-64	81	77	158
65-69	62	67	129	65-69	60	56	116
70-74	46	54	100	70-74	52	59	111
75+	66	92	158	75+	65	84	149
Total	2,929	2,858	5,787	Total	2,893	2,881	5,774
Population by broad age groups (in numbers)							
0-14	1,191	1,018	2,209	0-14	1,173	1,028	2,201
15-24	527	534	1,061	15-24	488	536	1,024
25-59	972	1,008	1,980	25-59	974	1,041	2,015
25-64	1,037	1,093	2,130	25-64	1,055	1,118	2,173
60+	239	298	537	60+	258	276	534
65+	174	213	387	65+	177	199	376
Population by broad age groups (in percentages)							
0-14	41	36	38	0-14	41	36	38
15-24	18	19	18	15-24	17	19	18
25-59	33	35	34	25-59	34	36	35
25-64	35	38	37	25-64	36	39	38
60+	8	10	9	60+	9	10	9
65+	6	7	7	65+	6	7	7
Age dependency ratio							
15-59			90	15-59			90
15-64			81	15-64			81
Sex ratio (males per 100 females)							
			102				100
Median age (years)							
Total	19.5	22.4	20.9	Total	19.6	22.2	20.8
Population growth 2006-2011							
Total				Males	-36	23	-13
Average annual					-7	5	-3
Percentage difference %					-1.2	0.8	-0.2
Average annual growth rate					-0.2	0.2	0.0

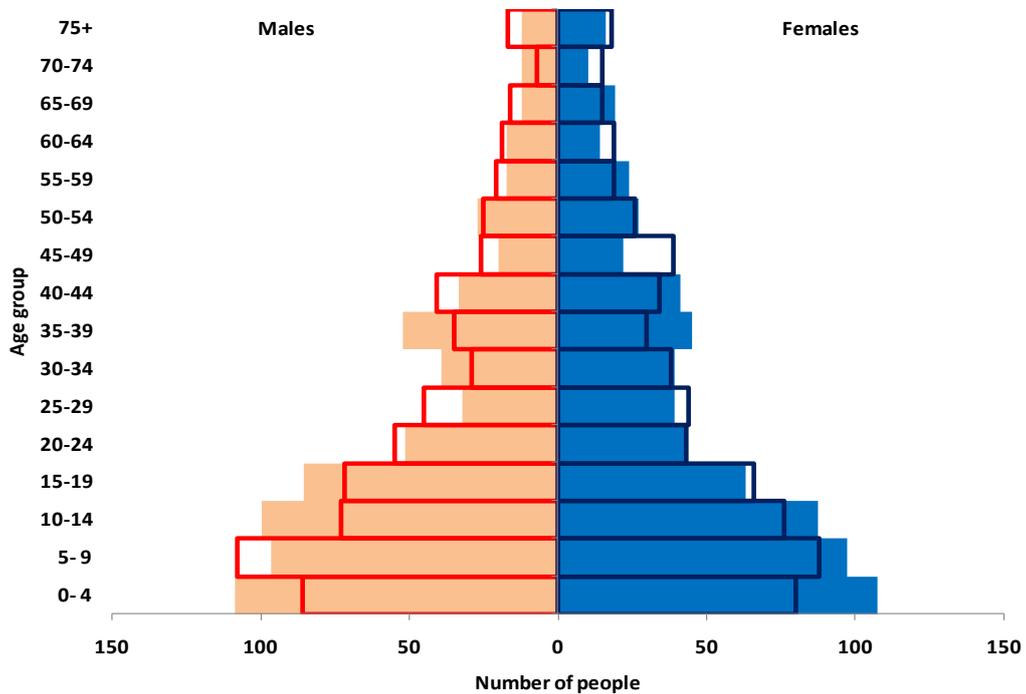
Pangaimotu

Population trend: 2006–2011



Population pyramid by five-year age group and sex, 2006 and 2011

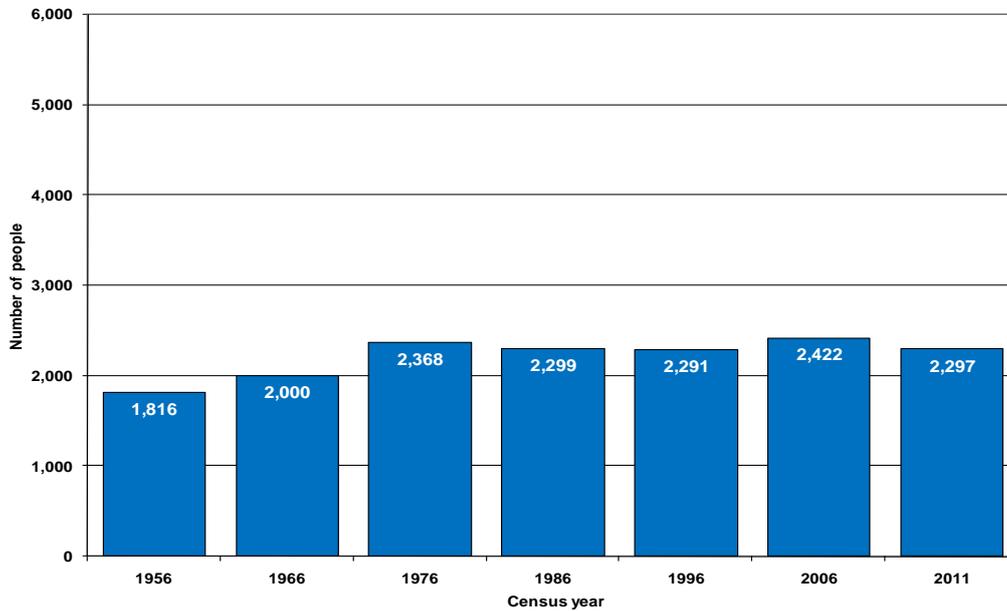
2006 (shaded area), 2011 (outlined)



Pangaimotu							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	109	108	216	0-4	86	80	166
5-9	97	98	194	5-9	108	88	196
10-14	100	88	187	10-14	73	76	149
15-19	85	63	149	15-19	72	66	138
20-24	51	42	94	20-24	55	43	98
25-29	32	39	71	25-29	45	44	89
30-34	39	39	78	30-34	29	38	67
35-39	52	45	98	35-39	35	30	65
40-44	33	41	74	40-44	41	34	75
45-49	20	22	42	45-49	26	39	65
50-54	27	27	54	50-54	25	26	51
55-59	17	24	41	55-59	21	19	40
60-64	17	14	31	60-64	19	19	38
65-69	12	19	31	65-69	16	15	31
70-74	12	10	22	70-74	7	15	22
75+	12	16	28	75+	17	18	35
Total	716	696	1,412	Total	675	650	1,325
Population by broad age groups (in numbers)							
0-14	305	293	597	0-14	267	244	511
15-24	137	106	242	15-24	127	109	236
25-59	221	238	460	25-59	222	230	452
25-64	238	252	491	25-64	241	249	490
60+	53	59	113	60+	59	67	126
65+	36	45	81	65+	40	48	88
Population by broad age groups (in percentages)							
0-14	43	42	42	0-14	40	38	39
15-24	19	15	17	15-24	19	17	18
25-59	31	34	33	25-59	33	35	34
25-64	33	36	35	25-64	36	38	37
60+	7	9	8	60+	9	10	10
65+	5	7	6	65+	6	7	7
Age dependency ratio							
15-59			101	15-59			93
15-64			93	15-64			83
Sex ratio (males per 100 females)							
			103				104
Median age (years)							
Total	18.1	19.4	18.7	Total	19.9	21.8	20.7
Population growth 2006-2011							
				Males	Females		Total
Total				-41	-46		-87
Average annual				-8	-9		-17
Percentage difference %				-5.7	-6.6		-6.2
Average annual growth rate				-1.2	-1.4		-1.3

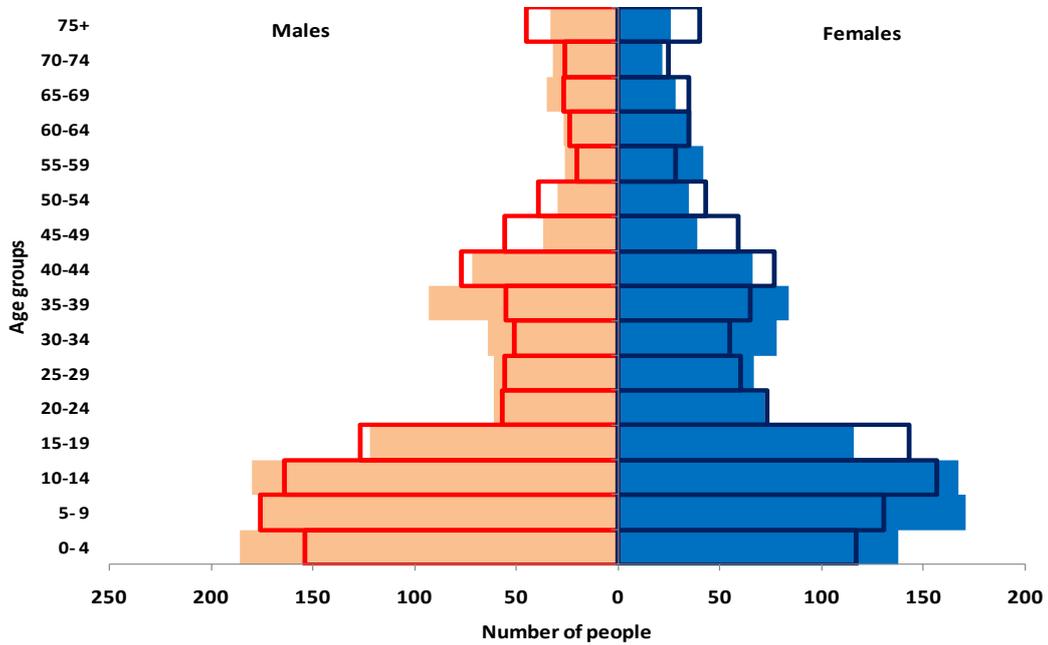
Hahake

Population trend: 1956–2011



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

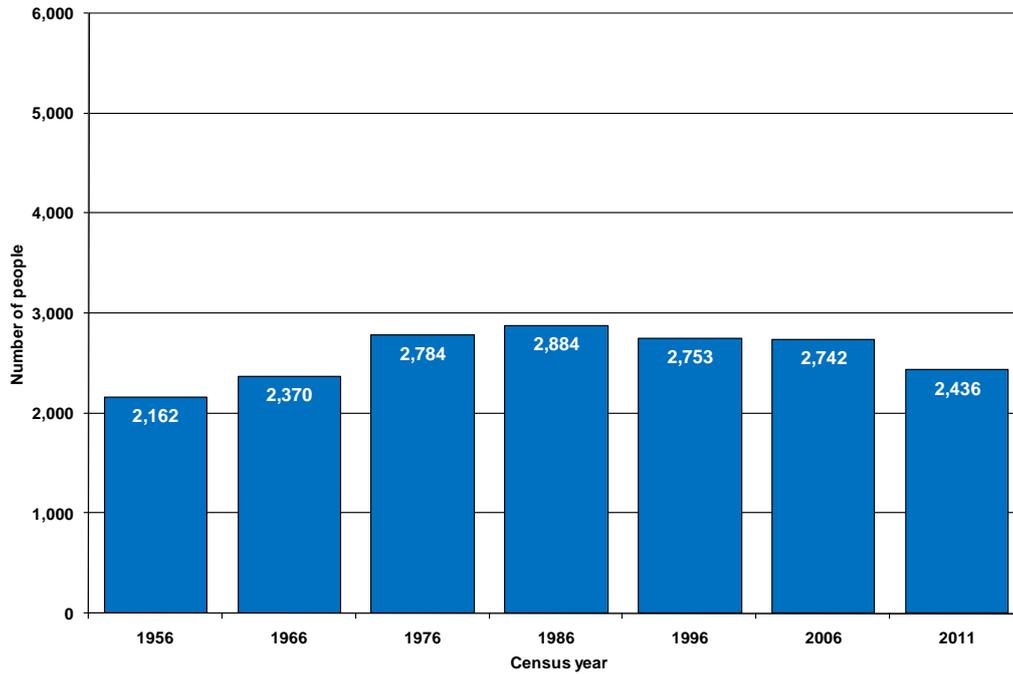
2006 (shaded area), 2011 (outlined)



Hahake							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	186	138	324	0-4	154	117	271
5-9	175	171	346	5-9	176	131	307
10-14	180	167	347	10-14	164	157	321
15-19	122	116	238	15-19	127	143	270
20-24	61	72	133	20-24	57	73	130
25-29	61	67	128	25-29	56	60	116
30-34	64	78	142	30-34	51	55	106
35-39	93	84	177	35-39	55	65	120
40-44	72	66	138	40-44	77	77	154
45-49	37	39	76	45-49	56	59	115
50-54	30	35	65	50-54	39	43	82
55-59	26	42	68	55-59	20	28	48
60-64	27	36	63	60-64	24	35	59
65-69	35	28	63	65-69	27	35	62
70-74	32	22	54	70-74	26	25	51
75+	33	26	59	75+	45	40	85
Total	1,234	1,188	2,422	Total	1,154	1,143	2,297
Population by broad age groups (in numbers)							
0-14	541	476	1,017	0-14	494	405	899
15-24	183	188	371	15-24	184	216	400
25-59	383	411	794	25-59	354	387	741
25-64	410	447	857	25-64	378	422	800
60+	127	112	239	60+	122	135	257
65+	100	76	176	65+	98	100	198
Population by broad age groups (in percentages)							
0-14	44	40	42	0-14	43	35	39
15-24	15	16	15	15-24	16	19	17
25-59	31	35	33	25-59	31	34	32
25-64	33	38	35	25-64	33	37	35
60+	10	9	10	60+	11	12	11
65+	8	6	7	65+	8	9	9
Age dependency ratio							
15-59			108	15-59			101
15-64			97	15-64			91
Sex ratio (males per 100 females)							
			104				101
Median age (years)							
Total	18.1	20.1	19.1	Total	18.3	21.6	19.6
Population growth 2006-2011							
				Males	Females		Total
Total				-80	-45		-125
Average annual				-16	-9		-25
Percentage difference %				-6.5	-3.8		-5.2
Average annual growth rate				-1.3	-0.8		-1.1

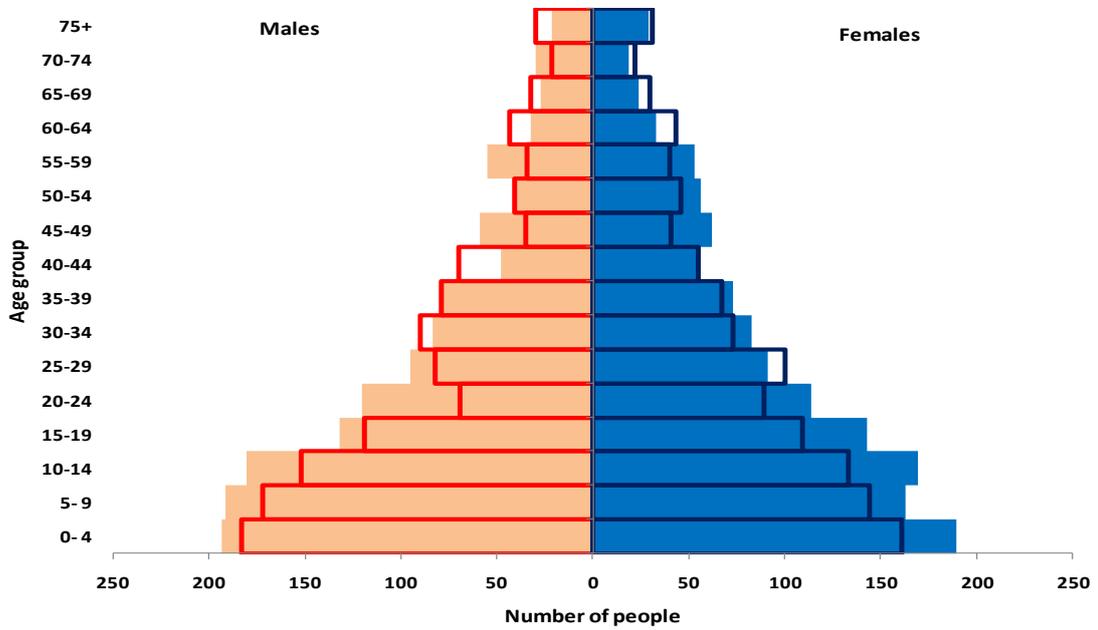
Leimatu'a

Population trend: 1956–2011



Population pyramid by five-year age group and sex, 2006 and 2011

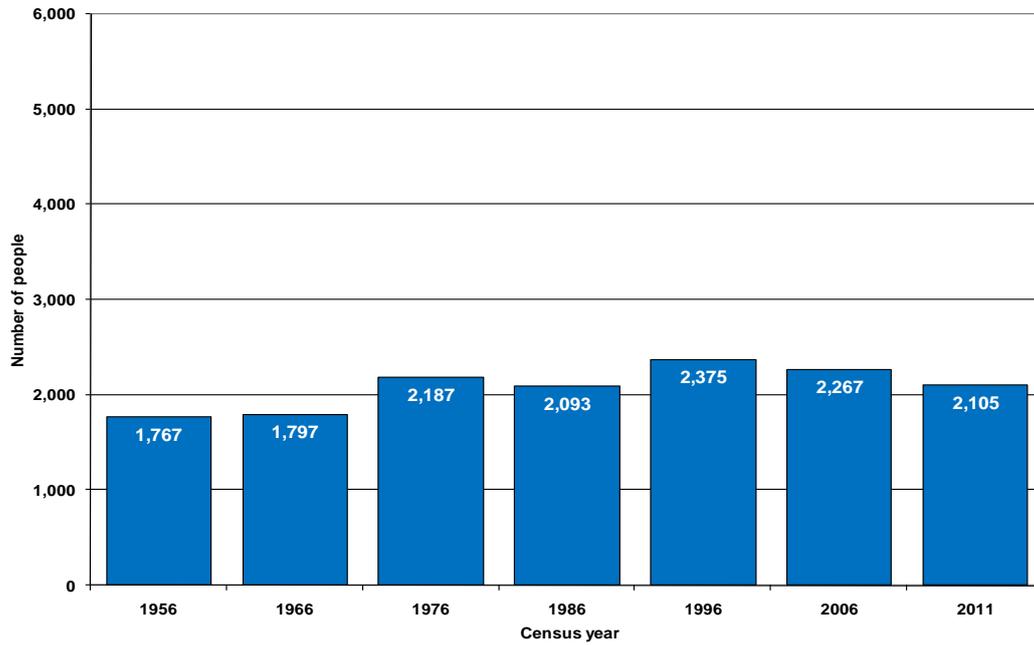
2006 (shaded area), 2011 (outlined)



Leimatu'a							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	193	189	382	0-4	183	161	344
5-9	191	163	354	5-9	172	144	316
10-14	180	169	349	10-14	152	133	285
15-19	132	143	275	15-19	119	109	228
20-24	120	114	234	20-24	69	89	158
25-29	95	91	186	25-29	82	100	182
30-34	83	83	166	30-34	90	73	163
35-39	80	73	153	35-39	79	67	146
40-44	48	54	102	40-44	70	55	125
45-49	59	62	121	45-49	35	41	76
50-54	40	56	96	50-54	41	46	87
55-59	55	53	108	55-59	34	40	74
60-64	32	33	65	60-64	43	43	86
65-69	27	24	51	65-69	32	30	62
70-74	30	19	49	70-74	21	22	43
75+	21	29	50	75+	30	31	61
Total	1,387	1,355	2,742	Total	1,252	1,184	2,436
Population by broad age groups (in numbers)							
0-14	564	521	1,085	0-14	507	438	945
15-24	252	257	509	15-24	188	198	386
25-59	460	472	932	25-59	431	422	853
25-64	492	505	997	25-64	474	465	939
60+	110	105	215	60+	126	126	252
65+	78	72	150	65+	83	83	166
Population by broad age groups (in percentages)							
0-14	41	38	40	0-14	40	37	39
15-24	18	19	19	15-24	15	17	16
25-59	33	35	34	25-59	34	36	35
25-64	35	37	36	25-64	38	39	39
60+	8	8	8	60+	10	11	10
65+	6	5	5	65+	7	7	7
Age dependency ratio							
15-59			90	15-59			97
15-64			82	15-64			84
Sex ratio (males per 100 females)							
			102				106
Median age (years)							
Total	19.9	20.6	20.2	Total	20.0	22.6	21.4
Population growth 2006-2011							
Total				Males	-135	-171	-306
Average annual					-27	-34	-61
Percentage difference %					-9.7	-12.6	-11.2
Average annual growth rate					-2.0	-2.7	-2.4

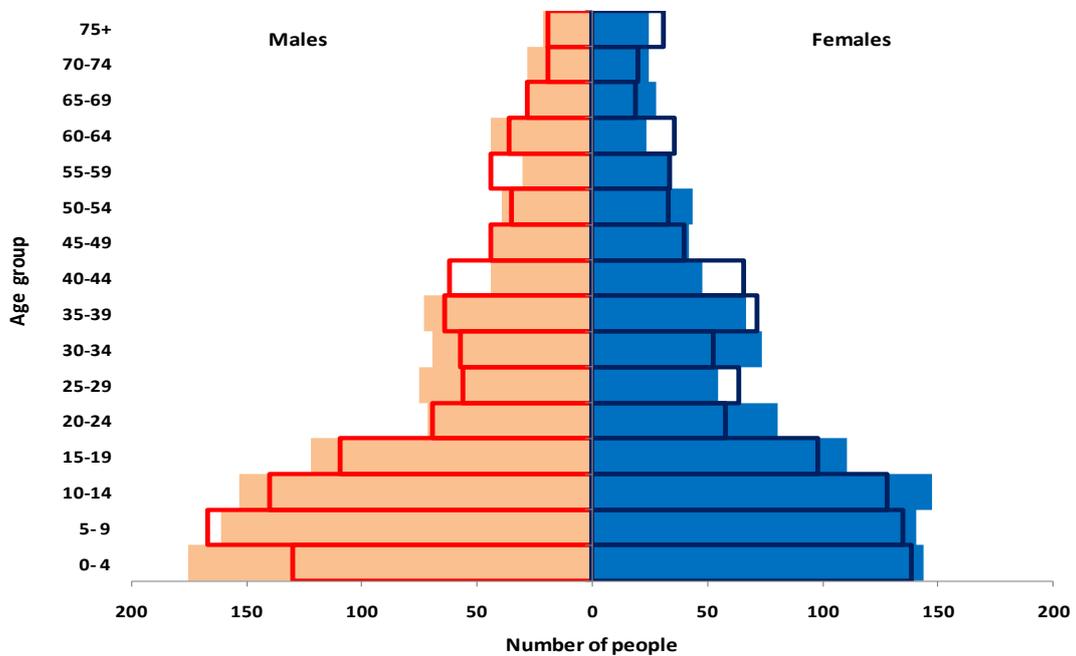
Hihifo

Population trend: 2006–2011



Population pyramid by five-year age group and sex, 2006 and 2011

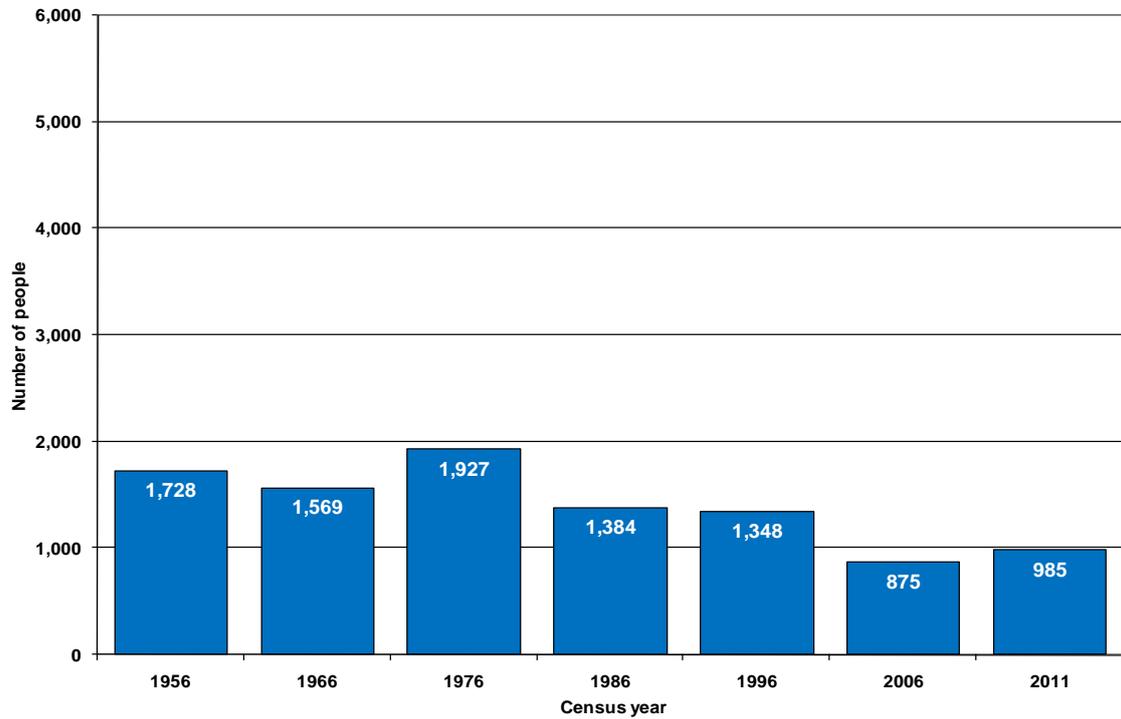
2006 (shaded area), 2011 (outlined)



Hihifo							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	175	144	319	0-4	130	139	269
5-9	161	141	302	5-9	167	135	302
10-14	153	148	301	10-14	140	128	268
15-19	122	111	233	15-19	109	98	207
20-24	71	81	152	20-24	69	58	127
25-29	75	55	130	25-29	56	64	120
30-34	69	74	143	30-34	57	53	110
35-39	73	67	140	35-39	64	72	136
40-44	44	48	92	40-44	62	66	128
45-49	43	42	85	45-49	44	40	84
50-54	39	44	83	50-54	35	33	68
55-59	30	35	65	55-59	44	34	78
60-64	44	24	68	60-64	36	36	72
65-69	27	28	55	65-69	28	19	47
70-74	28	25	53	70-74	19	20	39
75+	21	25	46	75+	19	31	50
Total	1,175	1,092	2,267	Total	1,079	1,026	2,105
Population by broad age groups (in numbers)							
0-14	489	433	922	0-14	437	402	839
15-24	193	192	385	15-24	178	156	334
25-59	373	365	738	25-59	362	362	724
25-64	417	389	806	25-64	398	398	796
60+	120	102	222	60+	102	106	208
65+	76	78	154	65+	66	70	136
Population by broad age groups (in percentages)							
0-14	42	40	41	0-14	41	39	40
15-24	16	18	17	15-24	16	15	16
25-59	32	33	33	25-59	34	35	34
25-64	35	36	36	25-64	37	39	38
60+	10	9	10	60+	9	10	10
65+	6	7	7	65+	6	7	6
Age dependency ratio							
15-59			102	15-59			99
15-64			90	15-64			86
Sex ratio (males per 100 females)							
			108				105
Median age (years)							
Total	19.1	20.2	19.5	Total	19.7	21.2	20.3
Population growth 2006-2011							
				Males	Females		Total
Total				-96	-66		-162
Average annual				-19	-13		-32
Percentage difference %				-8.2	-6.0		-7.1
Average annual growth rate				-1.7	-1.2		-1.5

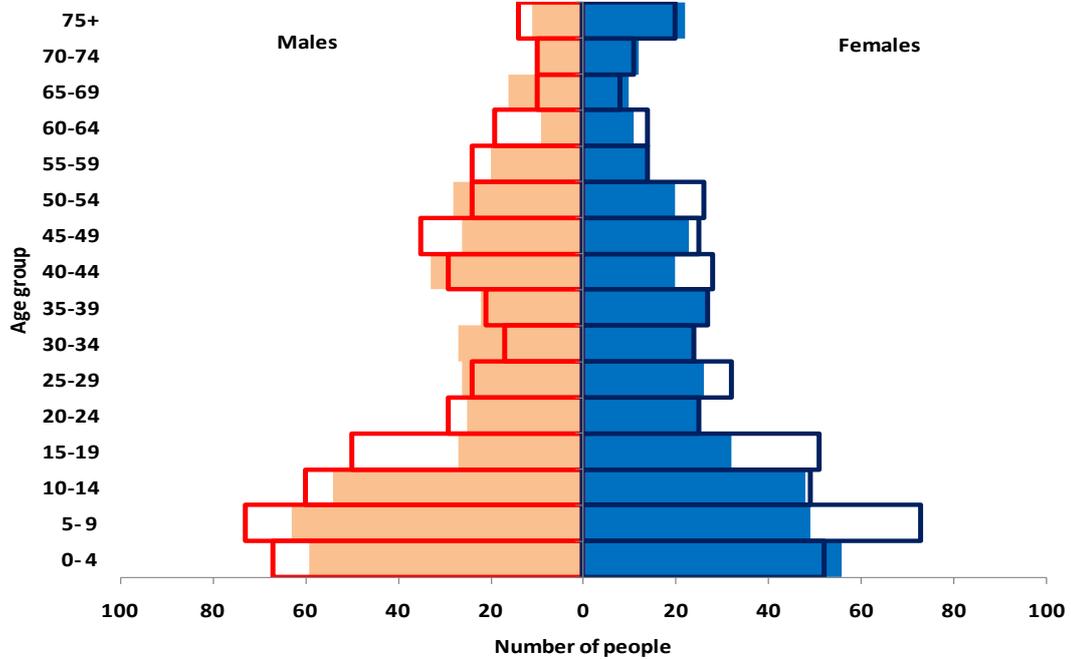
Motu

Population trend: 2006–2011



Population pyramid by five-year age group and sex, 2006 and 2011

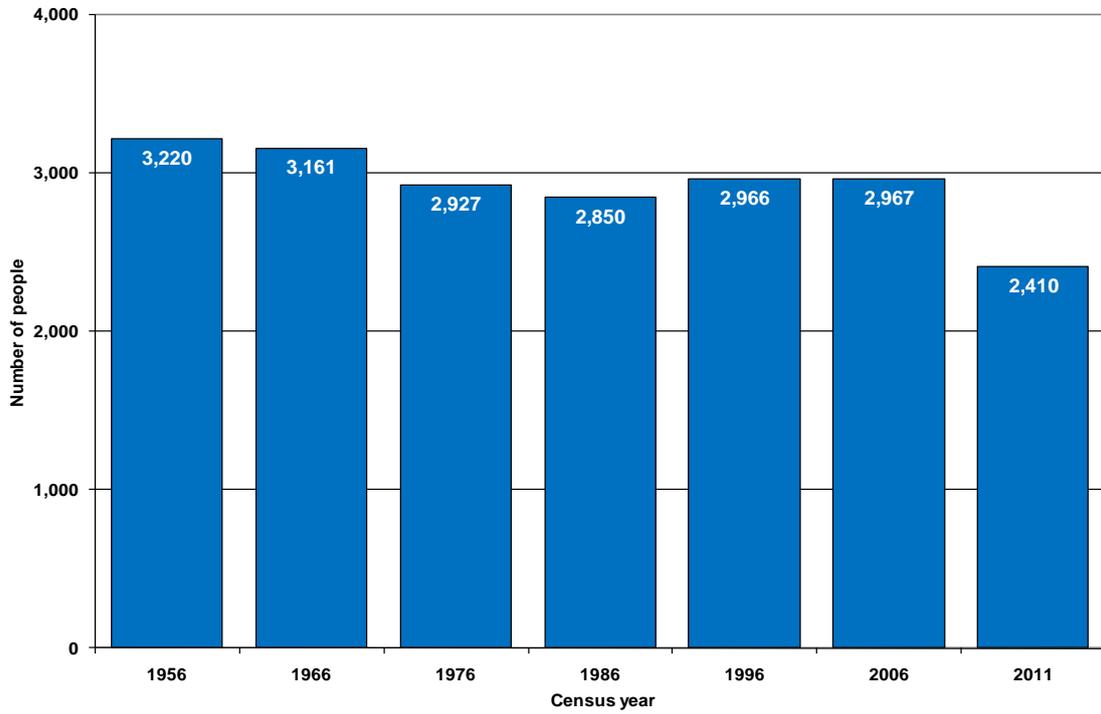
2006 (shaded area), 2011 (outlined)



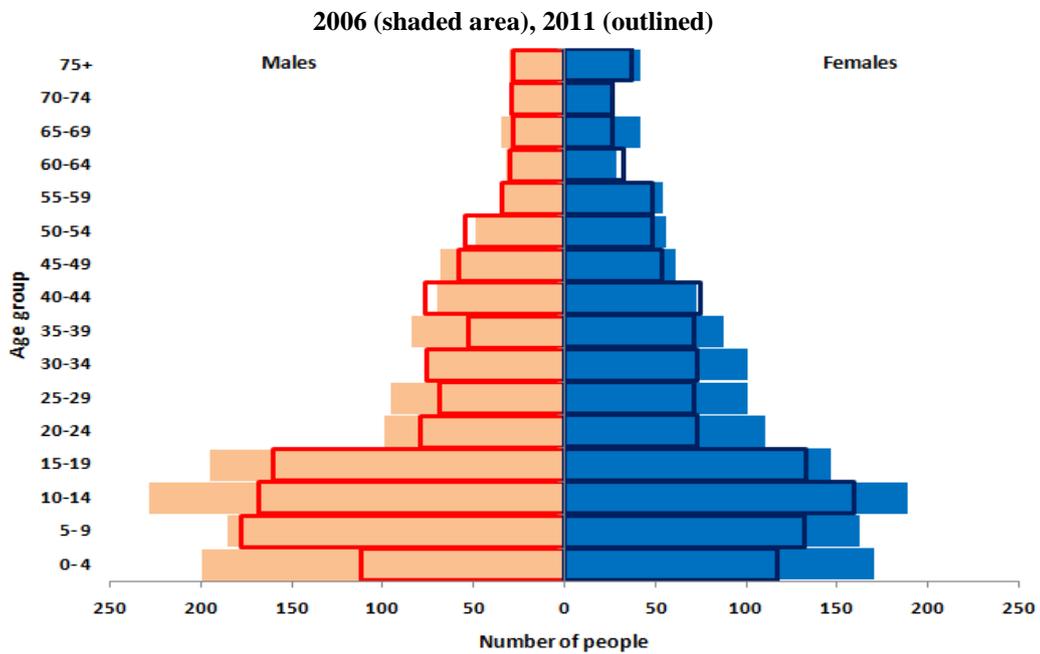
Motu							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	59	56	115	0-4	67	52	119
5-9	63	49	112	5-9	73	73	146
10-14	54	48	102	10-14	60	49	109
15-19	27	32	59	15-19	50	51	101
20-24	25	25	50	20-24	29	25	54
25-29	26	26	52	25-29	24	32	56
30-34	27	24	51	30-34	17	24	41
35-39	22	27	49	35-39	21	27	48
40-44	33	20	53	40-44	29	28	57
45-49	26	23	49	45-49	35	25	60
50-54	28	20	48	50-54	24	26	50
55-59	20	14	34	55-59	24	14	38
60-64	9	11	20	60-64	19	14	33
65-69	16	10	26	65-69	10	8	18
70-74	10	12	22	70-74	10	11	21
75+	11	22	33	75+	14	20	34
Total	456	419	875	Total	506	479	985
Population by broad age groups (in numbers)							
0-14	176	153	329	0-14	200	174	374
15-24	52	57	109	15-24	79	76	155
25-59	182	154	336	25-59	174	176	350
25-64	191	165	356	25-64	193	190	383
60+	46	55	101	60+	53	53	106
65+	37	44	81	65+	34	39	73
Population by broad age groups (in percentages)							
0-14	39	37	38	0-14	40	36	38
15-24	11	14	12	15-24	16	16	16
25-59	40	37	38	25-59	34	37	36
25-64	42	39	41	25-64	38	40	39
60+	10	13	12	60+	10	11	11
65+	8	11	9	65+	7	8	7
Age dependency ratio							
15-59			97	15-59			95
15-64			88	15-64			83
Sex ratio (males per 100 females)							
			109				106
Median age (years)							
Total	25.1	25.0	25.0	Total	20.6	23.0	21.7
Population growth 2006-2011							
				Males	Females		Total
Total				50	60		110
Average annual				10	12		22
Percentage difference %				11.0	14.3		12.6
Average annual growth rate				2.1	2.7		2.4

Pangai Hp

Population trend: 1956–2011



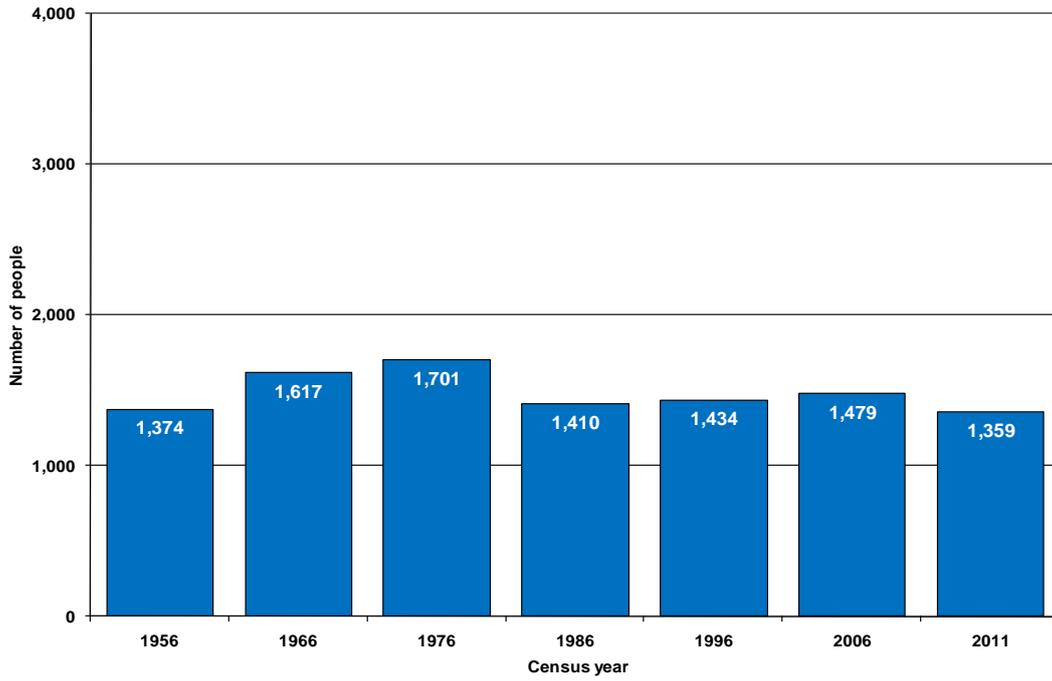
Population pyramid by five-year age group and sex, 2006 and 2011



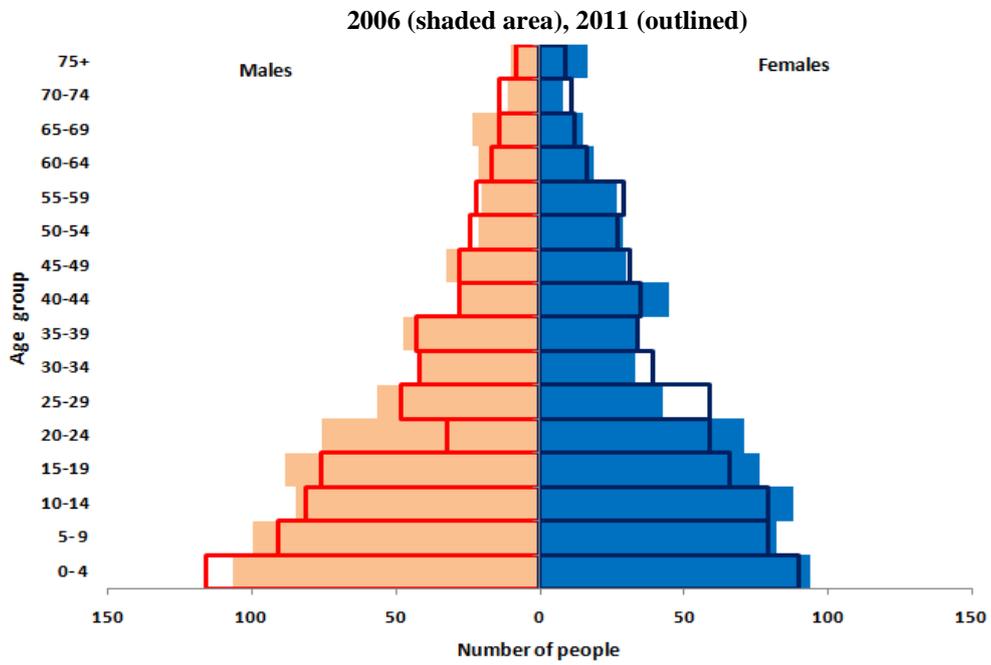
Pangai Hp							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	200	171	371	0-4	112	117	229
5-9	186	163	349	5-9	178	132	310
10-14	229	189	418	10-14	168	159	327
15-19	195	147	342	15-19	160	133	293
20-24	99	111	210	20-24	79	73	152
25-29	96	101	197	25-29	69	71	140
30-34	75	101	176	30-34	76	73	149
35-39	84	88	172	35-39	53	71	124
40-44	70	73	143	40-44	77	75	152
45-49	68	61	129	45-49	58	54	112
50-54	49	56	105	50-54	55	48	103
55-59	34	54	88	55-59	34	48	82
60-64	32	29	61	60-64	30	33	63
65-69	35	42	77	65-69	28	26	54
70-74	30	27	57	70-74	29	26	55
75+	30	42	72	75+	28	37	65
Total	1,512	1,455	2,967	Total	1,234	1,176	2,410
Population by broad age groups (in numbers)							
0-14	615	523	1,138	0-14	458	408	866
15-24	294	258	552	15-24	239	206	445
25-59	476	534	1,010	25-59	422	440	862
25-64	508	563	1,071	25-64	452	473	925
60+	127	140	267	60+	115	122	237
65+	95	111	206	65+	85	89	174
Population by broad age groups (in percentages)							
0-14	41	36	38	0-14	37	35	36
15-24	19	18	19	15-24	19	18	18
25-59	31	37	34	25-59	34	37	36
25-64	34	39	36	25-64	37	40	38
60+	8	10	9	60+	9	10	10
65+	6	8	7	65+	7	8	7
Age dependency ratio							
15-59			90	15-59			84
15-64			83	15-64			76
Sex ratio (males per 100 females)							
			104				105
Median age (years)							
Total	18.6	22.6	20.1	Total	20.0	23.3	21.5
Population growth 2006-2011							
Total				Males	-278	-279	-557
Average annual				Females	-56	-56	-111
Percentage difference %				Total	-18.4	-19.2	-18.8
Average annual growth rate					-4.1	-4.3	-4.2

Foa

Population trend: 1956–2011



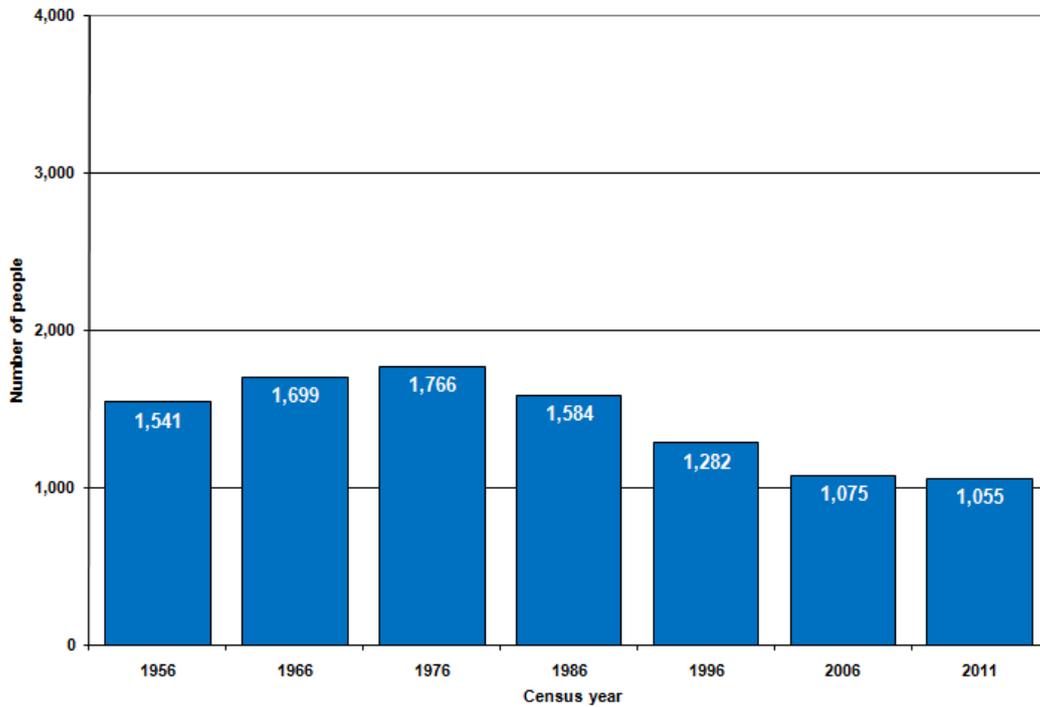
Population pyramid by five-year age group and sex, 2006 and 2011



Foa							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	106	94	201	0-4	116	90	206
5-9	99	82	181	5-9	91	79	170
10-14	84	88	172	10-14	81	79	160
15-19	88	76	164	15-19	76	66	142
20-24	75	71	146	20-24	32	59	91
25-29	56	43	99	25-29	48	59	107
30-34	42	33	75	30-34	42	39	81
35-39	47	35	82	35-39	43	34	77
40-44	28	45	73	40-44	28	35	63
45-49	32	30	62	45-49	28	31	59
50-54	21	29	50	50-54	24	27	51
55-59	20	27	47	55-59	22	29	51
60-64	21	19	40	60-64	17	16	33
65-69	23	15	38	65-69	14	12	26
70-74	11	8	19	70-74	14	11	25
75+	10	17	27	75+	8	9	17
Total	765	714	1,479	Total	684	675	1,359
Population by broad age groups (in numbers)							
0-14	290	265	554	0-14	288	248	536
15-24	163	147	311	15-24	108	125	233
25-59	247	243	489	25-59	235	254	489
25-64	268	262	529	25-64	252	270	522
60+	65	59	124	60+	53	48	101
65+	44	40	84	65+	36	32	68
Population by broad age groups (in percentages)							
0-14	38	37	37	0-14	42	37	39
15-24	21	21	21	15-24	16	19	17
25-59	32	34	33	25-59	34	38	36
25-64	35	37	36	25-64	37	40	38
60+	9	8	8	60+	8	7	7
65+	6	6	6	65+	5	5	5
Age dependency ratio							
15-59			85	15-59			88
15-64			76	15-64			80
Sex ratio (males per 100 females)							
			107				101
Median age (years)							
Total	20.3	21.2	20.7	Total	18.6	22.0	20.1
Population growth 2006-2011							
Total				Males	-81	Females	-39
Average annual					-16		-8
Percentage difference %					-10.6		-5.5
Average annual growth rate					-2.2		-1.1

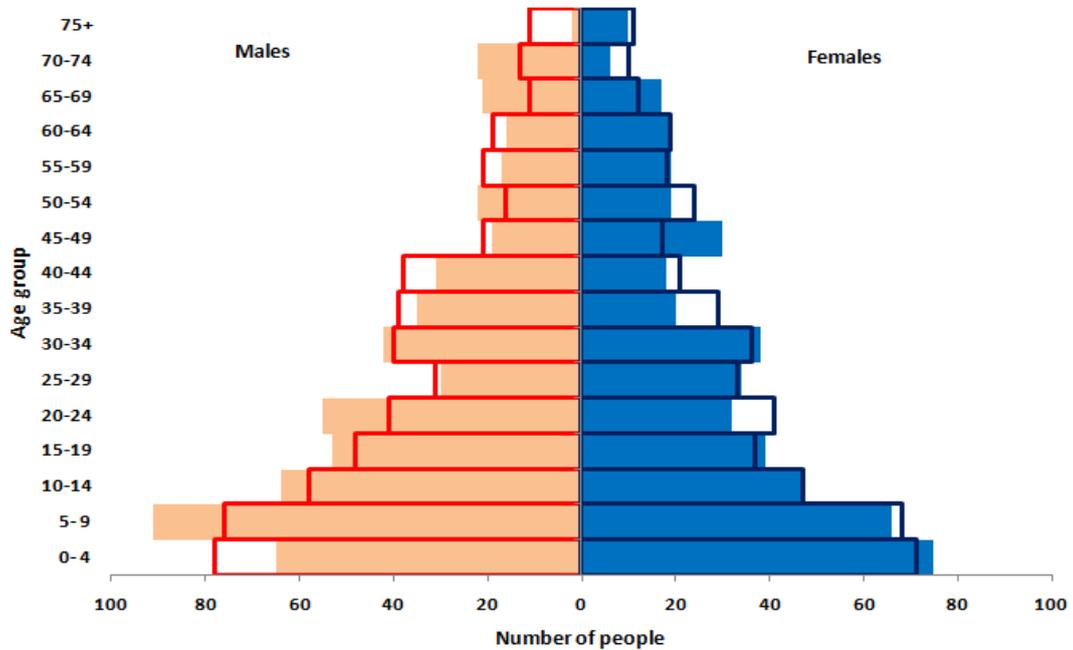
Lulunga

Population trend: 1956–2011



Population pyramid by five-year age group and sex, 2006 and 2011

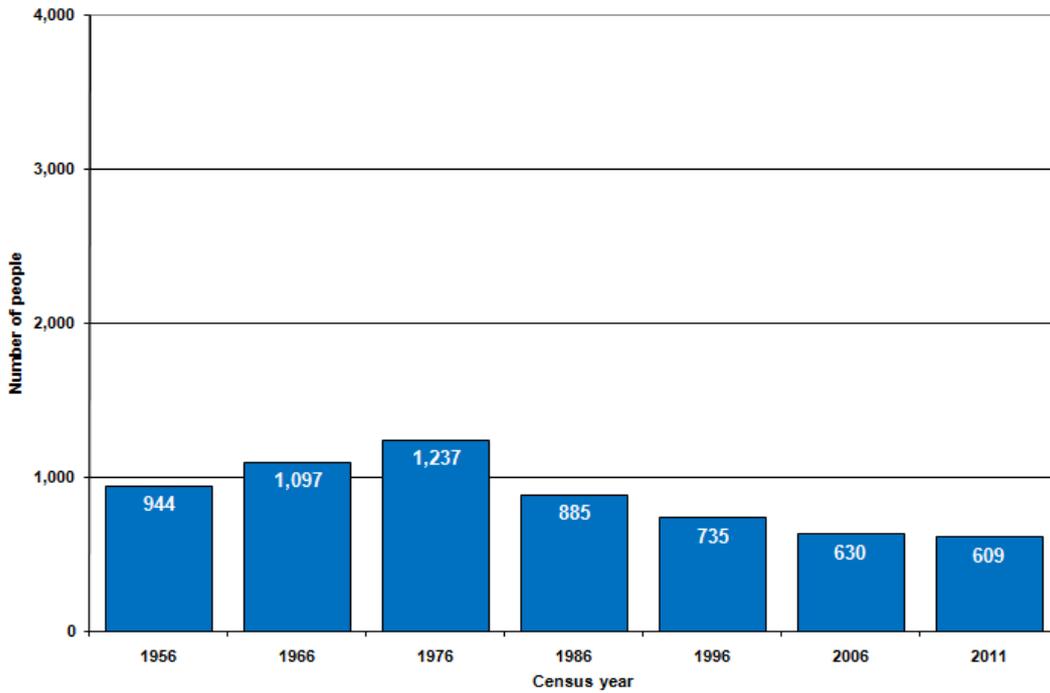
2006 (shaded area), 2011 (outlined)



Lulunga							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	65	75	140	0-4	78	71	149
5-9	91	66	157	5-9	76	68	144
10-14	64	47	111	10-14	58	47	105
15-19	53	39	92	15-19	48	37	85
20-24	55	32	87	20-24	41	41	82
25-29	30	34	64	25-29	31	33	64
30-34	42	38	80	30-34	40	36	76
35-39	35	20	55	35-39	39	29	68
40-44	31	18	49	40-44	38	21	59
45-49	19	30	49	45-49	21	17	38
50-54	22	19	41	50-54	16	24	40
55-59	17	19	36	55-59	21	18	39
60-64	16	19	35	60-64	19	19	38
65-69	21	17	38	65-69	11	12	23
70-74	22	6	28	70-74	13	10	23
75+	2	10	12	75+	11	11	22
Total	586	489	1,075	Total	561	494	1,055
Population by broad age groups (in numbers)							
0-14	220	188	408	0-14	212	186	398
15-24	108	71	179	15-24	89	78	167
25-59	196	178	374	25-59	206	178	384
25-64	212	197	409	25-64	225	197	422
60+	61	52	113	60+	54	52	106
65+	45	33	78	65+	35	33	68
Population by broad age groups (in percentages)							
0-14	38	38	38	0-14	38	38	38
15-24	18	15	17	15-24	16	16	16
25-59	34	36	35	25-59	37	36	36
25-64	36	40	38	25-64	40	40	40
60+	10	11	11	60+	10	11	10
65+	8	7	7	65+	6	7	6
Age dependency ratio							
15-59			94	15-59			91
15-64			83	15-64			79
Sex ratio (males per 100 females)							
			120				114
Median age (years)							
Total	21.8	22.8	22.2	Total	22.6	23.0	22.7
Population growth 2006-2011							
Total				Males	-25	Females	5
Average annual					-2		1
Percentage difference %					-4.3		1.0
Average annual growth rate					-0.9		0.2
							-20
							-4
							-1.9
							-0.4

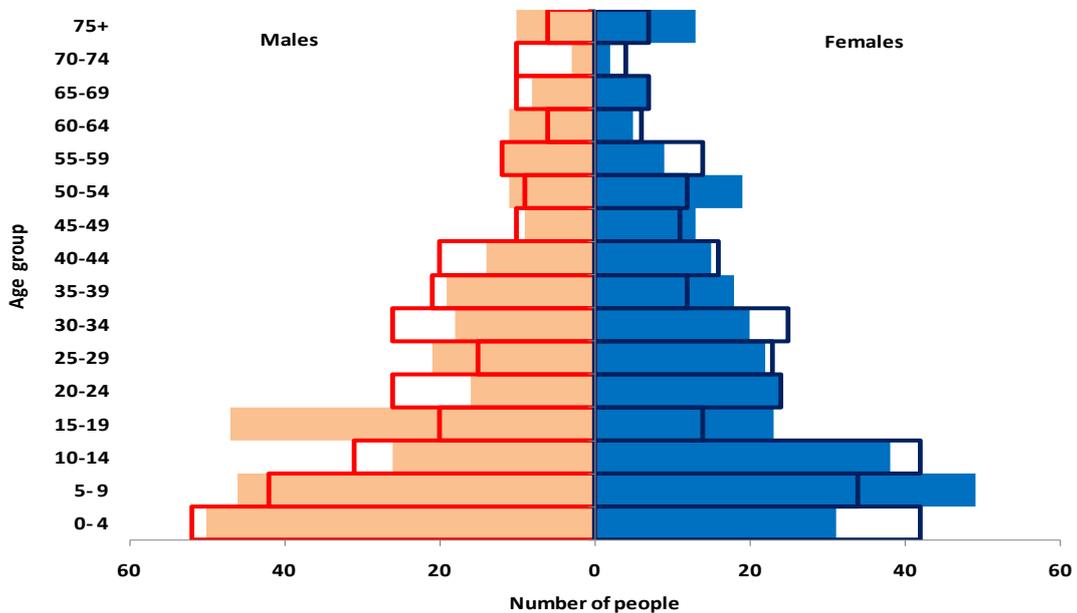
Mu'omu'a

Population trend: 1956–2011



Population pyramid by five-year age group and sex, 2006 and 2011

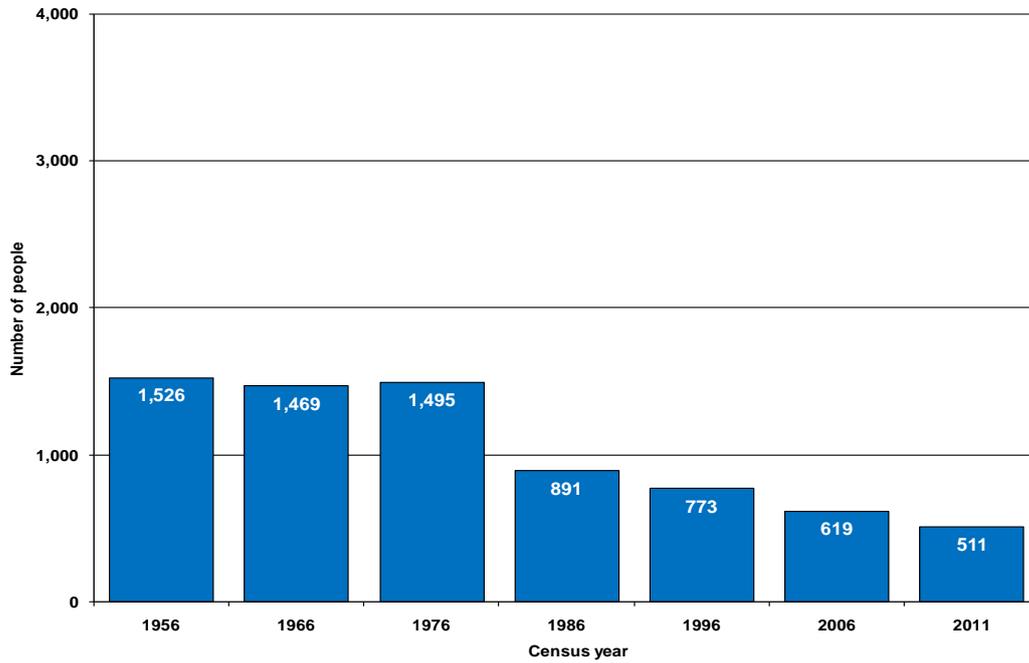
2006 (shaded area), 2011 (outlined)



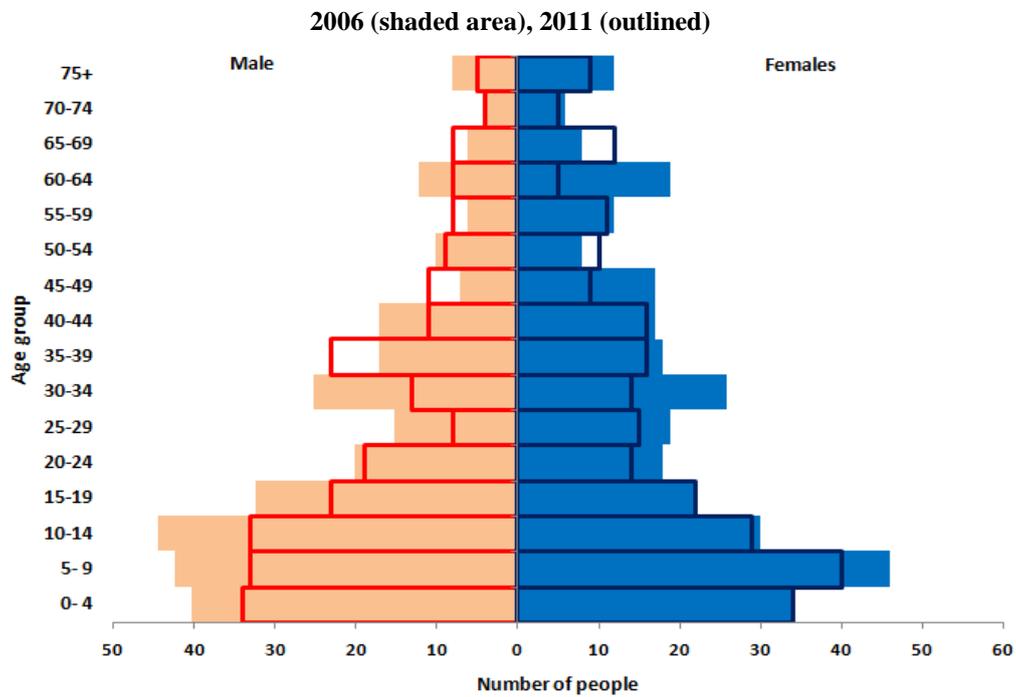
Mu'omu'a							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	50	31	81	0-4	52	42	94
5-9	46	49	95	5-9	42	34	76
10-14	26	38	64	10-14	31	42	73
15-19	47	23	70	15-19	20	14	34
20-24	16	24	40	20-24	26	24	50
25-29	21	22	43	25-29	15	23	38
30-34	18	20	38	30-34	26	25	51
35-39	19	18	37	35-39	21	12	33
40-44	14	15	29	40-44	20	16	36
45-49	9	13	22	45-49	10	11	21
50-54	11	19	30	50-54	9	12	21
55-59	12	9	21	55-59	12	14	26
60-64	11	5	16	60-64	6	6	12
65-69	8	7	15	65-69	10	7	17
70-74	3	2	5	70-74	10	4	14
75+	10	13	23	75+	6	7	13
Total	321	309	630	Total	316	293	609
Population by broad age groups (in numbers)							
0-14	122	118	240	0-14	125	118	243
15-24	63	47	110	15-24	46	38	84
25-59	104	116	220	25-59	113	113	226
25-64	115	121	236	25-64	119	119	238
60+	32	27	59	60+	32	24	56
65+	21	22	43	65+	26	18	44
Population by broad age groups (in percentages)							
0-14	38	38	38	0-14	40	40	40
15-24	20	15	17	15-24	15	13	14
25-59	32	38	35	25-59	36	39	37
25-64	36	39	38	25-64	38	41	39
60+	10	9	9	60+	10	8	9
65+	7	7	7	65+	8	6	7
Age dependency ratio							
15-59			91	15-59			96
15-64			82	15-64			89
Sex ratio (males per 100 females)							
			104				108
Median age (years)							
Total	19.1	22.8	20.6	Total	22.6	23.1	22.8
Population growth 2006-2011							
Total				Males	-5	Females	-16
Average annual					-1		-3
Percentage difference %					-1.6		-5.2
Average annual growth rate					-0.3		-1.1

Ha'ano

Population trend: 1956–2011



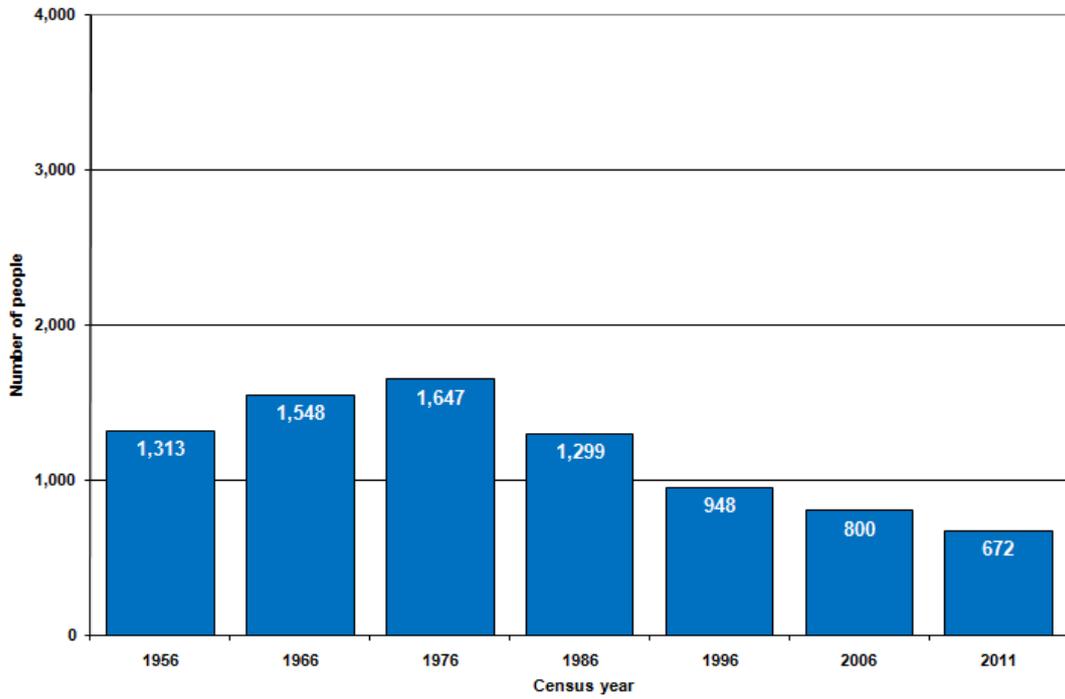
Population pyramid by five-year age group and sex, 2006 and 2011



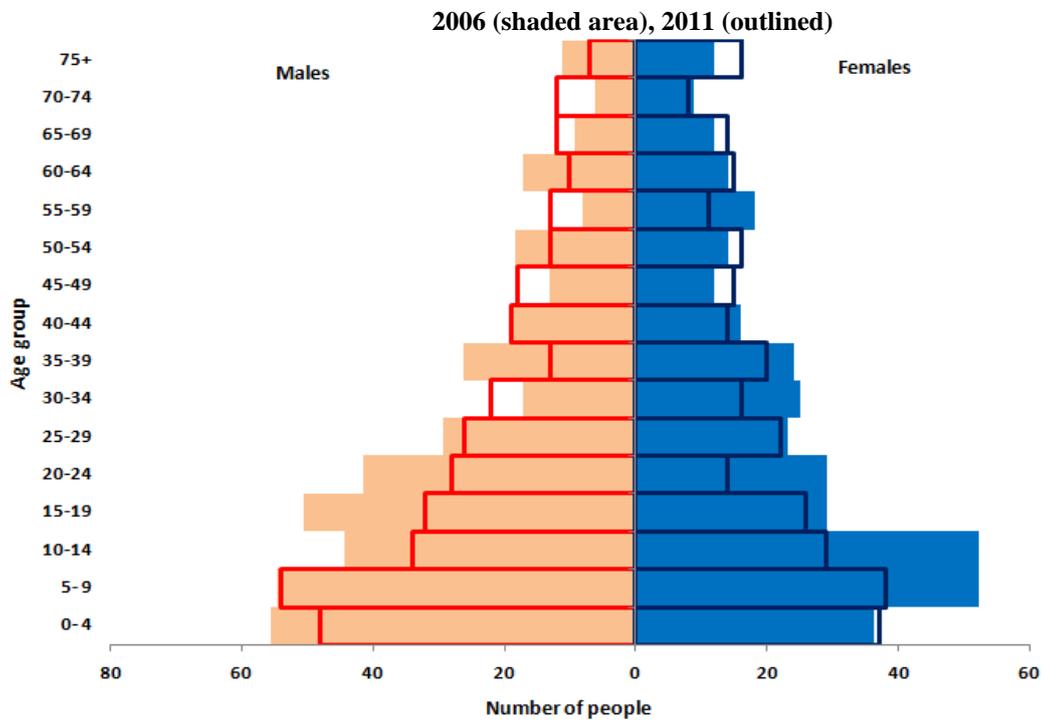
Ha'ano							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	40	34	74	0-4	34	34	68
5-9	42	46	88	5-9	33	40	73
10-14	44	30	74	10-14	33	29	62
15-19	32	22	54	15-19	23	22	45
20-24	20	18	38	20-24	19	14	33
25-29	15	19	34	25-29	8	15	23
30-34	25	26	51	30-34	13	14	27
35-39	17	18	35	35-39	23	16	39
40-44	17	17	34	40-44	11	16	27
45-49	7	17	24	45-49	11	9	20
50-54	10	8	18	50-54	9	10	19
55-59	6	12	18	55-59	8	11	19
60-64	12	19	31	60-64	8	5	13
65-69	6	8	14	65-69	8	12	20
70-74	4	6	10	70-74	4	5	9
75+	8	12	20	75+	5	9	14
Total	307	312	619	Total	250	261	511
Population by broad age groups (in numbers)							
0-14	127	110	237	0-14	100	103	203
15-24	52	40	92	15-24	42	36	78
25-59	98	117	215	25-59	83	91	174
25-64	110	136	246	25-64	91	96	187
60+	30	45	75	60+	25	31	56
65+	18	26	44	65+	17	26	43
Population by broad age groups (in percentages)							
0-14	41	35	38	0-14	40	39	40
15-24	17	13	15	15-24	17	14	15
25-59	32	38	35	25-59	33	35	34
25-64	36	44	40	25-64	36	37	37
60+	10	14	12	60+	10	12	11
65+	6	8	7	65+	7	10	8
Age dependency ratio							
15-59			102	15-59			103
15-64			83	15-64			93
Sex ratio (males per 100 females)							
			98				96
Median age (years)							
Total	19.2	26.7	22.5	Total	20.7	22.1	21.2
Population growth 2006-2011							
Total				Males	-57	Females	-51
Average annual					-11		-10
Percentage difference %					-18.6		-16.3
Average annual growth rate					-4.1		-3.6

Uiha

Population trend: 1956–2011



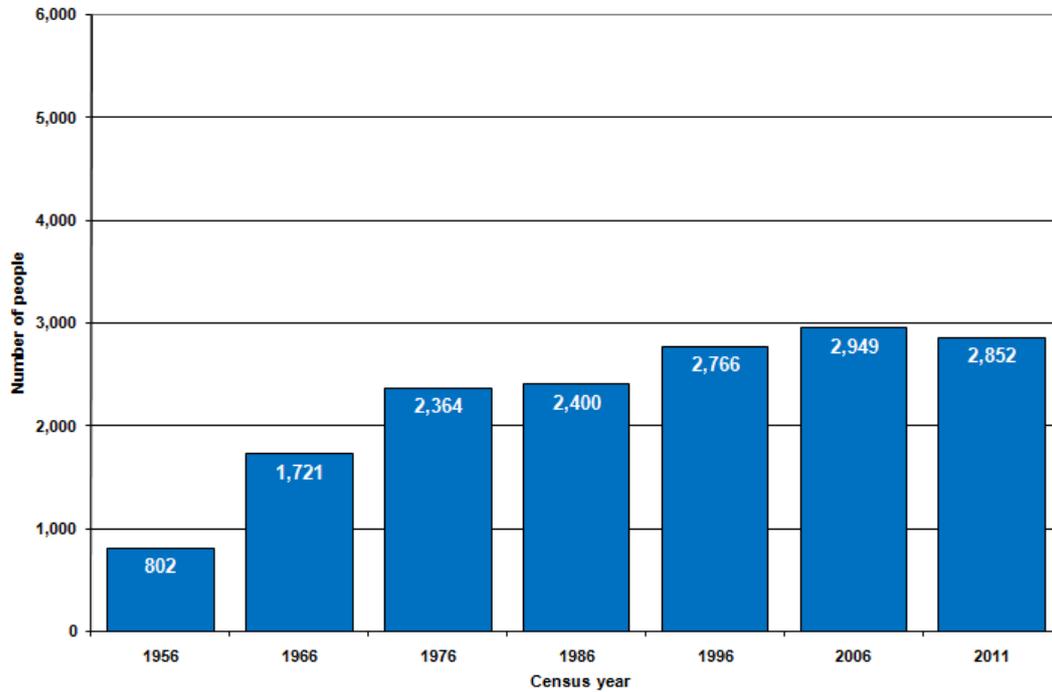
Population pyramid by five-year age group and sex, 2006 and 2011



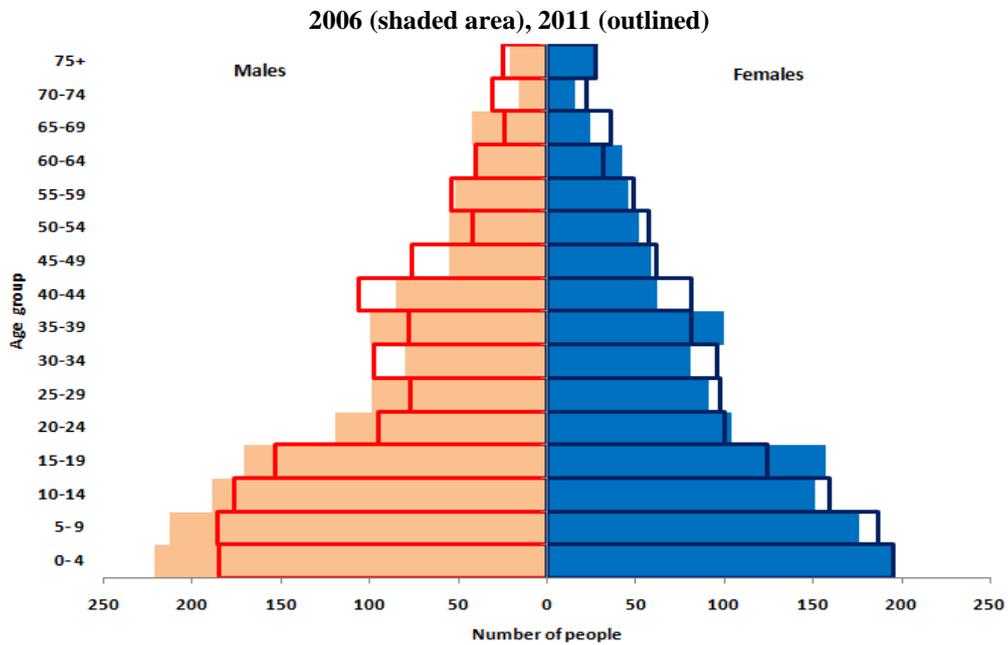
Uiha							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	55	36	92	0-4	48	37	85
5-9	54	52	107	5-9	54	38	92
10-14	44	52	97	10-14	34	29	63
15-19	50	29	80	15-19	32	26	58
20-24	41	29	71	20-24	28	14	42
25-29	29	23	52	25-29	26	22	48
30-34	17	25	42	30-34	22	16	38
35-39	26	24	50	35-39	13	20	33
40-44	19	16	35	40-44	19	14	33
45-49	13	12	25	45-49	18	15	33
50-54	18	14	32	50-54	13	16	29
55-59	8	18	26	55-59	13	11	24
60-64	17	14	31	60-64	10	15	25
65-69	9	12	21	65-69	12	14	26
70-74	6	9	15	70-74	12	8	20
75+	11	12	23	75+	7	16	23
Total	420	380	800	Total	361	311	672
Population by broad age groups (in numbers)							
0-14	154	141	295	0-14	136	104	240
15-24	92	58	150	15-24	60	40	100
25-59	131	133	264	25-59	124	114	238
25-64	148	147	295	25-64	134	129	263
60+	43	47	91	60+	41	53	94
65+	26	33	59	65+	31	38	69
Population by broad age groups (in percentages)							
0-14	37	37	37	0-14	38	33	36
15-24	22	15	19	15-24	17	13	15
25-59	31	35	33	25-59	34	37	35
25-64	35	39	37	25-64	37	41	39
60+	10	12	11	60+	11	17	14
65+	6	9	7	65+	9	12	10
Age dependency ratio							
15-59			93	15-59			99
15-64			80	15-64			85
Sex ratio (males per 100 females)							
			111				116
Median age (years)							
Total	20.7	23.4	21.8	Total	22.3	27.7	24.6
Population growth 2006-2011							
Total				Males	Females		Total
Average annual				-59	-69		-128
Percentage difference %				-12	-14		-26
Average annual growth rate				-14.0	-18.2		-16.0
				-3.0	-4.0		-3.5

'Eua Motu'a

Population trend: 1956–2011



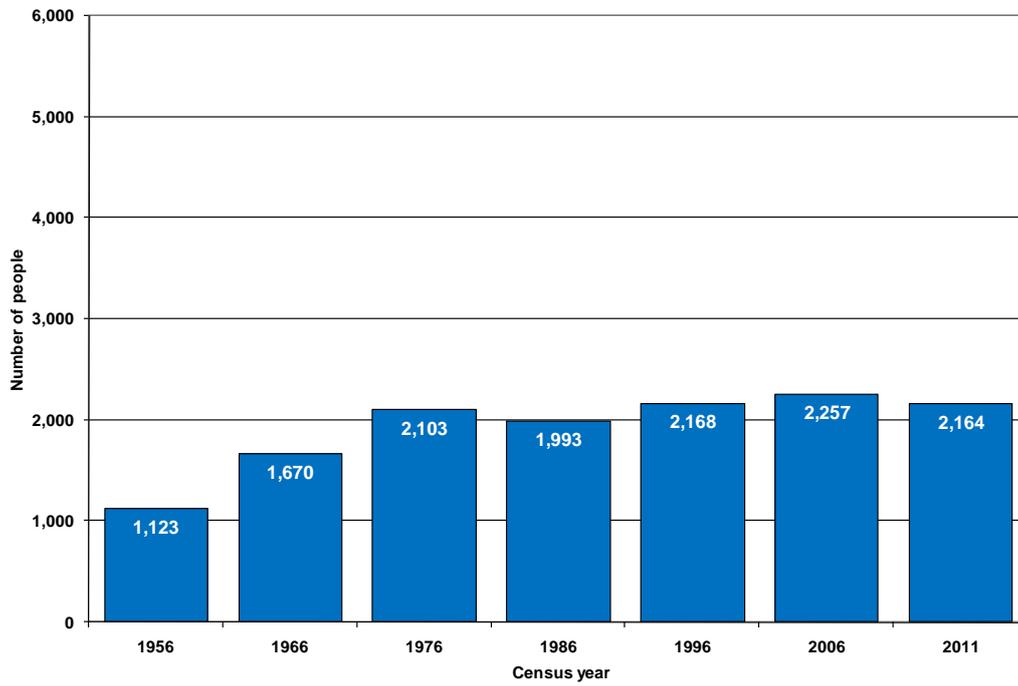
Population pyramid by five-year age group and sex, 2006 and 2011



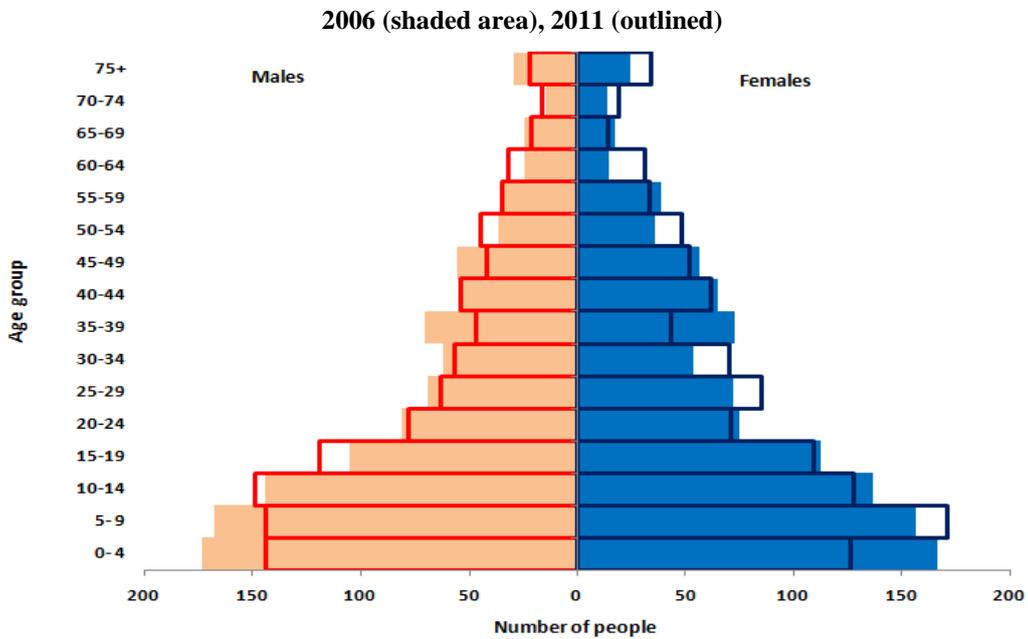
Eua Motu'a							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	221	196	418	0-4	185	195	380
5-9	213	176	390	5-9	186	187	373
10-14	189	151	340	10-14	176	159	335
15-19	171	157	328	15-19	153	124	277
20-24	119	104	223	20-24	95	100	195
25-29	99	91	190	25-29	77	98	175
30-34	80	81	161	30-34	98	96	194
35-39	100	100	200	35-39	78	81	159
40-44	85	62	147	40-44	106	81	187
45-49	55	59	114	45-49	76	62	138
50-54	55	52	107	50-54	42	57	99
55-59	52	46	98	55-59	54	49	103
60-64	41	42	83	60-64	40	32	72
65-69	42	24	66	65-69	24	36	60
70-74	16	16	32	70-74	31	22	53
75+	21	29	50	75+	25	27	52
Total	1,562	1,387	2,949	Total	1,446	1,406	2,852
Population by broad age groups (in numbers)							
0-14	624	523	1,148	0-14	547	541	1,088
15-24	291	261	552	15-24	248	224	472
25-59	527	491	1,018	25-59	531	524	1,055
25-64	568	533	1,101	25-64	571	556	1,127
60+	120	111	231	60+	120	117	237
65+	79	69	148	65+	80	85	165
Population by broad age groups (in percentages)							
0-14	40	38	39	0-14	38	38	38
15-24	19	19	19	15-24	17	16	17
25-59	34	35	35	25-59	37	37	37
25-64	36	38	37	25-64	39	40	40
60+	8	8	8	60+	8	8	8
65+	5	5	5	65+	6	6	6
Age dependency ratio							
15-59			88	15-59			87
15-64			78	15-64			78
Sex ratio (males per 100 females)							
			113				103
Median age (years)							
Total	19.6	20.6	20.0	Total	21.2	21.9	21.6
Population growth 2006-2011							
				Males	Females		Total
Total				-116	19		-97
Average annual				-23	4		-19
Percentage difference %				-7.4	1.4		-3.3
Average annual growth rate				-1.5	0.3		-0.7

'Eua Fo'ou

Population trend: 1956–2011



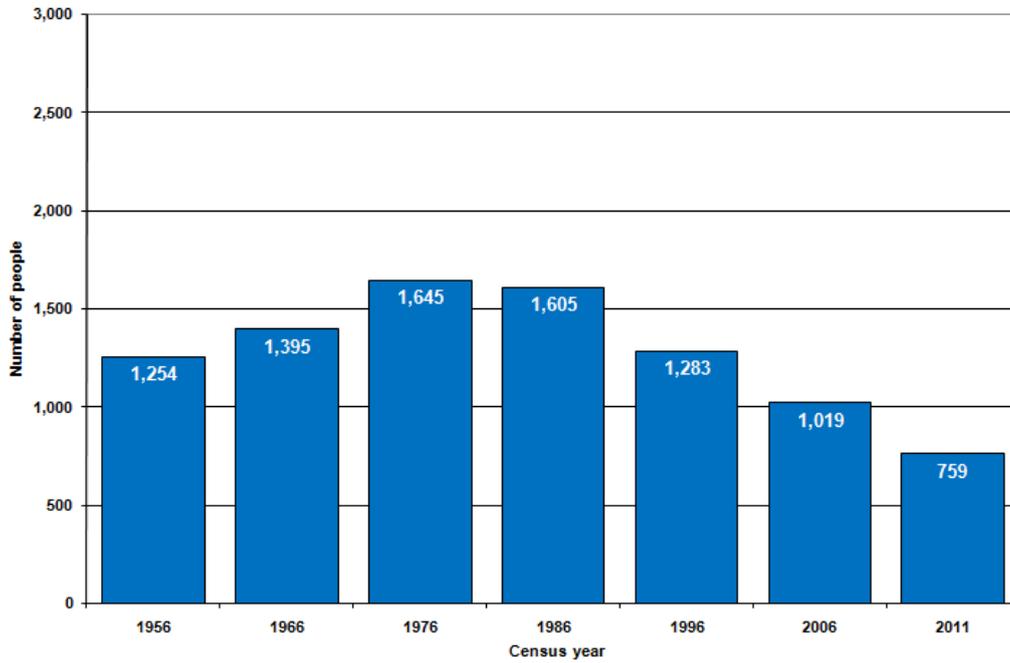
Population pyramid by five-year age group and sex, 2006 and 2011



Eua Fo'ou							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	173	167	340	0-4	144	126	270
5-9	167	157	324	5-9	144	171	315
10-14	144	137	281	10-14	149	128	277
15-19	105	113	218	15-19	119	109	228
20-24	81	75	156	20-24	78	71	149
25-29	69	72	141	25-29	63	85	148
30-34	62	54	116	30-34	57	70	127
35-39	70	73	143	35-39	47	43	90
40-44	53	65	118	40-44	54	62	116
45-49	55	57	112	45-49	42	52	94
50-54	36	36	72	50-54	45	48	93
55-59	33	39	72	55-59	35	33	68
60-64	24	15	39	60-64	32	31	63
65-69	24	18	42	65-69	21	14	35
70-74	14	14	28	70-74	16	19	35
75+	29	25	54	75+	22	34	56
Total	1,140	1,117	2,257	Total	1,068	1,096	2,164
Population by broad age groups (in numbers)							
0-14	484	461	945	0-14	437	425	862
15-24	186	188	374	15-24	197	180	377
25-59	378	396	774	25-59	343	393	736
25-64	402	411	813	25-64	375	424	799
60+	91	72	163	60+	91	98	189
65+	67	57	124	65+	59	67	126
Population by broad age groups (in percentages)							
0-14	42	41	42	0-14	41	39	40
15-24	16	17	17	15-24	18	16	17
25-59	33	35	34	25-59	32	36	34
25-64	35	37	36	25-64	35	39	37
60+	8	6	7	60+	9	9	9
65+	6	5	5	65+	6	6	6
Age dependency ratio							
15-59			97	15-59			94
15-64			90	15-64			84
Sex ratio (males per 100 females)							
			102				97
Median age (years)							
Total	19.1	19.3	19.2	Total	19.1	21.0	19.8
Population growth 2006-2011							
				Males	Females		Total
Total				-72	-21		-93
Average annual				-14	-4		-19
Percentage difference %				-6.3	-1.9		-4.1
Average annual growth rate				-1.3	-0.4		-0.8

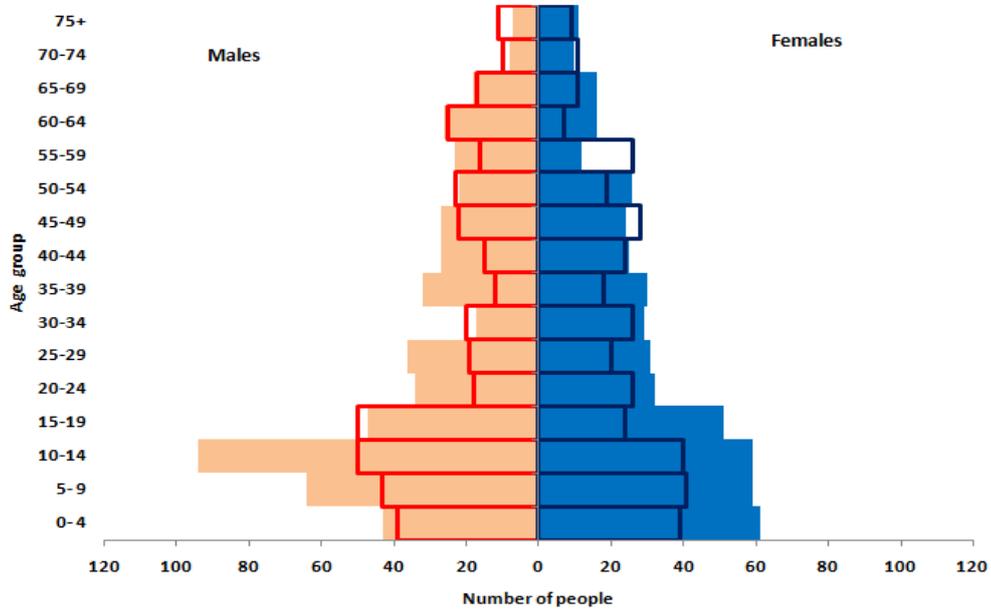
Niutoputapu

Population trend: 1956–2011



Population pyramid by five-year age group and sex, 2006 and 2011

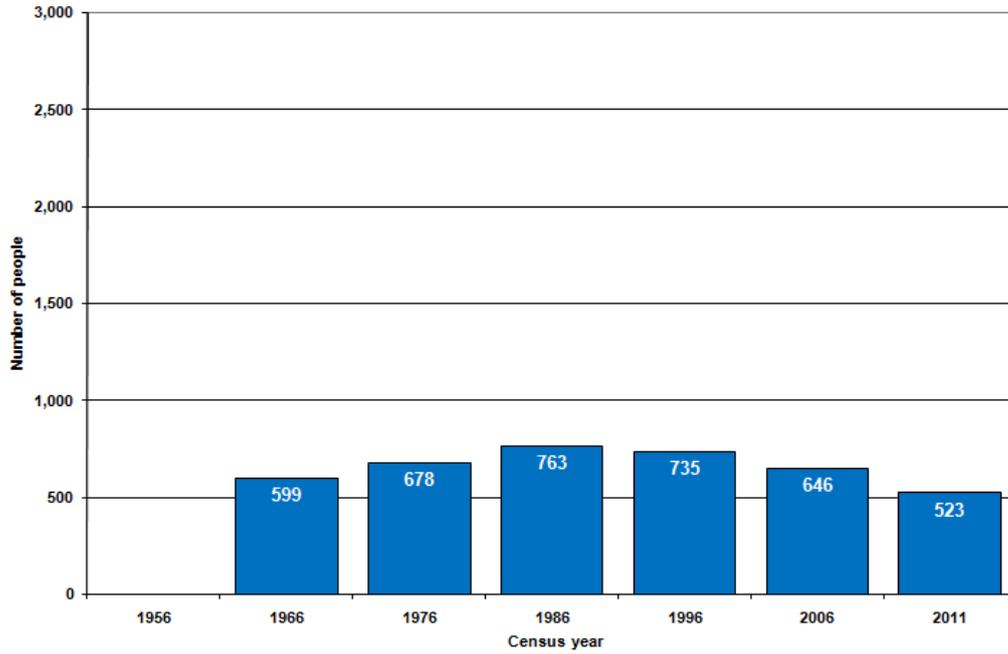
2006 (shaded area), 2011 (outlined)



Niuatoputapu							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	43	61	104	0-4	39	39	78
5-9	64	59	123	5-9	43	41	84
10-14	94	59	153	10-14	50	40	90
15-19	47	51	98	15-19	50	24	74
20-24	34	32	66	20-24	18	26	44
25-29	36	31	67	25-29	19	20	39
30-34	17	29	46	30-34	20	26	46
35-39	32	30	62	35-39	12	18	30
40-44	27	25	52	40-44	15	24	39
45-49	27	24	51	45-49	22	28	50
50-54	22	26	48	50-54	23	19	42
55-59	23	12	35	55-59	16	26	42
60-64	26	16	42	60-64	25	7	32
65-69	18	16	34	65-69	17	11	28
70-74	8	10	18	70-74	10	11	21
75+	7	11	18	75+	11	9	20
Total	526	493	1,019	Total	390	369	759
Population by broad age groups (in numbers)							
0-14	201	179	381	0-14	132	120	252
15-24	81	83	164	15-24	68	50	118
25-59	184	177	362	25-59	127	161	288
25-64	210	193	404	25-64	152	168	320
60+	59	53	112	60+	63	38	101
65+	33	37	70	65+	38	31	69
Population by broad age groups (in percentages)							
0-14	38	36	37	0-14	34	33	33
15-24	15	17	16	15-24	17	14	16
25-59	35	36	35	25-59	33	44	38
25-64	40	39	40	25-64	39	46	42
60+	11	11	11	60+	16	10	13
65+	6	8	7	65+	10	8	9
Age dependency ratio							
15-59			94	15-59			87
15-64			79	15-64			73
Sex ratio (males per 100 females)							
			107				106
Median age (years)							
Total	22.2	22.6	22.3	Total	23.8	28.8	26.3
Population growth 2006-2011							
Total				Males	-136	Females	-124
Average annual					-27		-25
Percentage difference %					-25.9		-25.2
Average annual growth rate					-6.0		-5.8

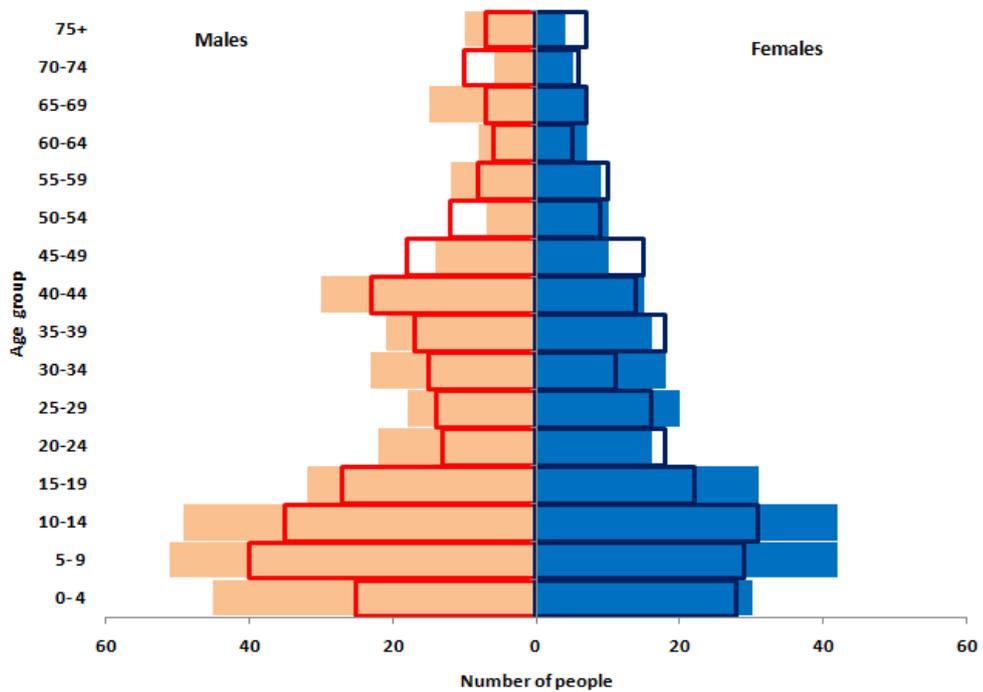
Niuafu'ou

Population trend: 1956–2011



Population pyramid by five-year age group and sex, 2006 and 2011

2006 (shaded area), 2011 (outlined)



Niufo'ou							
2006				2011			
Age	Males	Females	Total	Age	Males	Females	Total
Population by 5-year age groups and sex							
0-4	45	30	75	0-4	25	28	53
5-9	51	42	93	5-9	40	29	69
10-14	49	42	91	10-14	35	31	66
15-19	32	31	63	15-19	27	22	49
20-24	22	16	38	20-24	13	18	31
25-29	18	20	38	25-29	14	16	30
30-34	23	18	41	30-34	15	11	26
35-39	21	16	37	35-39	17	18	35
40-44	30	15	45	40-44	23	14	37
45-49	14	10	24	45-49	18	15	33
50-54	7	10	17	50-54	12	9	21
55-59	12	9	21	55-59	8	10	18
60-64	8	7	15	60-64	6	5	11
65-69	15	7	22	65-69	7	7	14
70-74	6	5	11	70-74	10	6	16
75+	10	4	14	75+	7	7	14
Total	364	282	646	Total	277	246	523
Population by broad age groups (in numbers)							
0-14	145	114	259	0-14	100	88	188
15-24	54	47	101	15-24	40	40	80
25-59	125	98	223	25-59	107	93	200
25-64	133	105	238	25-64	113	98	211
60+	39	23	62	60+	30	25	55
65+	31	16	47	65+	24	20	44
Population by broad age groups (in percentages)							
0-14	40	40	40	0-14	36	36	36
15-24	15	17	16	15-24	14	16	15
25-59	34	35	35	25-59	39	38	38
25-64	37	37	37	25-64	41	40	40
60+	11	8	10	60+	11	10	11
65+	9	6	7	65+	9	8	8
Age dependency ratio							
15-59			99	15-59			87
15-64			90	15-64			80
Sex ratio (males per 100 females)							
			129				113
Median age (years)							
Total	21.1	19.4	20.1	Total	24.6	23.8	24.0
Population growth 2006-2011							
				Males	Females		Total
Total				-87	-36		-123
Average annual				-17	-7		-25
Percentage difference %				-23.9	-12.8		-19.0
Average annual growth rate				-5.5	-2.7		-4.2