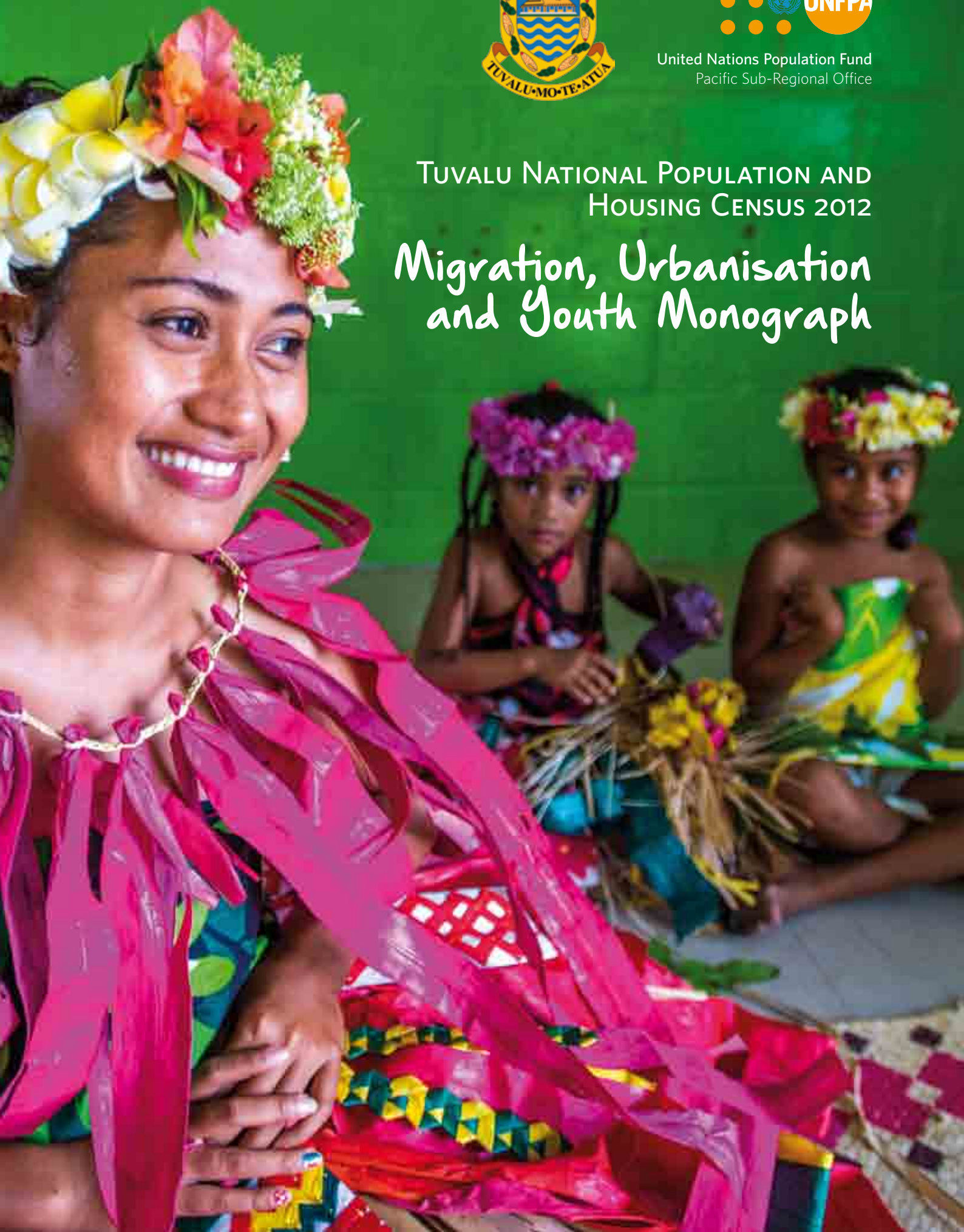


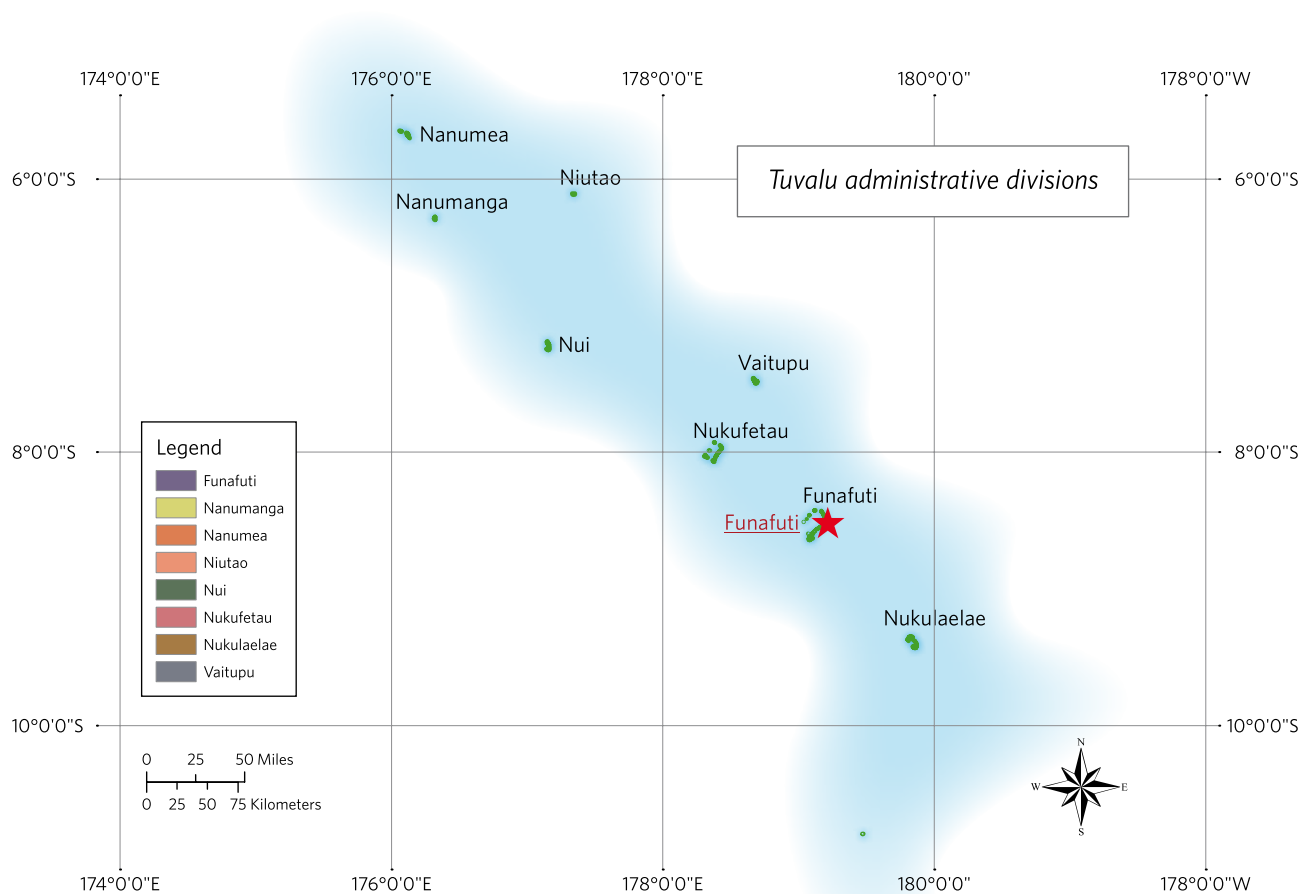


United Nations Population Fund
Pacific Sub-Regional Office

TUVALU NATIONAL POPULATION AND HOUSING CENSUS 2012

Migration, Urbanisation and Youth Monograph





Foreword and Acknowledgement



The Census Monograph on Migration, Urbanization and Youth provides an in-depth analysis of data made available from the 2012 Tuvalu Population and Housing census.

This report complements the standard and more general reports containing the census basic tables, as well as the main analytical census report.

The report is a timely initiative of the Central Statistics Department (CSD) of Tuvalu in collaboration with the University of Auckland, New Zealand, and made possible through the funding and technical support of the United Nations Population Fund (UNFPA).

The information from this analysis is relevant for policy and planning purposes, and the monitoring and evaluation of the National Strategy for Sustainable Development 2005-2015 (Te Kakeega II), the Millennium Development Goals (MDGs), and other sector policies and programmes.

The CSD is very grateful for the support provided by Dr. Wardlow Friesen, UNFPA Consultant, as the main contributing author of this report.

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Tuvalu Population and Housing Census 2012

Migration, Urbanisation and Youth Monograph

A. Migration



A1. Introduction: the significance of migration

Migration is one of the most important forces affecting change in societies around the world. There are many different reasons for migration and these relate to movements that range from those that are voluntary through to those that result from circumstances beyond the control of migrants. Migration is often undertaken to increase the opportunities available to migrants in relation to education, employment or a better lifestyle in general.

In the Pacific, the countries of Polynesia and Micronesia have long practiced international migration, and this is still a major factor in their economic and demographic development paths. Melanesian countries have had less opportunity for international mobility, so have mostly practiced internal migration between regions and islands within their own countries. International migration may have both positive and negative implications for countries of origin. One concern is that it is often skilled migrants who emigrate resulting in a 'brain drain', while on the other hand the international linkages created by migration may contribute to the fulfilment of the Millennium Development Goals (MDGs) in relation to poverty, gender equity, health, environmental sustainability and development partnerships.¹ Internal migration may similarly result in positive and negative outcomes, with urban places facilitating higher education and job specialisation, but also, in some cases, internal migration results in rural or outer island depopulation, threatening the viability of economies and service provision in those places.

Tuvalu is no stranger to migration. Original migration arrival stories feature in the mythology of most islands, and linguists, archaeologists and anthropologists have attempted to reconstruct the migration(s) of forebears originating in Southeast Asia. Historically documented movements include the slave trading to Peru and other parts of Latin America in the nineteenth century, as well as (perhaps) less coercive 'blackbirding' to Pacific plantation destinations such as Fiji, Tahiti, New Caledonia and Queensland which continued into the early twentieth century. In the second half of the twentieth century, significant labour movements were to work in the phosphate mines of Nauru and Banaba, and even more recently to work in the orchards and vineyards of New Zealand.



A2. Measuring migration

There are a variety of ways of measuring migration. Any movement between one place and another is a kind of mobility, ranging from daily travel between home and work to a move between two places which is considered to be 'permanent'. As well as timing, the measuring of migration involves issues of distance and boundaries crossed. Thus international migration is clearly differentiated from internal migration because it involves movement across national boundaries, necessitating passports and the permission of the governments involved. Internal migration could include movement between villages, but in this report, movement between the nine islands of Tuvalu is used to define this type of migration.

Several questions in the 2012 Census of Tuvalu allow an assessment of migration. An important issue relates to where a person usually lives, and the enumerators Training Manual defines usual residence (usually called 'residence') in this way:

"This refers to the place at which the person has lived continuously for most of the last 12 months (that is, for at least six months and one day), not including temporary absences for holidays or work assignments, or intends to live for at least six months."

Usual residence can be compared to other indicators to determine migration. The most common comparison is with birthplace, and if these two are different, 'lifetime migration' has taken place. Two types of shorter-term mobility are measureable from census data. If residence is different from place of enumeration, this implies a temporary movement from the usual place of movement, with the likelihood of returning to the usual residence. The census asked a question about usual place of residence three years earlier (in 2009) and when this is compared to current residence, a measure of short-term migration can be determined. A further question asked each individual what their 'home island' was and this was not necessarily their place of birth but the island they associated with in relation to the birthplaces of their parent(s) or grandparent(s) and the land rights that might be attached to that. This allows an assessment of 'migration across generations'.



A3. International Migration

a. Overseas born by birthplace

There were 2,273 people enumerated in the 2012 Census who were born overseas, making up 21.3 percent of the population of Tuvalu. The great majority of these were Tuvaluan as shown by the fact that about 95 percent of them declared that their 'home island' was in Tuvalu. However, they were born in other countries, usually where their parents were resident after migrating there for reasons discussed further below. In this category there are three main countries of birth: Kiribati, Nauru and Fiji, and each of these is discussed separately here.

Kiribati born population

Of the 554 people who were born in Kiribati, about 90 percent named their home island as being in Tuvalu. This suggests that there is not a significant movement of I-Kiribati to Tuvalu but rather that this movement relates to colonial and post-colonial realities. The age structure of the Kiribati born population shows that more than two-thirds were born before independence in 1978 so were born in the colonial territory of the Gilbert Islands when government workers may have been posted anywhere within the colony, so some of those from the Ellis Islands had their children in Tarawa or elsewhere in what is now Kiribati.

Further, a considerable number of Tuvaluans worked in Banaba (Ocean Island) so some of those who were born in Kiribati were children of those workers. In some cases, intermarriage between Tuvaluans and I-Kiribati has also resulted in movement between the two nation states.

Nauru born population

Nauru is the source of the largest number of overseas born Tuvaluans, with 598 being enumerated in the 2012 Census. The mining of phosphate in Nauru started in the early twentieth century and migrant labour has been important throughout its history. Significant numbers of Tuvaluans started to work in Nauru from the 1950s onwards and many of them worked there for long periods. By the mid-1990s, the mining was starting to wind down and most Tuvaluans had left by about 2006. The numbers involved in the early 21st century are indicated by the 2002 Nauru Census which enumerated about 400 Tuvaluans, or four percent of the resident population at that time. The age structure of the Nauru born population resident in Tuvalu in 2012 indicates a continuous labour engagement for nearly half a century, with significant numbers of people in all the age cohorts between 10 and 55 years i.e. born in Nauru between 1957 and 2002.

Fiji born population

About 95 percent of the 585 people born in Fiji gave one of the Tuvaluan islands as their 'home island'. Of these, nearly one-third gave Vaitupu as their home island, suggesting some of this number are likely to be people who have returned from the Fijian island of Kioa where many people from Vaitupu settled from the 1950s onwards. The age structure of Fiji-born is young, with 60 percent being under 15 years of age. This suggests that these are the children of Tuvaluans studying or working in Fiji in recent years, but who have returned to Tuvalu.

b. Other indicators of international migration

Overseas 3 years ago by location

The 2012 Census asked the question "Where were you living three years ago?"² The response to this question is used to gauge both internal and international migration in the medium term. Table A1 shows that there were just under 600 people of Tuvaluan nationality who were overseas in 2009, three years before the census. Fiji was by far the most significant place of overseas residence, comprising nearly two-thirds of the total. The age-sex structure of those who were in Fiji suggests that many of them were in tertiary education at The University of the South Pacific and other institutions. However, there are also a number of those in older age cohorts who were probably in Fiji for other reasons, including work. A smaller number of people were in New Zealand three years earlier. Some of these may also have been undertaking tertiary education, but considering the large number of Tuvaluans resident in New Zealand (see below), some of these movements were likely to be related to family visits. The 'all other' category is relatively small, and involved mostly countries in Asia and Europe, and notably there were five times as many males as females in this category suggesting that many of these were seafarers based for a period of time outside of Tuvalu.

Table A1: Tuvaluans overseas three years before census by country/region, age and sex

Age and sex		Total	Country/region of residence in 2009			
			Fiji	Other Pacific	New Zealand	All other
Total all ages	Total	593	382	58	89	64
	Males	337	197	34	52	54
	Females	256	185	24	37	10
Aged 0-14	Total	122	88	14	18	2
	Males	69	46	11	11	1
	Females	53	42	3	7	1
Aged 15-29	Total	233	160	23	22	28
	Males	134	85	13	14	22
	Females	99	75	10	8	6
Aged 30-44	Total	133	80	9	22	22
	Males	80	40	5	14	21
	Females	53	40	4	8	1
Aged 45-59	Total	72	39	10	12	11
	Males	40	21	5	5	9
	Females	32	18	5	7	2
Aged 60+	Total	33	15	2	15	1
	Males	14	5	0	8	1
	Females	19	10	2	7	0

Persons out of Tuvalu on Census Night

On the back of the census form, each household was asked to list members “out of country on census night”. This table did not collect information on where the person was, but did ask about sex, age and home island. A total of 1200 people were listed as being out of country with more males (57%) than females (43%) being in this category. Table A2 shows the broad age breakdown of those overseas as well as the home island. The distribution by home island is as might be expected in relation to the total numbers who have specified home island in the general population, but the age distribution is distinctive. A high proportion are in the younger cohorts especially ages 15 to 29 years which had about 37 percent of the total, indicating the significance of overseas tertiary education and training.

Table A2: People "out of country on census night", by home island, age and sex

AGE AND SEX		TOTAL	HOME ISLAND								
			Nanumea	Nanumaga	Niutao	Nui	Vaitupu	Nukufetau	Funafuti	Nukulaelae	Other Countries
Total all ages	Total	1200	179	133	196	89	205	136	154	95	13
	Males	689	114	77	109	48	105	88	91	50	7
	Females	511	65	56	87	41	100	48	63	45	6
Aged 0-14	Total	289	43	28	49	22	53	26	47	18	3
	Males	149	25	10	22	10	27	14	30	10	1
	Females	140	18	18	27	12	26	12	17	8	2
Aged 15-29	Total	438	68	55	60	28	72	50	54	47	4
	Males	246	40	30	32	15	38	33	34	21	3
	Females	192	28	25	28	13	34	17	20	26	1
Aged 30-44	Total	298	40	31	58	30	48	43	28	16	4
	Males	192	28	22	38	19	26	31	17	10	1
	Females	106	12	9	20	11	22	12	11	6	3
Aged 45-59	Total	130	22	16	16	8	23	14	18	12	1
	Males	81	19	12	10	4	12	8	7	8	1
	Females	49	3	4	6	4	11	6	11	4	0
Aged 60+	Total	45	6	3	13	1	9	3	7	2	1
	Males	21	2	3	7	0	2	2	3	1	1
	Females	24	4	0	6	1	7	1	4	1	0

Seafarers: on the seas, overseas

Starting in 1959, seafarers were being recruited from the Gilbert and Ellice colony onto international merchant ships, first by British, then German companies. During this period, a marine training school was set up in Tarawa, and soon after independence, Tuvalu set up its own school, The Tuvalu Marine Training Institute, which trains about 60 seamen a year.³ Since the 1960s employment as seafarers has been important for Tuvaluan men, with 250 to 300 trainees contracted to work on ships each year, so that in the mid-2000s there were about 400 to 500 seafarers working at any one time. As a result of the Global Financial Crisis from 2008 onwards there has been a significant decline in numbers of seafarers employed, with fewer than 100 in most recent years.⁴ There are about six times this number of Tuvaluan seafarers registered ('active') and more than this number of potential trained seamen, resident in both Tuvalu and New Zealand.

Seasonal work: New Zealand's RSE scheme

The New Zealand Recognised Employer (RSE) scheme was initiated in 2007 and Tuvalu was one of the 'kick-start' nations to join this scheme, along with Kiribati, Samoa, Tonga and Vanuatu. The RSE allows Tuvaluans to work for up to nine months in New Zealand, in agricultural sectors such as orchards and vineyards. From an initial intake of 99 in the first year, there have been an average of 67 Tuvaluans recruited each year, mostly working in the Hawke's Bay region of New Zealand.⁵ A small number of workers have also been recruited into the Australian Seasonal Work Program in recent years.

c. Overseas Tuvaluan Communities

Tuvaluans in New Zealand

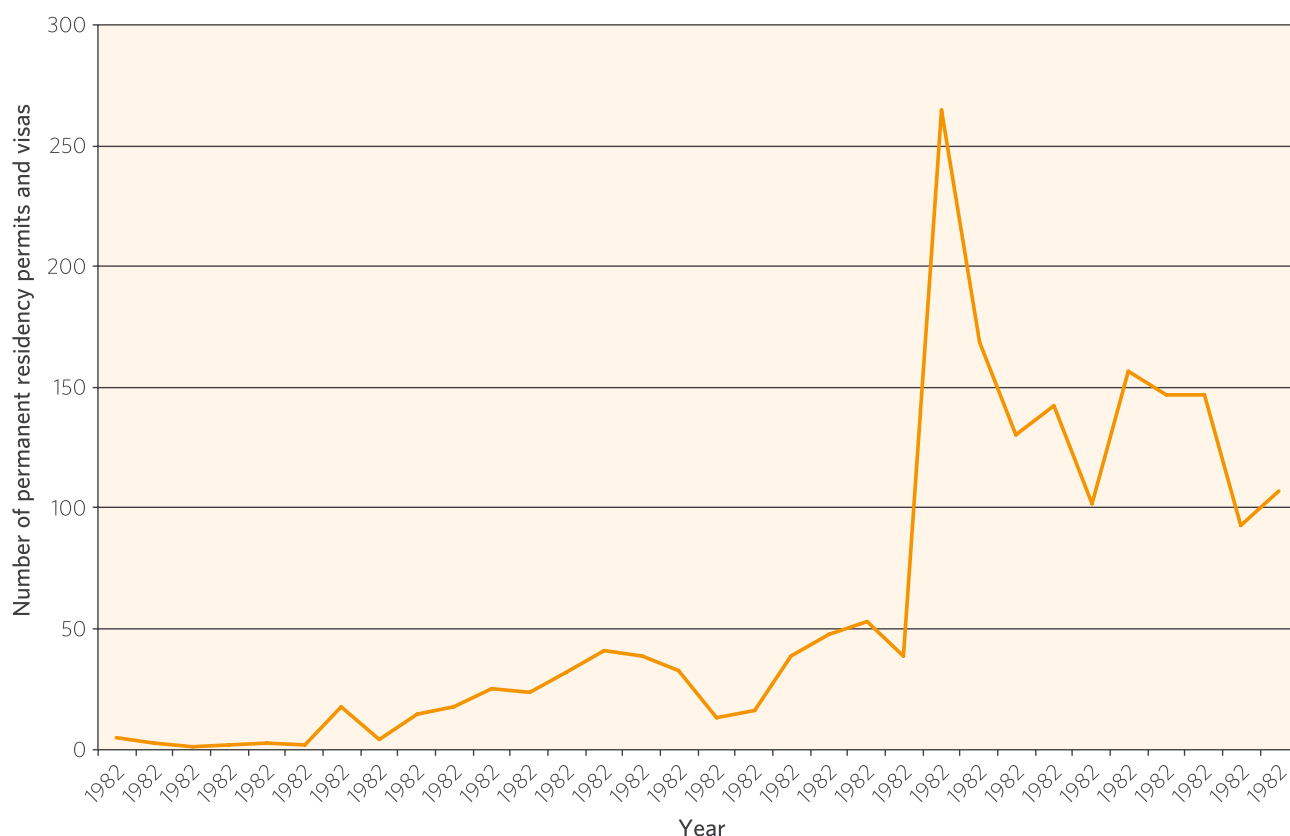
The 2013 Census of New Zealand enumerated 3,537 Tuvaluans, an increase of 80 percent from the 1,965 enumerated in 2001. Of those enumerated in 2013, only about 40 percent (1,419) had been born in Tuvalu. The high proportion of Tuvaluans who are New Zealand born illustrates the fact that migration to New Zealand has been an ongoing process, and that many families are well-established there. Migration has been facilitated by a number of immigration schemes starting with the South Pacific Work Permit Scheme which incorporated Tuvalu in 1986, and by the late 1980s allowed residence of up to three years and had a quota of 80 people from Tuvalu.⁶ This work scheme was replaced in 2002 by the Pacific Access Category (PAC) Scheme which allowed permanent residency for a number of Pacific countries including Tuvalu, which has a quota of 75 people per year. Applications for this scheme are drawn by ballot, but there are quite demanding conditions of acceptance related to age restrictions for the primary applicant (18 to 45 years), a viable job offer at a minimum income level, English language competency, excellent health and no criminal record.⁷

Tuvaluans may also qualify for permanent residency through the channels available to all nationalities, for example within the skilled migrant category. Figure A1 shows that through the 1990s there were consistently small numbers of permanent residents admitted to New Zealand, and that in the 2000s this increased considerably. Over the decade 2004 to 2013 there was an annual average of 146 successful permanent residencies for Tuvaluan nationals. This includes the PAC category migrants as well as skilled migrants and those admitted on family reunification grounds or other humanitarian categories. Climate change has not qualified as a justification for refugee status in any country, but a seminal decision in New Zealand in August 2014 appears to have taken climate change into account in granting permanent residency to a Tuvaluan family who had been resident for a number of years.⁸

Tuvaluans in New Zealand are strongly clustered, with nearly three-quarters living in the Auckland area in 2013, with many of the rest in Wellington and small clusters in Otago and Bay of Plenty. In Auckland, about two-thirds live in the west, especially around Ranui and Massey, an apparent outcome of the location of most Tuvaluan work migrants in the 1980s.⁹

The youth and family-based nature of the Tuvaluan population in New Zealand is revealed in the age-sex pyramids shown in Figure A2. These show higher proportions in the younger age cohorts and lower proportions in older cohorts for the New Zealand resident Tuvaluan population than is the case for the population of Tuvalu, suggesting the relative recency of some migration and the likelihood of family formation after migration. The median age of Tuvaluans, at 19.2 years was about half of that for the total population (at 38 years), and lower than the median for all Pacific peoples at 22.1 years. Median income is also relatively low compared to the general population, partly as a result of the fact that more than one-third of Tuvaluans were working as labourers in 2013 with smaller numbers working in semi-skilled occupations.¹⁰ About 20 percent of Tuvaluan females were working as professionals, a proportion about three times as high as for males.

Figure A1: Number of New Zealand permanent residency visas and permits approved for Tuvaluan nationals 1982-2013 (March years)



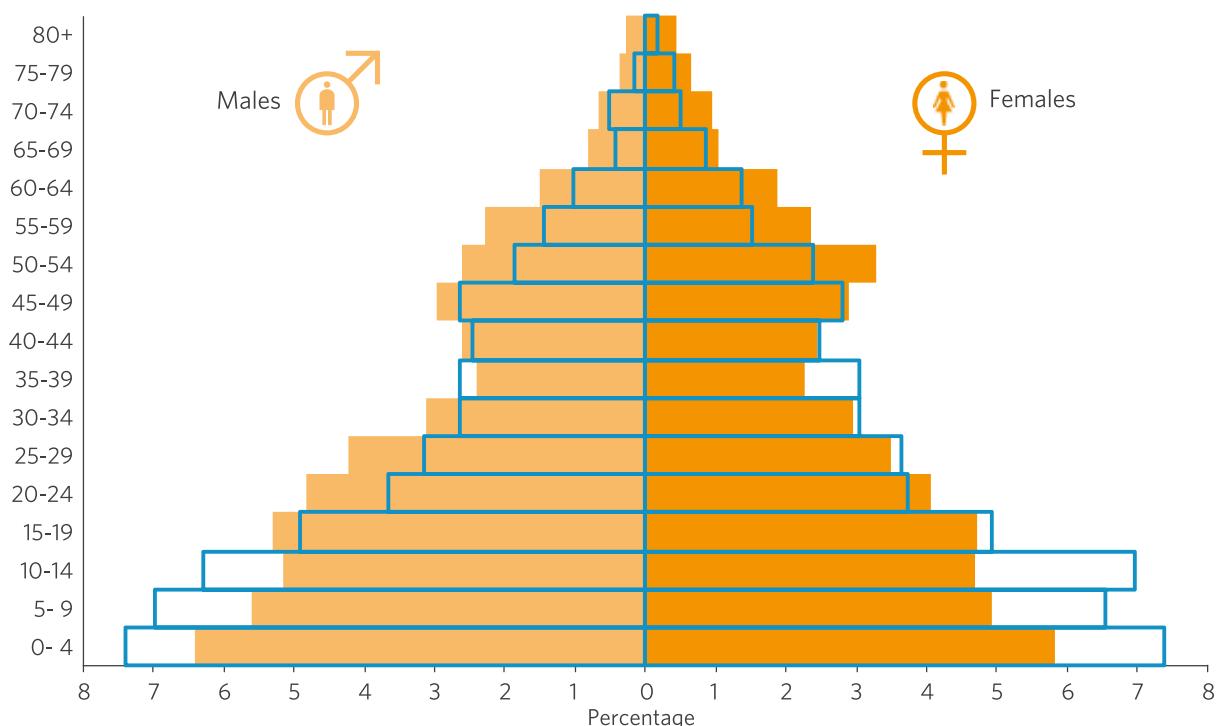
Data source: New Zealand Immigration Service

Other overseas communities

One of the longer term overseas settlement of Tuvaluans is in Kioa Island in Fiji. Between 1947 and 1983, several hundred people from Vaitupu settled in Kioa, a freehold island which they had purchased. While some of these have subsequently returned to Tuvalu, the majority have remained in Fiji. There are no recent Fijian census data available, but in 2009 it was estimated that there were about 600 Tuvaluans resident, although some of these were temporarily elsewhere in Fiji.¹¹

The Tuvaluan community in Australia is much smaller than in New Zealand. In the 2011 Australian Census there were 228 people who put Tuvaluan as their first response to a question on 'ancestry'. Of these about one-half (120) were born in Tuvalu. Of all Tuvaluans, the largest number were resident in Queensland, especially Brisbane, with smaller numbers in Victoria and New South Wales.¹² Of those who migrated to Australia, most arrived between 1981 and 2010 with the largest number in the 1990s. Nearly one-half of all Tuvaluan migrants have become Australian citizens, illustrating their intentions to remain in Australia long-term.

Figure A2: Age-sex structure of NZ Tuvaluans (blue lines) compared to Tuvalu (shading)



d. International remittances within the context of total remittances

About 40 percent of all households enumerated in 2012, had received some remittances over the previous year (Figure A3). Nearly 500 of these households (28 percent) had received remittances from outside of Tuvalu while just under 350 (20 percent) had received remittances from within the country. Funafuti households received relatively few internal remittances compared to their number, but they received just over half of all international remittances (Table A3).

Overall, there was a decline in the proportion of households receiving remittances between 2002 and 2012, from 50 percent to 40 percent. Most notable in this change was a reduction from 28 to 20 percent of households which received remittances from 'outside Tuvalu only', probably mostly a result of the decline in the numbers of seafarers in this period.

Figure A3: Household by sources of remittances within and outside Tuvalu 2012

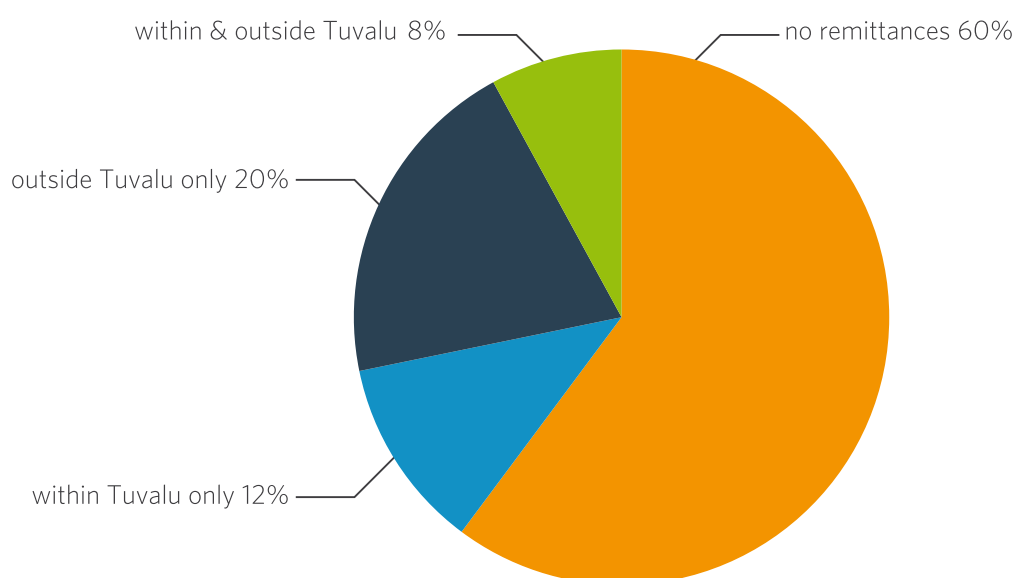


Table A3: Number of households whether receiving remittances by source of remittance and island

Island	Total	Sources Of Remittances			
		No remittance	Within Tuvalu only	Outside Tuvalu only	Within & outside Tuvalu
Nanumea	115	61	17	19	18
Nanumaga	116	73	23	11	9
Niutao	123	65	24	21	13
Nui	138	76	25	18	19
Vaitupu	226	130	46	24	26
Nukufetau	124	64	25	23	12
Funafuti	845	542	34	233	36
Nukulaelae	67	46	6	8	7
Niulakita	7	3	4	-	-
Total	1,761	1,060	204	357	140

Another source of data on remittances comes from the Household Income and Expenditure Surveys (HIES). The total amount of remittances received from overseas according to the 2004/05 and 2010 HIES are shown in Table A4. The total for Tuvalu declined slightly between the two surveys, but even more notable is the difference between Funafuti and the Outer Islands in which remittances to Funafuti increased and to the Outer Islands declined.

Table A4: Remittances received from overseas, by receiving region, from Household Income and Expenditure Surveys 2004/05 and 2010

Receiving Region	2004/05	2010
Tuvalu total	\$2,294,048	\$2,188,431
Funafuti	\$1,085,153	\$1,489,521
Outer Islands	\$1,208,896	\$698,910

Source: 2004/05 and 2010 HIES

The 2010 HIES estimated that household income from 'gifts in cash' averaged \$169 per month, with households in Funafuti getting considerably more, at \$211 compared to \$137 in the Outer Islands.¹³ Of these 'gifts in cash' an average of \$100 came from overseas, with Funafuti households averaging \$157 and Outer Islands households averaging \$56 per month. Conversely, Outer Islands households got more internal remittances (\$81) than those in Funafuti (\$54). Perhaps this represents a kind of 'filtering' with Funafuti households having the most direct linkages with overseas Tuvaluan residents, but then 'passing on' some remittances to other islands. As well as gifts in cash, 'gifts in kind' equated to \$32 per month (\$45 in Funafuti and \$21 in the Outer Islands), but the source of these was not recorded in the HIES. Overall, remittances (including gifts in kind) made up about 15 percent of all household income, with this calculation including subsistence income. Of these remittances, about one-half originated from overseas.



A4. Internal Migration

a. Lifetime migration: birthplace vs. residence

One measure of migration is 'lifetime migration', that is, the movement of someone from their place of birth to their place of residence. One limitation of this measure is that any movements in between birth and current residence are not recorded, but one advantage of this measure is that nearly everyone is clear about where they were born, and where they now live. Table A5 presents a matrix of islands of birth (as well as overseas birth) and islands of residence. Overall, in terms of internal migration, about 46 percent of the population was resident on the same island on which they were born (see the shaded cells running at an angle through the table). The remaining 54 percent are therefore lifetime internal migrants, having moved away from their island of birth. The table also shows the number of lifetime out-migrants from each island (bottom row) and number of internal and overseas in-migrants (second and third last columns on the right). The difference between the internal in-migrants and internal out-migrants results in net migration shown in the right-hand column. The northern islands of Nanumea, Nanumaga and Niutao had relatively high net migration losses, with most of their out-migrants residing in Funafuti. Nukufetau was the other island with a significant loss, once again much of it to Funafuti. Vaitupu had the largest net migration gain, largely as a result of the location of the national high school there and the movement of students from all islands. Funafuti had a surprisingly low net gain when measured by lifetime migration and this points out one of the limitations of these data. With the national hospital located in Funafuti, women often travel from other islands to have their babies there, and then may return to their home islands, thus generating a migration loss for Funafuti. For example, in 2012 about 300 children aged 0 to 9 who were resident in the Outer Islands had been born in Funafuti. This is one reason for using 'home island' as an alternative measure of migration flows. Further detail about lifetime migration, broken down by age and sex can be found in Basic Table 12.

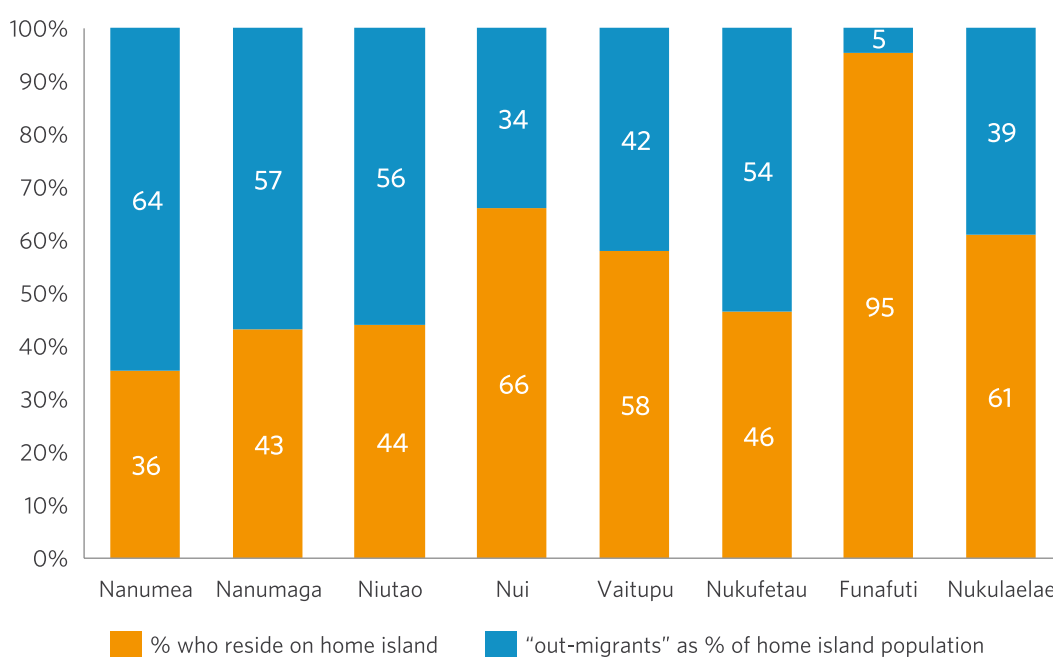
b. Migration across generations: home island vs. residence

The 2012 Census asked about the 'home island' of each person in a household. A comparison of home island to island of residence allows an assessment of longer-term migration i.e. movement across the generations from 'home'. In many cases when a person's home island is different from their residence island, this does not mean the person is a 'migrant' in the usual sense of somebody who moves during their own lifetime, as in the previous section. In migration literature there is reference to 'second generation migrants' whose parents were migrants, or 'third generation migrants' whose grandparent(s) were migrants, and these descriptions can be applied to many people in Tuvalu.

It is not always straightforward to determine 'home island'. The enumerator's Training Manual instructs that each person should only have one home island recorded, and it should be the one that "she/he prefers most to be the home island". If that person has parents who were born on different islands, or has ancestries from more than one island, then a choice had to be made. The determination of home island is not simply an issue of finding out about earlier migrations, but it relates to land ownership and rights that can carry down through generations even if a person is not born or resident on that island. Thus in the census, the reply to this question is likely to relate to the island that a person perceives as the one where the land right ties are strongest and/or the one which their parent(s) maintain the most contact with.

Table A6 compares home island with island of residence, and the long-term levels of in and out migration that these numbers imply. Of the total population, only 54 percent were residing on their home islands in 2012. Figure A4 shows the proportions of the home island populations that usually reside in the home island and that are residing on a different island. It shows that the northern islands of Nanumea, Nanumaga and Niutao have the lowest proportion of residents, and with Nukufetau, have less than fifty percent of their home island populations resident. In contrast, Funafuti had about 95 percent of its home island population resident. Further breakdown of home island by island of residence, age and sex is available in Basic Table 11.

Figure A4 Proportion of home island populations which are resident or absent 2012



c. Recent migration: residence at census vs. residence 3 years earlier

One question on the 2012 Census was specifically designed to collect information on recent mobility. Each person was asked what their usual residence was in 2009, three years before the census. The results from this question are tabulated in Table A7. The only significant net migration change using this three year indicator was in Vaitupu where a net loss of nearly 200 was shown. This is an outcome of the on-movement of high school students who have completed their studies and returned to Funafuti or their home island. For the other islands there are relatively small net gains or losses over three years. However, the data does show that there were nearly 1,100 changes in usual residence over this period (not including overseas migration) indicating a considerable level of population 'circulation'. While about 40 percent of this circulation is into and out of Funafuti, there is considerable circulation between all of the islands. Further detail on this recent migration by age and sex is shown in Basic Table 11.

Table A5: Lifetime migration: Island of birth by island of residence 2012

Place of residence	Place of birth											In-migrants (excl. overseas)	In-migrants (inc. overseas)	internal net migration
	Tuvalu	Nanumea	Nanumaga	Niutao	Nui	Vaitupu	Nukufetau	Funafuti	Nukulaelae	Niulakita	Overseas			
Tuvalu	10,640	737	600	715	487	893	695	3,933	248	59	2,273	0	2,273	0
Nanumea	612	309	6	19	8	5	4	161	0	1	99	204	303	-224
Nanumaga	551	7	282	6	1	4	2	152	3	2	92	177	269	-141
Niutao	694	13	13	345	5	11	4	177	6	30	90	259	349	-111
Nui	729	8	3	11	321	6	8	213	1	2	156	252	408	86
Vaitupu	1,542	44	44	47	23	607	28	412	14	5	318	617	935	331
Nukufetau	666	11	3	4	3	5	362	192	2	0	84	220	304	-113
Funafuti	5,436	339	239	261	124	247	282	2,488	76	17	1,363	1,585	2,948	140
Nukulaelae	364	6	6	8	2	7	5	119	146	1	64	154	218	52
Niulakita	46	0	4	14	0	1	0	19	0	1	7	38	45	-20
Out-migrants	0	428	318	370	166	286	333	1,445	102	58	2,273	3,506	5,779	0

Table A6: Inter-generational migration: Home island by island of residence 2012

Place of residence	Home Island											In-migrants (excl. overseas)	In-migrants (inc. overseas)	internal net migration
	Tuvalu	Nanumea	Nanumaga	Niutao	Nui	Vaitupu	Nukufetau	Funafuti	Nukulaelae	Niulakita	Overseas			
Tuvalu	10640	1656	1222	1424	1034	2068	1381	1166	543	20	126	0	126	0
Nanumea	612	588	5	10	4	0	1	3	0	0	1	23	24	-1045
Nanumaga	551	2	528	4	1	6	7	0	0	0	3	20	23	-674
Niutao	694	11	6	628	5	13	8	15	5	0	3	63	66	-733
Nui	729	3	7	4	684	5	7	0	1	0	18	27	45	-323
Vaitupu	1542	74	48	66	38	1202	50	29	22	1	12	328	340	-538
Nukufetau	666	8	1	5	2	0	641	6	2	0	1	665	666	-75
Funafuti	5436	958	622	680	300	832	666	1111	181	0	86	4,239	4,325	4184
Nukulaelae	364	11	2	8	0	6	1	2	332	0	2	30	32	-181
Niulakita	46	1	3	19	0	4	0	0	0	19	0	27	27	26
Out-migrants	0	1,068	694	796	350	866	740	55	211	1	126	5,422	5,548	641

Table A7: Recent migration: Island of residence 3 years earlier (2009) by island of residence 2012

Residence 3 years earlier															In-migrants (excl. overseas)	in-migrants (inc. overseas)	internal net migration
Place of residence	Tuvalu	Nanumea	Nanumaga	Niutao	Nui	Vaitupu	Nukufetau	Funafuti	Nukulaelae	Niulakita	Overseas						
Tuvalu	9845	486	508	611	605	1561	564	4559	301	31	619	0	619	0			
Nanumea	569	398	1	11	1	10	0	111	0	0	37	134	171	46			
Nanumaga	510	0	452	0	0	9	0	45	0	0	4	54	58	-2			
Niutao	648	1	1	546	3	16	0	68	1	0	12	90	102	25			
Nui	674	4	1	1	554	28	4	52	1	0	29	91	120	40			
Vaitupu	1444	8	3	3	0	1269	0	79	5	0	77	98	175	-194			
Nukufetau	620	0	0	4	0	21	507	55	3	0	30	83	113	26			
Funafuti	4994	75	46	39	41	195	49	4114	18	2	415	465	880	20			
Nukulaelae	344	0	4	2	6	13	4	28	273	0	14	57	71	29			
Niulakita	42	0	0	5	0	0	0	7	0	29	18	12	30	10			
Out-migrants	0	88	56	65	51	292	57	445	28	2	636	1,084	1,720	0			

d. Temporary mobility: enumeration vs. residence

One way of measuring temporary mobility is by comparing place of enumeration and place of residence. Since usual residence means that a person has lived more than six months in a place or intends to live for more than six months, those who are enumerated on an island other than their island of usual residence, are temporary migrants. As might be expected, the great majority of these temporary migrants are involved in movements to or from Funafuti. In the 2012 Census, there were 879 people who were enumerated on Funafuti but were usual residents of another island (and a further 127 usually resident overseas). Thus temporary internal migrants comprise about 14 percent of the enumerated population of Funafuti. The census did not collect information about why these temporary migrants were in Funafuti but it is likely to include reasons such as staying with family, looking for employment, undertaking government business, shopping, and similar activities. There were also 290 people who were usual residents of Funafuti but were enumerated in other islands. These would include people visiting their families on their home islands as well as government employees working temporarily on other islands.

e. Impacts of internal migration

A positive aspect of internal migration is often said to be that it can moderate income inequalities between rural and urban areas, or between areas of a country with more cash-based jobs or other opportunities, and areas with less opportunities. Remittances are one means of doing this, and there is evidence that remittances play a significant role in the incomes of Tuvaluan households. Internal remittances have already been compared to international remittances, and it was shown that while 28 percent of households received remittances from overseas, only 20 percent received them from within Tuvalu. It is notable that Funafuti received more from overseas, while the Outer Islands received the greatest amount from within, presumably mostly from Funafuti. The aggregate amounts of internal remittances received, estimated from the 2004/05 and 2010 Household Income and Expenditure Surveys (HIES), are shown in Table A8. The 2010 HIES showed that the average monthly internal remittances received in the Outer Islands was \$81 while households in Funafuti averaged \$54.

Table A8: Remittances received within Tuvalu, by receiving region, from Household Income and Expenditure Surveys 2004/05 and 2010

Receiving Region	2004/05	2010
Tuvalu total	\$411,894	\$1,520,986
Funafuti	\$93,663	\$513,006
Outer Islands	\$318,231	\$1,007,980

Source: 2004/05 and 2010 HIES

In most countries, migration is usually age, and sometimes, sex selective. In the case of internal migration in Tuvalu, it is especially age selective, with sex selectivity also being seen in some cases. In Figure A5 the age-sex structure of lifetime migration is compared to the total population of Tuvalu. It reveals only a limited amount of age-sex selectivity especially for females at secondary school ages and in their early thirties, with the latter possibly related to marriage movements. The age-sex structure of recent migrants, who were resident on a different island three years before the census, is more typical of the age selectivity of migration (Figure A6). Younger age cohorts, especially those between ages 15 and 30 have shown the highest level of mobility over the three year period, mostly related to secondary school movements and entry into the labour force. Since much of the latter involves movement to Funafuti, this has had an impact on that island's age-sex structure, making it much younger than the age structure of the Outer Islands. This is discussed further in the urbanisation section which follows. Over time, internal migration has also resulted in

the rapid growth of Funafuti, but population loss or slow growth in the Outer Islands. This is also discussed further in the urbanisation section.

Figure A5: Age-sex structure of lifetime migrants (blue lines) compared to age-sex structure of Tuvalu (shaded)

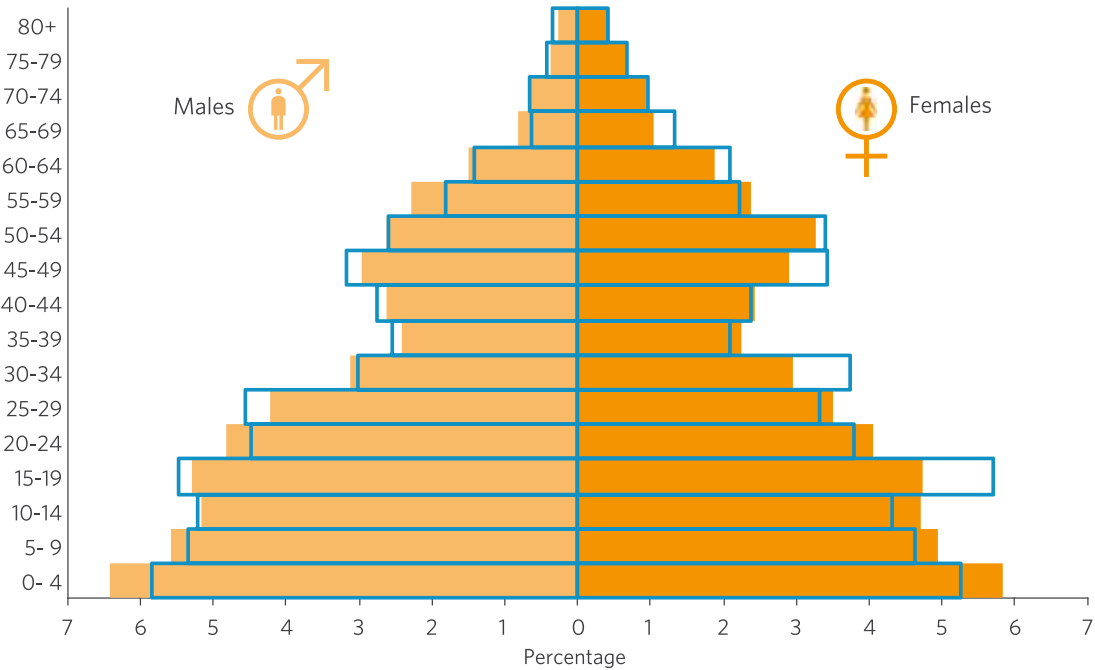
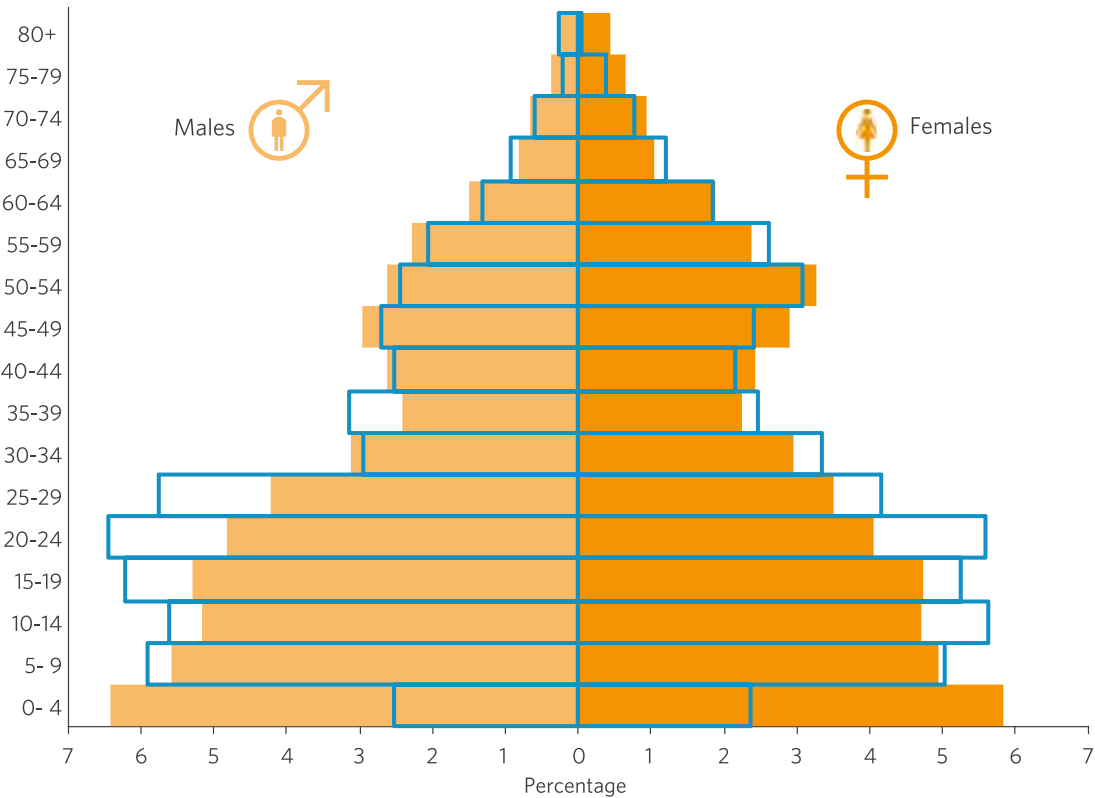


Figure A6: Age-sex structure of recent migrants (different island 3 years ago) (blue lines) compared to age-sex structure of Tuvalu (shaded)





B. Urbanisation



B1. Introduction: Urbanisation in Pacific and Tuvaluan contexts

Urbanisation is a world-wide phenomenon, and can alternatively be seen as an outcome of economic development or as a factor promoting development, and to some extent it is both. Although the populations of most Pacific nations are small compared to other parts of the world, and urbanisation is smaller scale in terms of numbers, in proportionate terms urbanisation has a great impact in the Pacific. For most Pacific nations, urbanisation has been mainly focussed on a single town or city on a single island. This, of course is the case with Funafuti in Tuvalu, but also with Tarawa in Kiribati, Rarotonga in Cook Islands, Papeete in French Polynesia, Apia in Samoa, Nukualofa in Tonga, and Honiara in Solomon Islands.

Urbanisation is taking place in all parts of the Pacific, with high rates of urban growth in the 'relatively rural' countries of Melanesia and also in the 'relatively urban' countries of Micronesia. Polynesian countries fall somewhere in between, with 41 percent of their populations being urban in 2000, a rise of 181 percent since 1960.¹⁴ The urban population is projected to almost double between 2000 and 2050 so that the proportion in urban areas will rise from 41 percent to 58 percent. Problems associated with rapid urbanisation include slower growth of labour force than of those wishing to enter formal employment, increasing concentration of youth in urban centres and potential dissatisfaction, increased inequalities between urban and rural areas and within urban areas, and difficulties of providing urban services to growing populations.¹⁵

In the context of this report, Funafuti, or more specifically Fongafale island of Funafuti atoll, is considered to be the only urban area in Tuvalu. Although its population of about 6,000 is small by global norms, and even by Pacific standards, there are various reasons to consider Funafuti as 'urban'. It is the administrative capital, location of the only airport and international shipping port, and centre of much of the cash economy of Tuvalu. As a result of the location of government and business, a high proportion of the formal labour force is located there, including most of the highly-skilled professionals and semi-professionals. Also, its population density is high as anybody who has flown over it, or walked through it, will know, with houses crowded closely together.

The Population Policy of Tuvalu has recognised the problems of ongoing urbanisation in Tuvalu.¹⁶ Potential problems noted are similar to those mentioned above for the Pacific generally, but especially notable is the rapid concentration of population on Funafuti compared to the outer islands, the challenges for the Funafuti Kaupule (Council) in dealing with issues of land rights, provision of services, and the ecological fragility of Fongafale island, especially in terms of provision of water supply and of waste disposal. Although much of the Population Policy is relevant to the issue of urbanisation, two policy goals in particular relate to this issue: Policy Goal 2-Retain population in outer islands and create a more balanced age structure, and Policy Goal 3- Improve the urban environment.

B2. Population changes Funafuti vs. outer islands

Historical population change 1973-2012

The history of the urbanisation of Funafuti is linked to the separation of the Gilbert and Ellice Islands in the 1970s. As a response to different cultural and political expectations the Ellice Islands achieved separation from the Gilbert Islands in 1976, and then independence as the nation state of Tuvalu in 1978. It was during the late colonial and early independence periods that the infrastructure of government was established in Funafuti to replace the government functions based at Tarawa, which became the capital of the newly independent Kiribati. Many Tuvaluan civil servants were relocated from Tarawa to Funafuti, others were attracted from other islands in Tuvalu, and overseas diplomatic and aid workers were mostly located there. These changes soon before and soon after independence resulted in an increase in population growth in Tuvalu generally between 1973 and 1979 (averaging 3.7 percent per year) but especially dramatic was the growth of population of Funafuti from 871 in 1973 to 2,131 in 1979 (Figure B1), at a growth rate about four times the national average, and resulting in a near doubling of its proportion of the population of Tuvalu (Figure B2).

In the 1980s the population growth rate of Tuvalu slowed to about two percent per year, and further in the 1990s to only about 0.5 percent per year.¹⁷ This was largely a result of increased opportunity for international migration since Total Fertility Rates appear to have been nearly constant through this period, at about 4.0.¹⁸ Further slowing was offset by increases in life expectancy. From a life expectancy of 62.9 years in the period 1992-1997 there was a significant increase to 70.1 years in 2004-2009, with women maintaining an average lifespan of 4.5 years longer than men. The relatively slow growth of the population, however, seems to have had more impact in the Outer Islands than in Funafuti. Figure B1 shows the number of people enumerated in the Outer Islands has declined slowly but steadily since 1979, while Funafuti has increased throughout. This difference is more pronounced when the proportion of the total population of Tuvalu that was enumerated in Funafuti is considered. Figure B2 shows the percentage in the capital rising from 29 to 42 percent between 1979 and 1991, then to 47 percent in 2002, and finally to 57 percent in 2012.

Figure B1: Population growth of Funafuti and Outer Islands 1973-2012

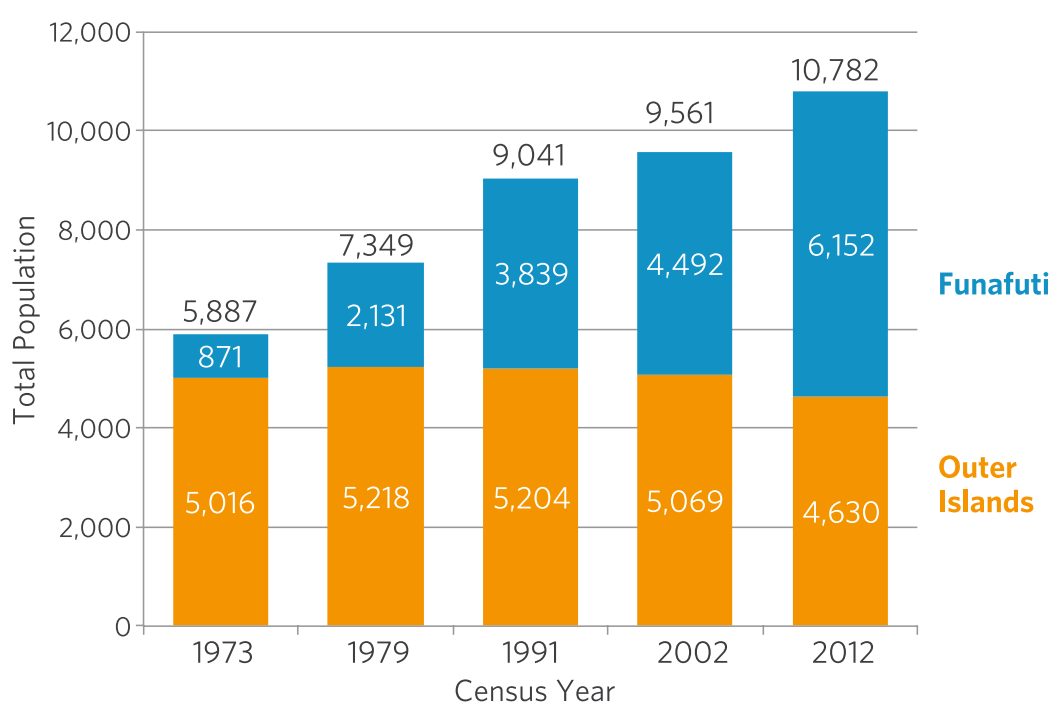
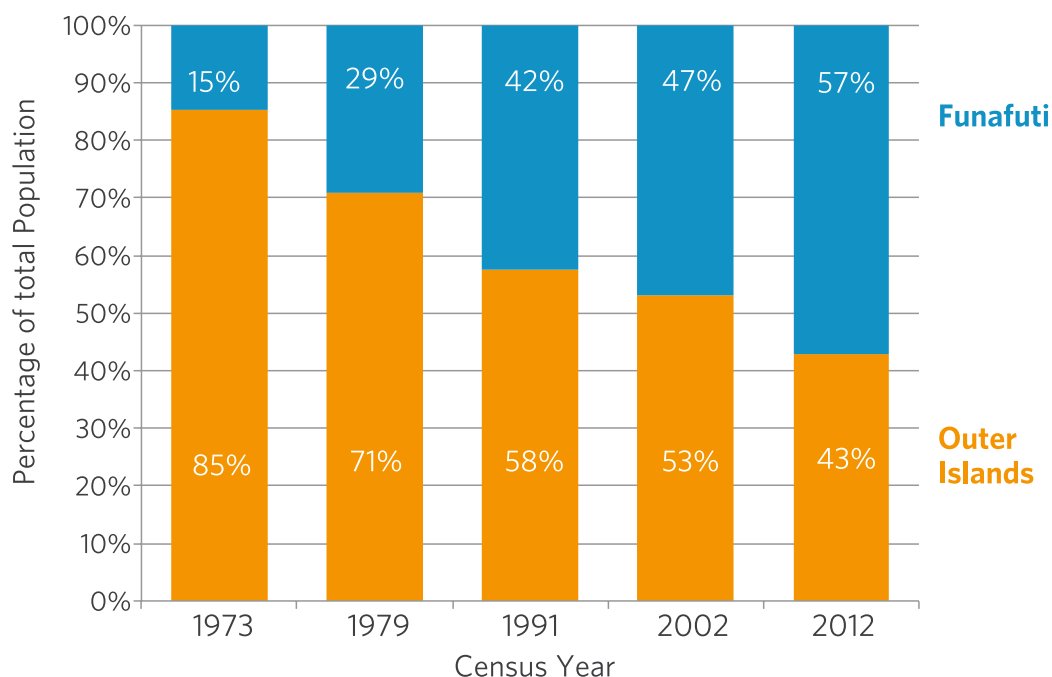


Figure B2: Relative proportions of population in Funafuti 1973-2012



B3. What is the population of Funafuti?: Enumeration/residence/home island

It is not a simple matter to determine how many people 'live' on Funafuti, and this may be measured in different ways. The 2012 Census adopted three primary measures of 'location' and 'attachment': place of (usual) residence, place of enumeration, and home island.

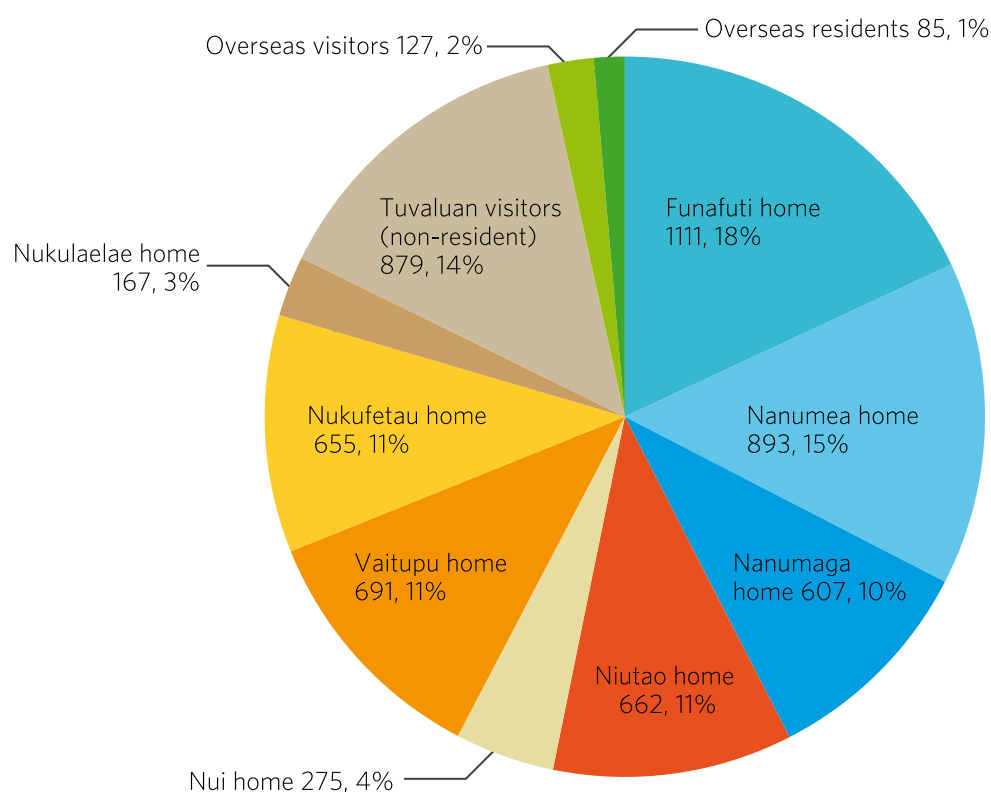
The place of residence question asked where each person enumerated 'usually lived' and as discussed earlier this meant anyone who had been resident more than six months or intended to be resident for more than six months was considered to be usually resident. The number of usual residents for Funafuti was 5,436 in the 2012 Census, although 290 of these were enumerated in other islands in the census.

The place of enumeration is where a person was on Census Night (November 4, 2012) and this included anybody resident in Tuvalu including tourists and those stopping over on ships. At the time of the census there were just over 1,000 'visitors' in Funafuti, made up of 879 Tuvaluans from other islands and 127 from overseas (see Figure B3). When these numbers are combined with usual residents who were actually in Funafuti on Census Night, the total enumerated population of Funafuti was 6,152.

A further question asked where each person's home island was, meaning the island to which they were attached in terms of ancestry and land rights (see discussion in migration section). There was also a census question on birthplace, but this did not determine affiliation since often this was a different island to home island or place of residence. In the census, 1166 people gave their home island as Funafuti with the great majority of these also residing there (1,111). Figure B3 further shows the breakdown of the enumerated residents according to their home island, and this illustrates the diversity of population resident in Funafuti, but also the potential pressure on land usage rights.

The concept of usual residence is often used for planning purposes, such as the provision of schools, health facilities and other services. However, it is perhaps the enumerated population of Funafuti that is more relevant for the provision of many services, since it is likely that the census enumeration represents a typical situation for Funafuti at any one point in time, with a significant numbers of 'visitors' who must be catered for.

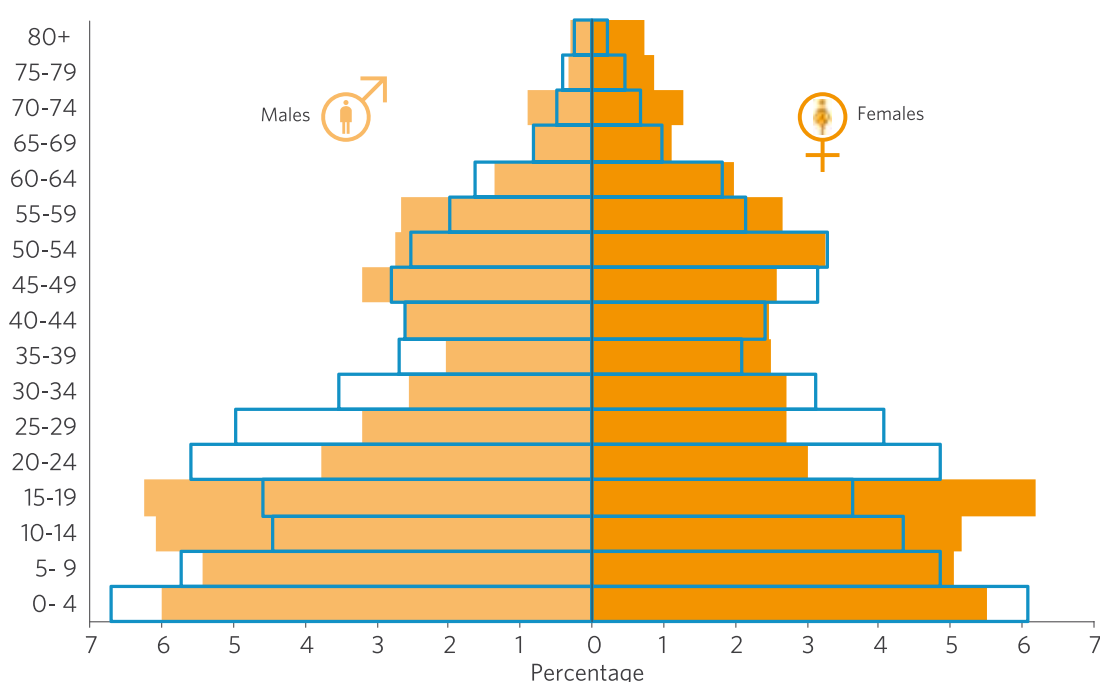
Figure B3: Enumerated population of Funafuti 2012 according to home island of usually resident population and internal and international visitors



B4. Urban age-sex structure

The international and internal migration processes operating over many years in Tuvalu, and promoting urbanisation, have resulted in age and gender specific patterns of settlement. In Figure B4 the age-sex structure of Funafuti is compared to the combined age-sex structure of the Outer Islands. The most obvious difference is the higher proportion of population in the age cohorts from 20 to 34, and for males up to 39, in Funafuti. These are the cohorts who are most likely to have moved to Funafuti in search of paid work and have stayed on either working formally or undertaking other activities. The location of the government high school in Vaitupu is apparent with the absence of 10 to 19 year olds from Funafuti. The overall sex ratio of 106 males per 100 females is relatively balanced compared to some other urban areas in the Pacific, illustrating both the family composition of internal migration, and the active involvement of women in the paid labour force.

Figure B4: Age sex structure of Funafuti (blue lines) compared to Outer Islands (shading) 2012



B5. Urban households: access to land, housing and services

The main census report has an extensive coverage of household characteristics by island and often comparing Funafuti to the Outer Islands. It is not intended to reproduce those data and charts in this report, but rather to emphasise some of the differences between the Outer Islands and the only urban area i.e. Funafuti. Thus the focus is on some of the issues facing urban households in relation to the ownership of land, the ownership and provision of housing, and the provision of urban services.

Land and house ownership

Access to land is one of the fundamental issues in the urbanisation of Funafuti. This is mainly to allow the construction of housing, but is also relevant to allow the growing of trees and small-scale food gardens, the housing of pigs, and the establishment of business premises. Figure B5 relates to the ownership of the land on which households have their living quarters according to the type of owner. For the Outer Islands of Tuvalu, nearly 70 per cent of households own their own land through their clan affiliations. In contrast, in Funafuti, just over one-third of all households are on land for which they can claim ownership. All of the land on Funafuti can be said to be ultimately owned within the traditional land ownership system, with the possible exception of some church land which has been gifted in perpetuity. All government land has been leased from the traditional owners, with leases set to expire in 2017. Thus, in Figure B5, the 23 percent of land shown as being leased from government is in reality re-leased from traditional owners through the government. This contrasts with 19 percent of households which have a private lease, presumably directly with traditional landowners. A slightly higher proportion of households have a personal arrangement, which implies that they have a less formal arrangement with landowners, possibly through family linkages or friendships. While we have seen in Figure B3 that only 18 percent of the resident population consider Funafuti to be their home island, it should be noted that access rights to land may flow through inter-marriage or longer term relationships between clans on different islands, and this may explain some of the complexities shown in Figure B5.

About 80 percent of households in the Outer Islands own the house in which they live and this contrasts with the situation in Funafuti in which just over one-half of households own their house (Figure B6). Just over one-third of households rent their house, and about 10 percent have some sort of personal arrangement, paralleling the personal arrangements in land access already noted. Figure B7 shows that about one-half of rental houses are owned by individuals and a further 43 percent are owned by the government. Civil servants who have come from other islands to Funafuti are 'eligible' for housing provided by the government, but the demand exceeds the supply so that some civil servants rent from private landlords, in some cases with a subsidy provided by the government.

Another way of considering the housing situation of households is according to the living quarter arrangements. Figure B8 shows that one family detached houses are the predominant mode of arrangement throughout Tuvalu, though less prevalent in Funafuti where about three-quarters of households are in this category. As a result of land pressure, about 16 percent of households live in one family houses that are attached to another house. A small number of households also live in apartments and in other arrangements.

Figure B5: Land ownership of households in Funafuti and Outer Islands compared 2012

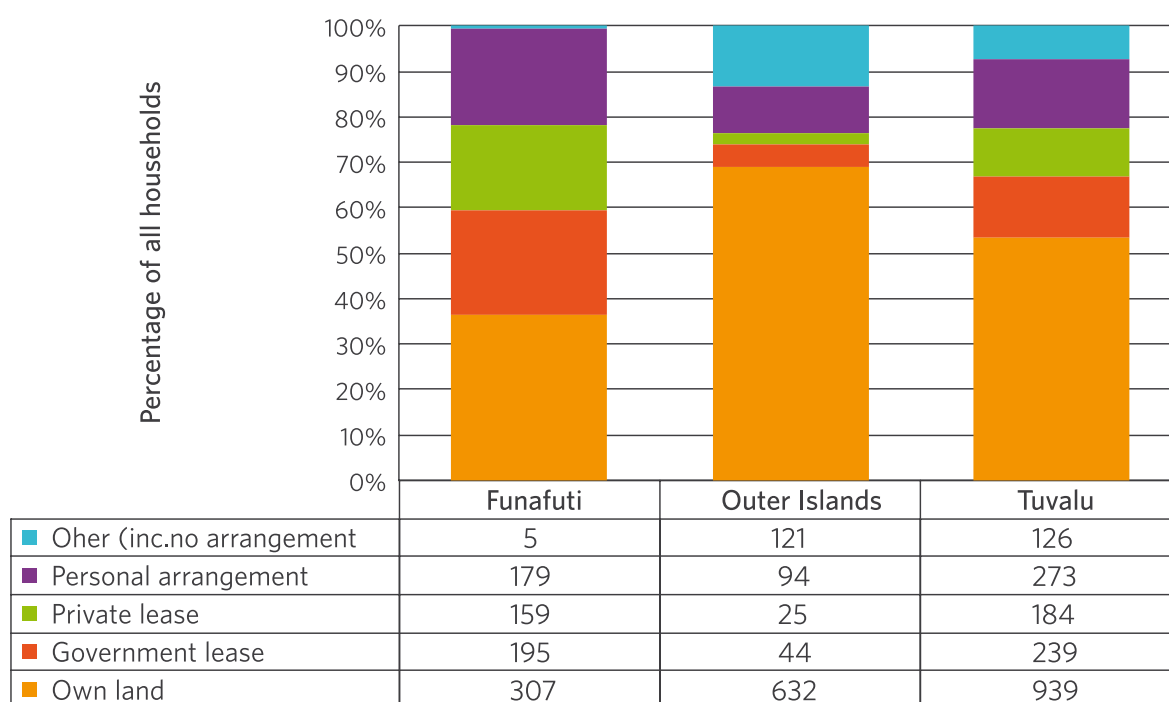


Figure B6: House ownership of households in Funafuti and Outer Islands compared 2012

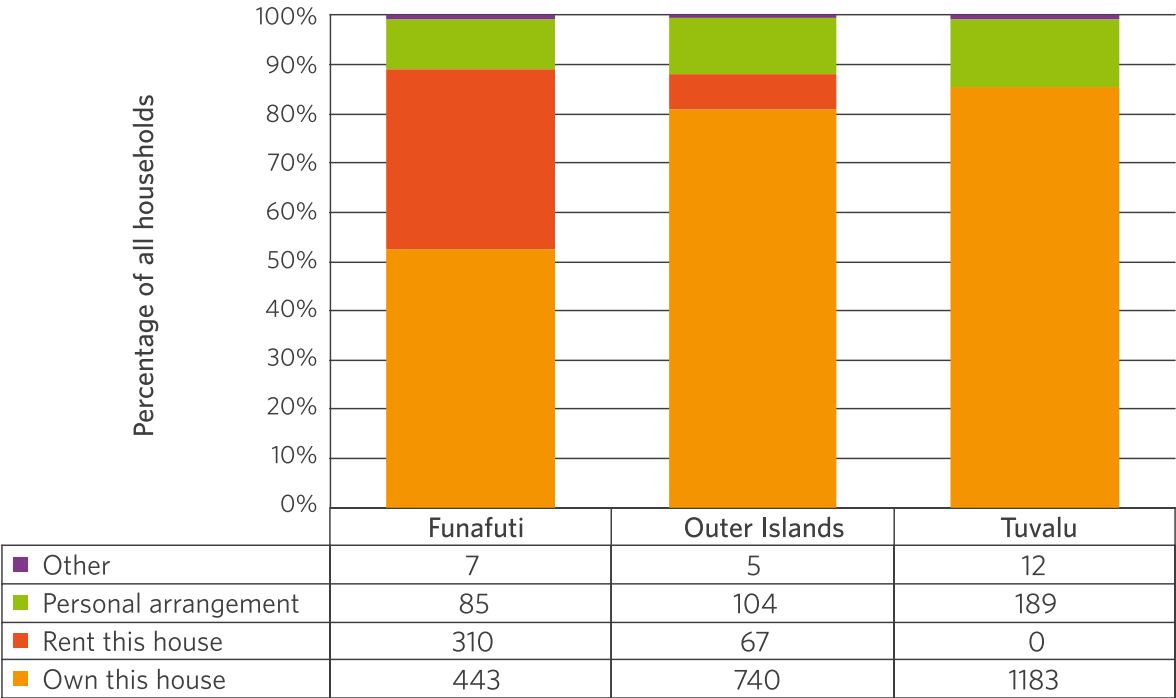


Figure B7: Ownership of rental housing in Funafuti 2012

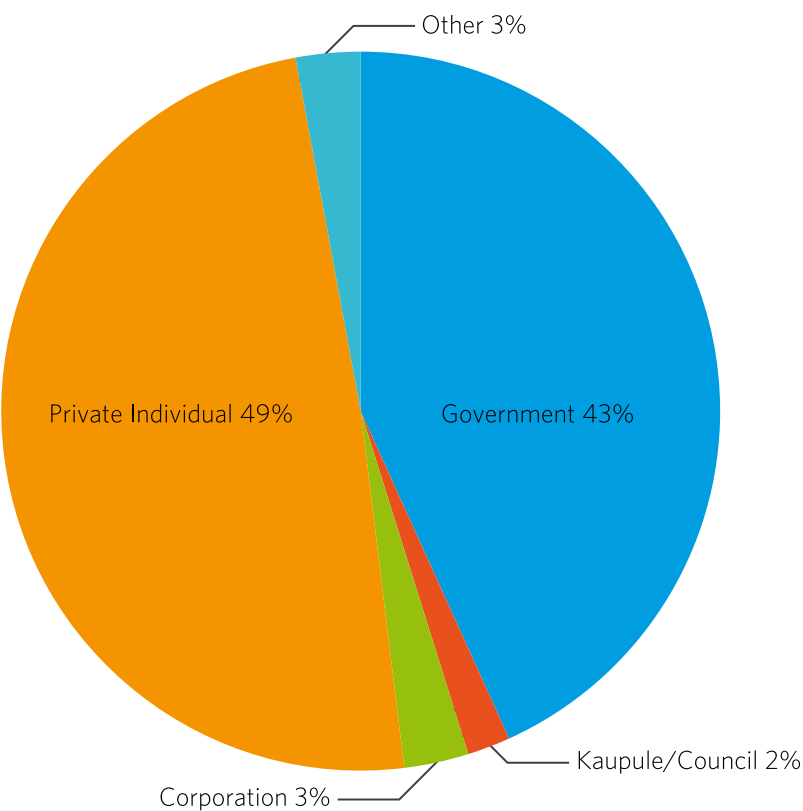
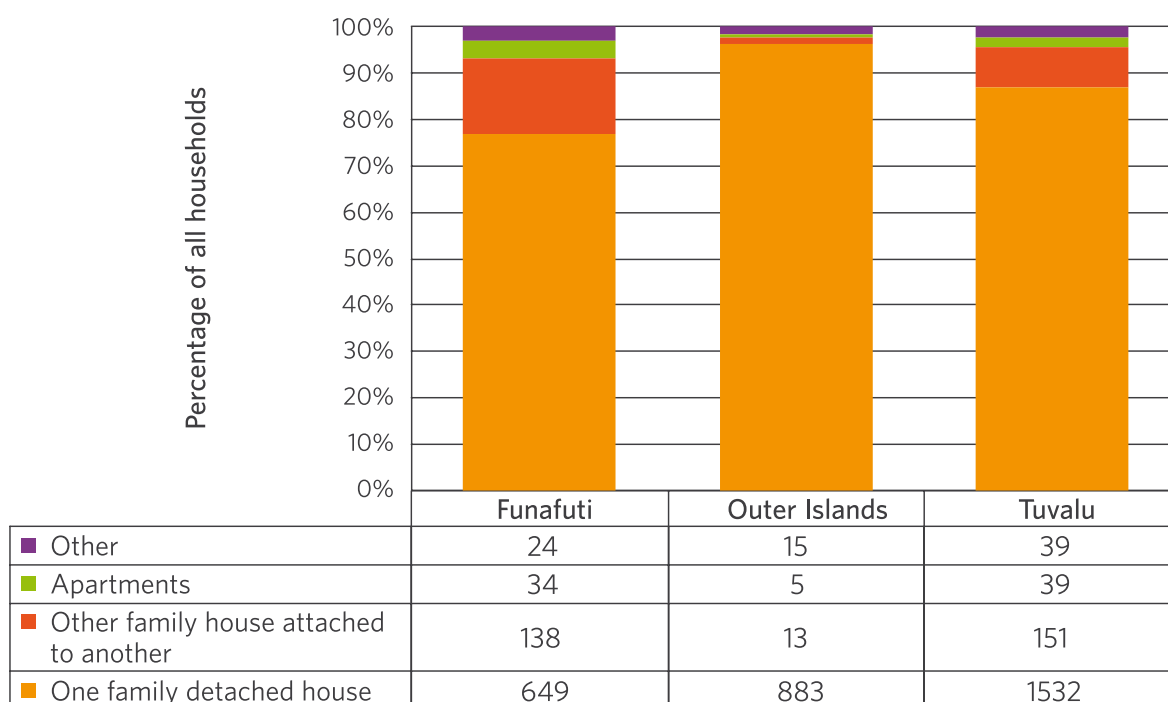


Figure B8: Household living quarter arrangements, Funafuti and Outer Islands compared 2012



Urban services

The rapidly growing population of Funafuti has put pressure on the provision of resources necessary for the operation of households. In some cases these relate to issues that affect all of the islands of Tuvalu, but in others they are specific to issues of the rapid urbanisation and population density of Funafuti. One simple indicator of pressure on households is the average household size, which in Funafuti is 7.1 people compared to an average of 5.0 in the Outer Islands.

Two aspects of service provision which are relatively similar between Funafuti and the Outer Islands are power supply and water supply. Table B1 shows that about 95 percent of Tuvalu's households get their power supply for lighting from electricity, with little difference between Funafuti and the Outer Islands. The dependence on electricity also means a dependence on imported fossil fuels for power generation, and recent efforts to diversify, especially to solar energy, had had only limited impact by the time of the census, with only 2.4 percent of households using this as their main source of lighting energy.

Water supply is also a serious issue for islands without rivers or large supplies of underground fresh water. Even with the recent installation of desalinators, rainfall remains the most important source of water for drinking, washing and other purposes. However, the issue of seasonality and potential long dry periods is a serious problem as shown by the serious drought in 2011. The issue then becomes storage, and nearly all households in Tuvalu (99 percent) rely on their own water cisterns or tanks to store water. Table B1 shows that in Funafuti about one-half of these are constructed to provide piped water into the house, while the other half have piped water in the yard nearby. This contrasts with the Outer Islands where most households have water piped only into the yard. The census also asked detailed questions about the number of water tanks and their capacity, allowing a calculation of total water storage. The average household capacity for the country was close to 25,000 litres, with Funafuti a little higher and the Outer Islands a little lower.

When the larger average household size of Funafuti is considered, the average per capita storage capacity is somewhat lower at 3,586 litres per person compared to 4,566 litres in the Outer Islands. It should be remembered, however, that the main functional water desalinator is operating in Funafuti. Water storage facilities were enumerated in the 2002 Census, but these data are not directly comparable; however the rapid expansion in the number of water storage tanks throughout the country has resulted in a reduced number of households which had to fetch and carry water from 16 percent in 2002 to less than one percent in 2012.

Other aspects of resources available to households vary considerably between Funafuti and the Outer Islands as shown in Table B1. Figure B9 shows the contrast in terms of cooking fuel where bottled gas is the predominant cooking fuel in Funafuti with 81 percent of households in this category, while in the Outer Islands, nearly three-quarters of households used wood and coconut parts for cooking. This illustrates the availability of resources in the Outer Islands which are now a scarce commodity in Funafuti. For Funafuti, the use of gas is a significant switch from 2002 when kerosene was the predominant fuel with about three-quarters of households using this and only one-fifth using gas.

There is also a contrast in waste disposal systems with the predominant mode being collection by the kaupule (76 percent of households) in Funafuti, while in the Outer Islands, authorised collections sites were predominant (58 percent). Figure B10 shows that the Outer Islands had more diverse means of disposal, including composting and burning, practices which were rare in Funafuti. Human waste disposal had more commonality with septic tanks predominating in all areas, but pit latrines being more common in the Outer Islands (Table B1). Worryingly, about five percent of households in Funafuti and nine percent in the Outer Islands said they had no toilet facilities and used the bush or beach. This was a decline from seven and 17 percent respectively in 2002. The water-conserving option of composting toilets (falevaties) has been promoted by aid donors in recent years, but at the time of the census in 2012, only 22 households (2.6 percent) claimed to be using these.

Figure B9: Main cooking fuel of households, Funafuti and Outer Islands compared

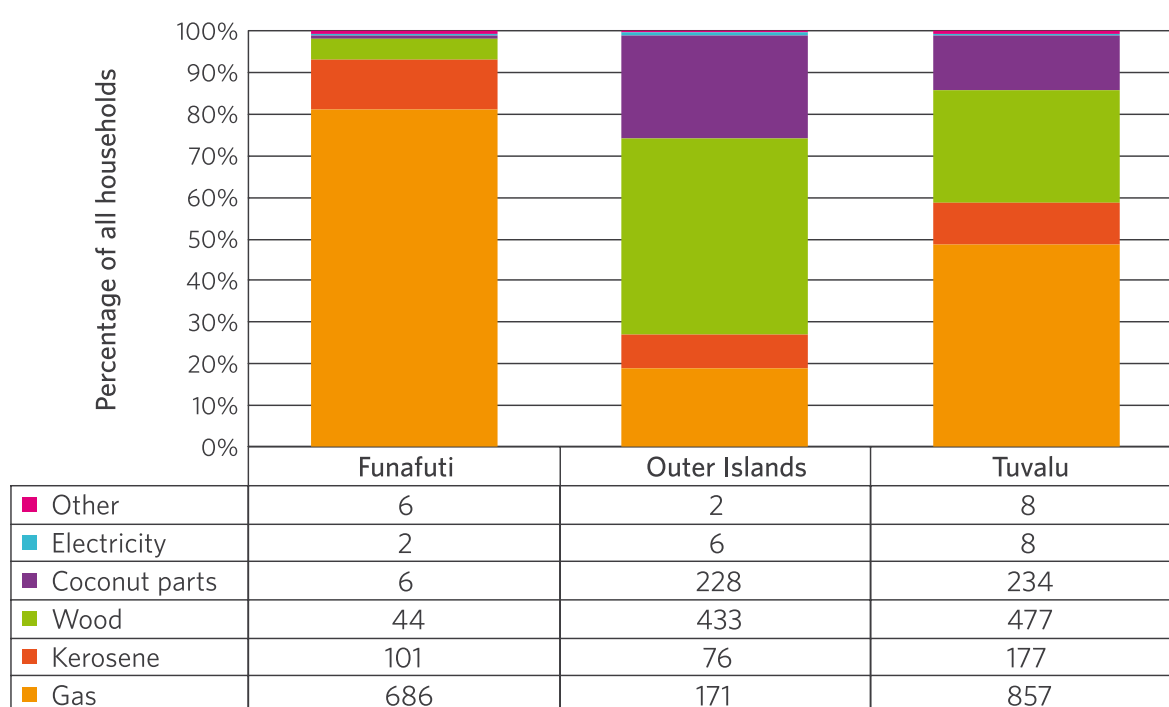
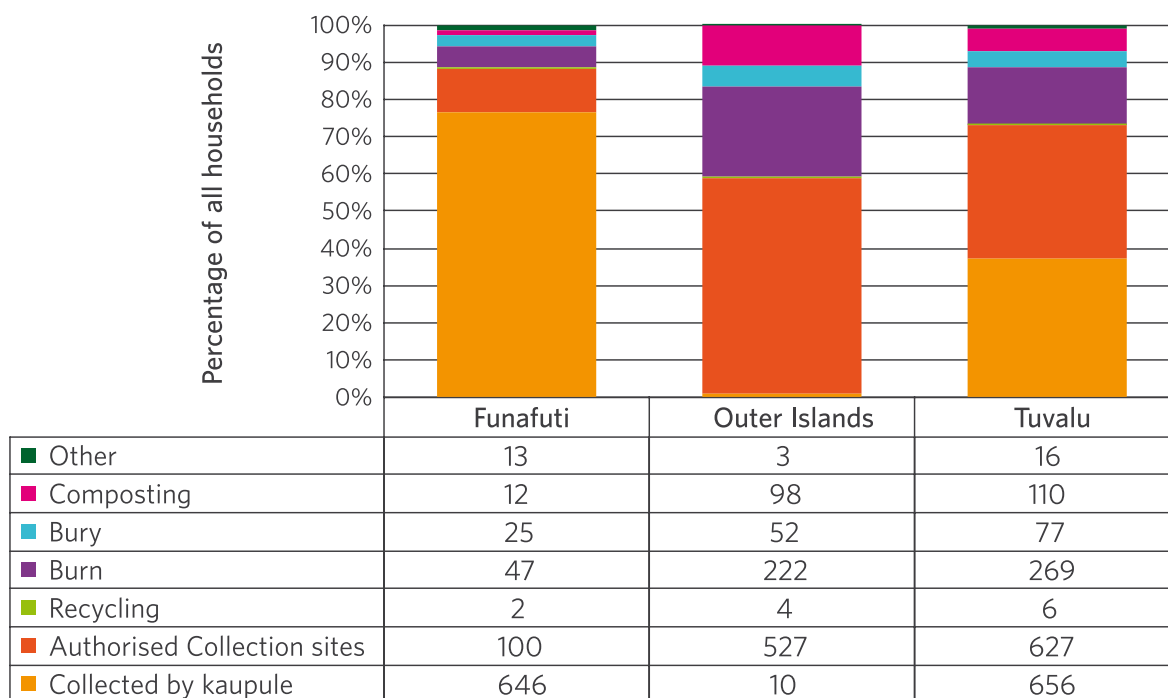


Table B1: Service provision to households, Funafuti and Outer Islands compared

Household (HH) characteristics	Funafuti	Outer Islands	Tuvalu
No. of private households	845	916	1761
Average household size	7.1	5.0	6.0
power supply (% of HHs)			
> using electricity	96.3	94.2	95.2
> think electricity reliable	91.1	60.9	75.4
water supply (drinking: % of HHs)			
> piped into dwelling	50.2	17.7	33.3
> piped into yard	49.1	80.8	65.5
water storage			
> average no. litres/HH	26,110	23,077	24,532
> average no. litres/person	3,586	4,566	4,007
Main cooking fuel (% of HHs)			
> gas	81.2	18.7	48.7
> kerosene	12.0	8.3	10.1
> wood	5.2	47.3	27.1
> coconut parts	0.7	24.9	13.3
waste disposal (% of HHs)			
> collected by kaupule	76.4	1.1	37.3
> authorised collection sites	11.8	57.5	35.6
> burn	5.6	24.2	15.3
> composting	1.4	10.7	6.2
> other	4.7	6.4	5.6
toilet facilities (% of HHs)			
> septic tank	86.3	73.6	75.0
> pit latrine	6.0	16.2	15.2
> none/bush/beach	4.6	8.6	8.2

Figure B10: Means of waste disposal, Funafuti and Outer Islands compared



B6. Urbanisation Conclusions

The urbanisation of Funafuti is one of the most important issues facing Tuvalu. There are a variety of ways in which the individual and household characteristics of Funafuti can be described and analysed. More information about urban households is contained in the main census report, where many variable tables also use the Funafuti / Outer Islands comparative that has been used here. However, in this section of the report the focus has been on emphasising some of the issues directly related to the rapid growth of one island in a nation of nine islands. The rapid growth poses serious questions about access to land and the provision of housing, as well as the provision of adequate services in a context where resources are usually limited. These issues are immediate ones facing the government and people of Tuvalu, but in the longer term these issues will also transect with potential sea level rise resulting from global warming, as well as the potentialities of migration already discussed.





C1. Introduction: the youth transition

An important focus of the Tuvalu government and of international agencies such as UNFPA relates to the wellbeing of youth, since it is this group who will determine the future of Tuvalu. A new Youth Policy was developed in 2011 for a five year period. The goal of the 2012-2016 Tuvalu National Youth Policy is:

“To foster the spiritual, mental, physical and cultural development of youth of Tuvalu to enable them to be positive contributors to the national development of Tuvalu.”¹⁹

The six priority policy outcomes over the five years are:

1. Improved and equitable access to education, training and employment opportunities for young women and men (*Youth and Career Pathways*)
2. Increased equal opportunities for young women and men to participate in decision making and leadership (*Youth and Governance*)
3. Youth wellbeing improved through equitable access to health services, spiritual guidance, sports opportunities and cultural activities (*Youth and Wellbeing*)
4. Increased number of youth participating in activities that promotes peace building and conflict prevention (*Youth and Peacebuilding*)
5. Increased number of youth promoting sustainable development (*Youth and Sustainable Development*)
6. Improved capacity to implement the Policy (*Youth Mainstreaming*)

Although the 2012 Census data do not relate to all of these policy areas, it can serve as a benchmark for some of them. In this report ‘youth’ are considered to be those who are aged between 15 and 35. Although those in their 20s and into their early 30s may not be considered ‘youth’ by some measures, these cohorts are included here because these are the target cohorts for the youth policy. The policy notes, however, that “...this definition is a departure from cultural norms in Tuvalu where age is not considered a limiting factor in determining who can or cannot participate in youth activities” and in some cultural contexts people up to the age of 50 can be considered as ‘youth’. One of the reasons for using a broader definition of youth is that in many cases, people are undertaking tertiary education and job searching into their late 20s and early 30s, so can be seen to be in transition.

The purpose of this section of the report is to use the 2012 Census to show how young people are doing in terms of the transition from childhood to full participation in the society and economy. A number of life changes take place during the youth transition including the completion (or not) of higher education, finding formal employment or more generally establishing a means of livelihood, entering new relationships including marriage, leaving the parental home, and making lifestyle choices about health and other aspects. The approach of this part of the report is to show how each five-year cohort between ages 15 and 35 is faring in relation to some of these issues that are measurable by a census, and to compare the ‘adult’ population aged 35 and over.

C2. Demographics of the youth population

The broad definition of 'youth' that aligns with the Tuvalu Youth Policy and that is used within this report includes all of those aged between 15 and 35 years (the oldest cohort shown as 30-34 in tables and figures). This group comprises about 33 percent of the total population of Tuvalu. Figure C1 shows these ages broken down by five year cohorts within the general age-sex structure of Tuvalu in 2012. The pyramid shows a relatively 'natural' shape for these cohorts with the exception of males aged 30-34 which is reduced; this leads on to the 35 to 39 years cohorts for both males and females which are significantly reduced. This suggests the age selectivity of out-migration which impacts particularly after age 30. The age sex breakdown of the youth population by single years of age and five year cohort is shown in Table C1.

Figure C1: Youth population within the age-sex structure of Tuvalu 2012

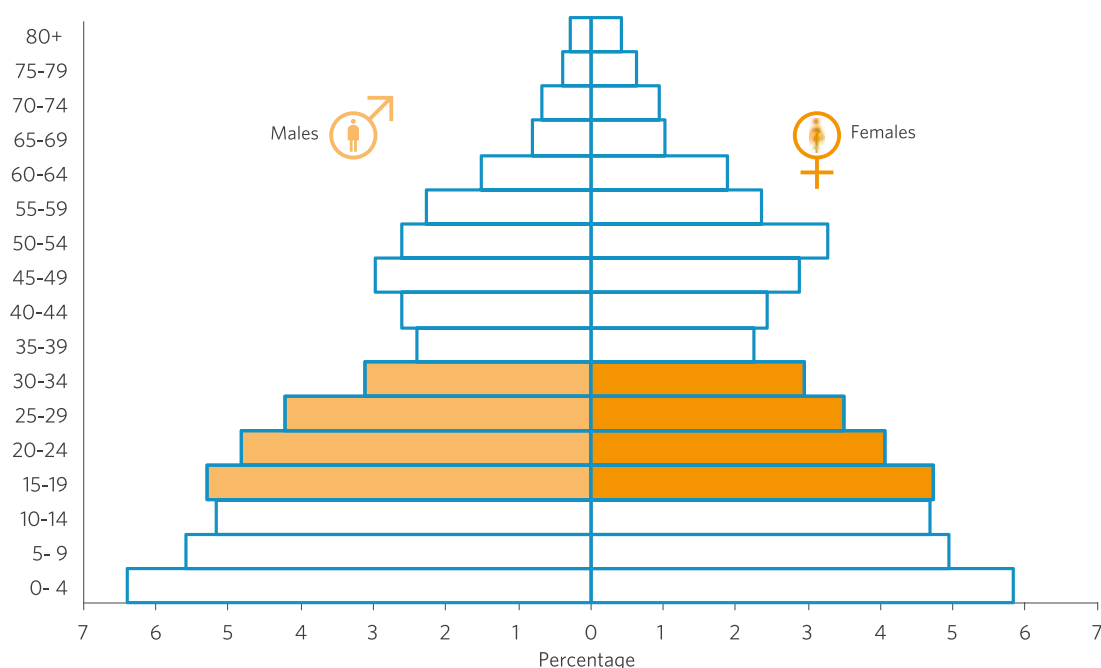


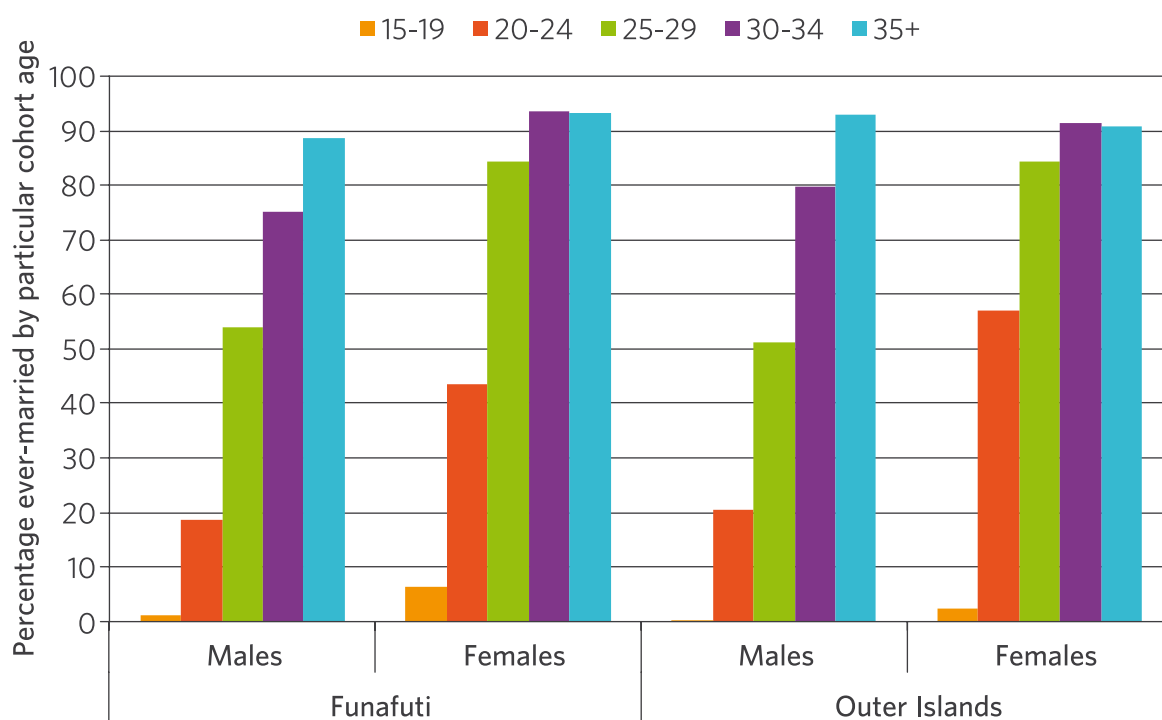
Table C1: Young people by single years of age and sex, Tuvalu 20112

Age (years)	Males	Females	Total				
15	107	95	202	25	113	93	206
16	116	120	236	26	95	75	170
17	124	108	232	27	82	52	134
18	108	104	212	28	98	89	187
19	116	83	199	29	67	68	135
15-19	571	510	1,081	25-29	455	377	832
20	107	89	196	30	104	90	194
21	94	90	184	31	70	67	137
22	117	77	194	32	56	63	119
23	113	84	197	33	57	49	106
24	89	98	187	34	49	49	98
20-24	520	438	958	30-34	336	318	654
				TOTAL	1,882	1,643	3,525

Differences in age and sex structure between islands are mainly affected by two factors: the movement of population to Funafuti, and the location of the national high school in Vaitupu. In Figure B4 we have already seen that there is a predominance of age cohorts between 20 and 35 years in Funafuti compared to the Outer Islands. The presence of those aged 10 to 19 in the Outer Islands is largely related to their presence in Vaitupu attending the secondary school.

Marriage is potentially one of the most significant events during the youth transition. Figure C2 shows the proportions of the youth population that are married within particular cohorts, by sex and whether they are in Funafuti or the Outer Islands. It shows that females are married at earlier ages in both the urban areas and Outer Islands than males. In the latter, females are nearly three times as likely as males to be married in their early twenties, whereas in Funafuti it is more than twice as likely, though still having a lower rate than in the Outer Islands. In the late 20s, there is still a significant difference between females and males, but the differential between urban and rural areas is much diminished. It is not until past the age of 35 that the male-female difference nearly disappears.

Figure C2: Percentage of youth ever-married according to age cohort, gender and location



C3. Education

Education is a critical element in the transition from childhood to adulthood. For children at primary school level (years 1 to 8), schooling is free and compulsory, and Figure C3 shows that school is almost universally attended in the ages six to thirteen. Schooling remains compulsory until year 10, but it appears this is not always adhered to. From age 14 upwards, a significant gap develops in which the percentage of boys enrolled plunges more rapidly than it does for girls. At age 16 there is a marked disparity, with only 57 percent of boys and 85 percent of girls being at school. The gender gap then converges as a proportion of girls also leave the secondary schooling system.

The highest educational level achieved by young women and men according to their age cohort is shown in Figure C4. This is not always a straightforward measure because it is sometimes difficult to determine which qualification is 'higher' than another. For example, having a tertiary certificate, such as in marine, may not require full secondary school completion, while others, such as in nursing may require this. Nevertheless, Figure C4 attempts to rank these according a generally accepted educational hierarchy. One thing that is apparent is the much higher proportions of females in their 20s who had completed high school, compared to men, a phenomenon already suggested in the school enrolment data. That this difference will continue at least into the short-term future is suggested by the much higher proportion of 15 to 19 year old women who are still in school. This does not continue into tertiary degrees where women and men in their 20s are equally represented, and in the 30 to 34 year cohort, a higher proportion of men are in this category. Both men and women have significant numbers of tertiary certificate qualifications, with a clear gender demarcation in which most marine and trade certificates are held by men, and most teaching and nursing certificates are held by women.

A further general statement that can be made about the data shown in Figure C4 is that overall, the levels of education shown in the 2012 Census are considerably higher for youth populations than they were for earlier generations of Tuvaluans. For the population aged 35 and over, 46 percent of women and 34 percent of men had primary as their highest level of education, while of 20 to 34 year olds, the comparable percentages are 16 for women and 17 for men. At the other end of the spectrum, in the older cohorts, only 26 percent of women and 40 percent of men had secondary or higher (including tertiary certificates), compared to 76 percent of women and 73 percent of men in the youth cohorts.

Figure C3: School attendance by single years of age 3 to 29 years in 2012

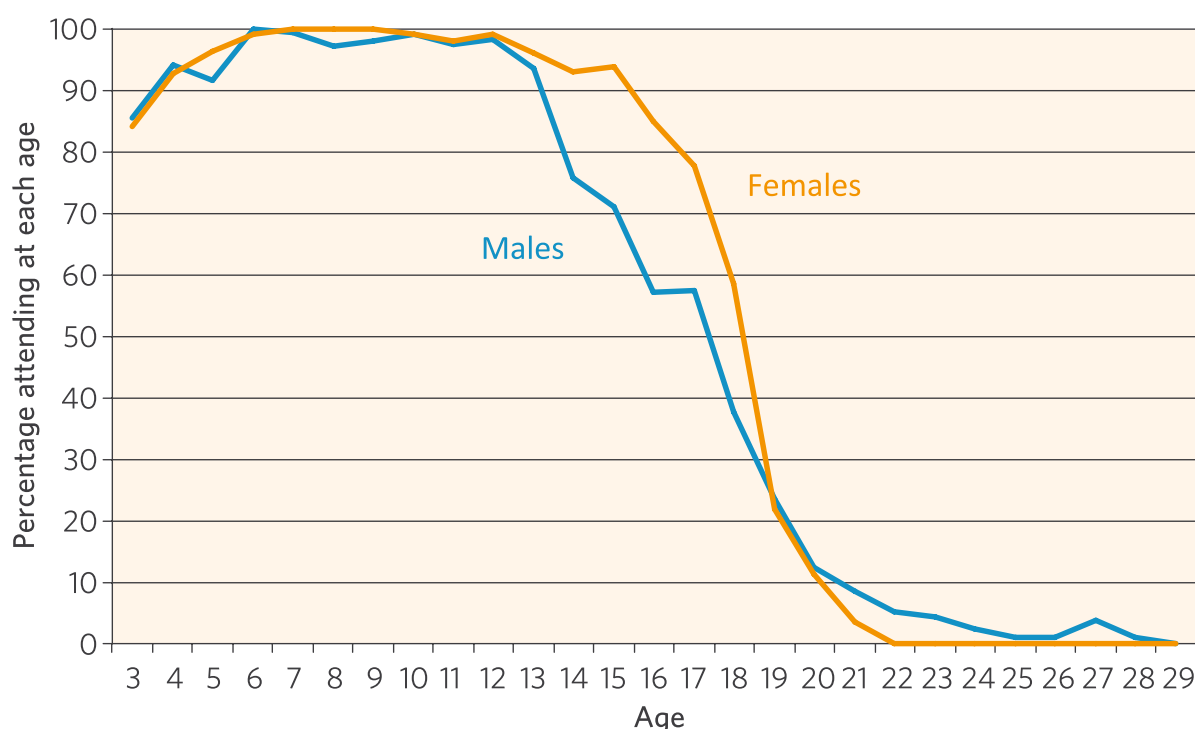
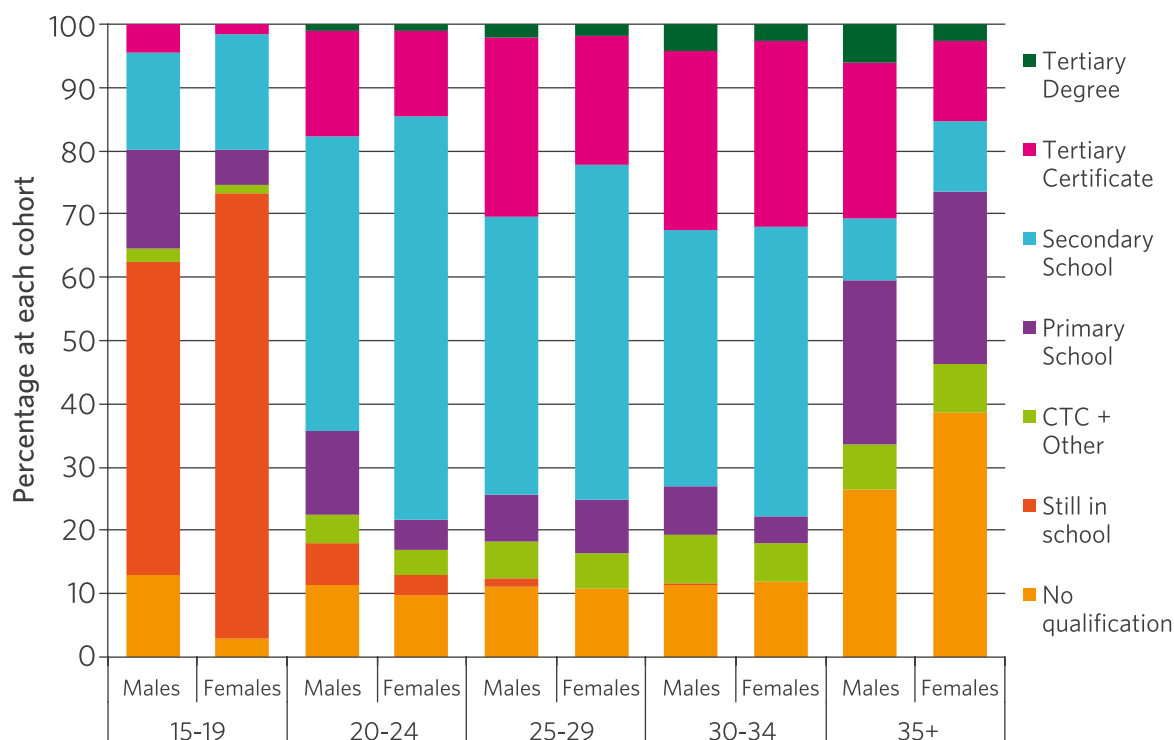


Figure C4: Highest educational qualification of youth by age cohort and gender 2012



C4. Labour force

Labour force participation and unemployment

In the 2012 Tuvalu Census, the framework for 'labour force' incorporates a range of activities summarised in Figure C5. Employed workers include those who are unpaid in family work, voluntary work and producing goods for consumption (subsistence), as well as paid workers in formal employment (wages and salaries) and those producing goods for sale. Unemployed are also considered to be in the labour force if they are available for work, whether or not they are looking for work. This contrasts to the practice in many other countries in which only those who are actively looking for work are considered to be 'unemployed'. However, the approach taken in this census appears to be more realistic since those who are 'available' but 'not looking' for work are often 'discouraged' since they (realistically?) think their chances of getting employment are minimal. The categories of activity which are not considered to be in the labour force are students, those in full-time home duties, those who are retired and those who are inactive for some reason.

Figure C5: Tuvalu labour force framework

WORKING AGE GROUP 15+												
Not in 'Labour Force'				'Labour Force'								
				Unemployed		Employed						
student	full-time home duties	retired	inactive	available and looking for work	available and not looking for work	Paid workers			Unpaid workers			
						Formal Employment			producing goods for sale	voluntary / community work	unpaid family work	producing goods for consumption
						employee (gov't or private)	employer	self employed				

The labour force participation rate is the proportion of those in the working age group aged 15 and over who are either employed or unemployed but available to work, and this can be calculated for various subsets of the population. In Figure C6, labour force participation is shown for the youth

cohorts and disaggregated by sex and location. The location in Funafuti or the Outer Islands is significant for labour force analysis because of the markedly different economic bases and employment potential between those areas. In the cohort aged 15 to 19, labour force participation is relatively low because many are still enrolled in secondary school. There is then a rapid transition for those aged 20 to 24, with about 90 percent of males and 85 percent of females in the Outer Islands participating, with respective rates of about 85 and 80 percent in Funafuti. In the urban area these rates remain relatively constant for age cohorts 25 to 34, before declining at older ages. In the Outer Islands, there is a relative increase for males aged 25 to 29, before a decline, whereas for females there is a modest increase until age 35.

In Figure C7, the rates of youth unemployment by age, gender and location are shown and these include all of those who say they are available for work, including both those who are actively looking for work and those who are not. In Funafuti, unemployment rates have an inverse relationship with age, starting very high at nearly 50 per cent of those aged 15 to 19 for both men and women, and then declining in each age cohort. The pattern in the Outer Islands is quite different, with rates for men increasing between ages 15 and 30 before declining, and with women peaking in the age cohort 20 to 24 before declining. The steady decline in unemployment in Funafuti relates to greater availability of work, but also to the reality that it often takes a considerable period of time before young people become incorporated into the paid employment sector.

Another measure of employment relates to involvement in formal employment, sometimes called the wages and salaries sector. In Figure C8 the difference between Funafuti and the Outer Islands becomes clearer than it is for participation in the labour force more generally. Within each age cohort, there is a substantially higher proportion of the working age population in formal employment in Funafuti than the Outer Islands. In Funafuti, the increasing proportion of youth population that becomes incorporated into the formal sector at each age cohort for both males and females, supports the idea that it takes time for youth to succeed in finding relevant jobs within the urban economy. The pattern in the Outer Islands is harder to interpret, though the higher rate of female involvement in the formal economy between the ages of 25 and 34 appears to be related to the fact that there are more female than male primary teachers, many of these working in the Outer Islands.

Figure C6: Youth labour force participation rates by age cohort and gender, Funafuti and Outer Islands 2012

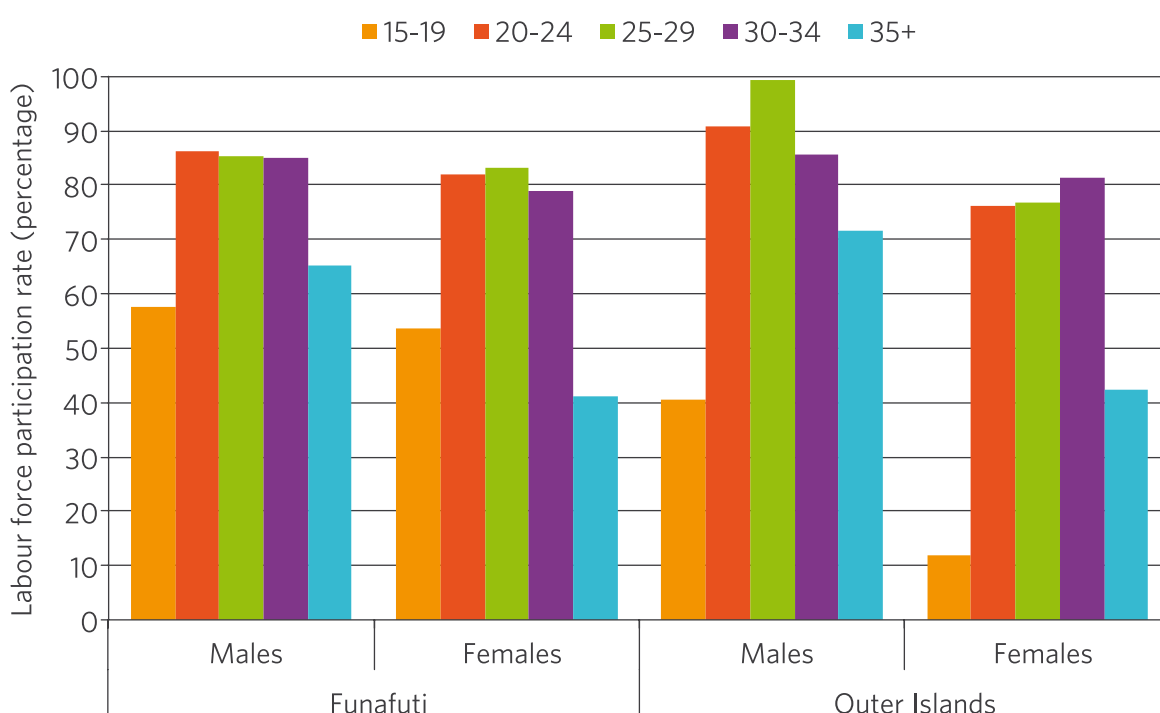


Figure C7: Youth unemployment rates by age cohort and gender, Funafuti and Outer Islands 2012

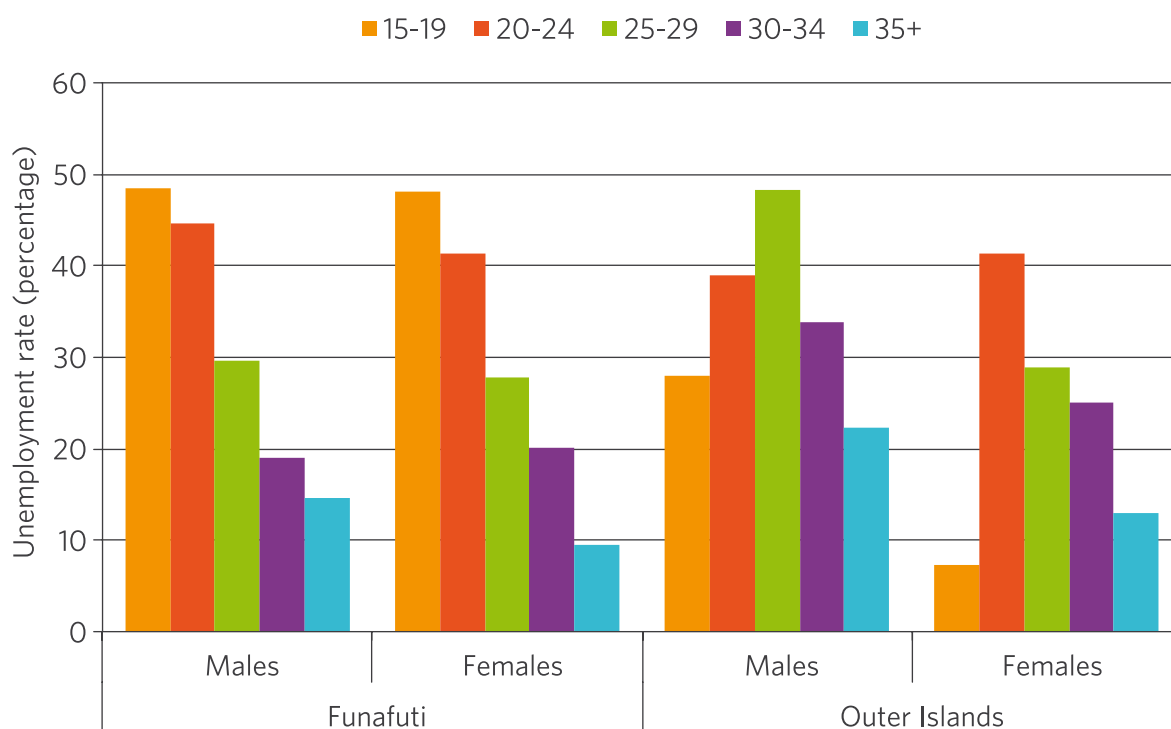
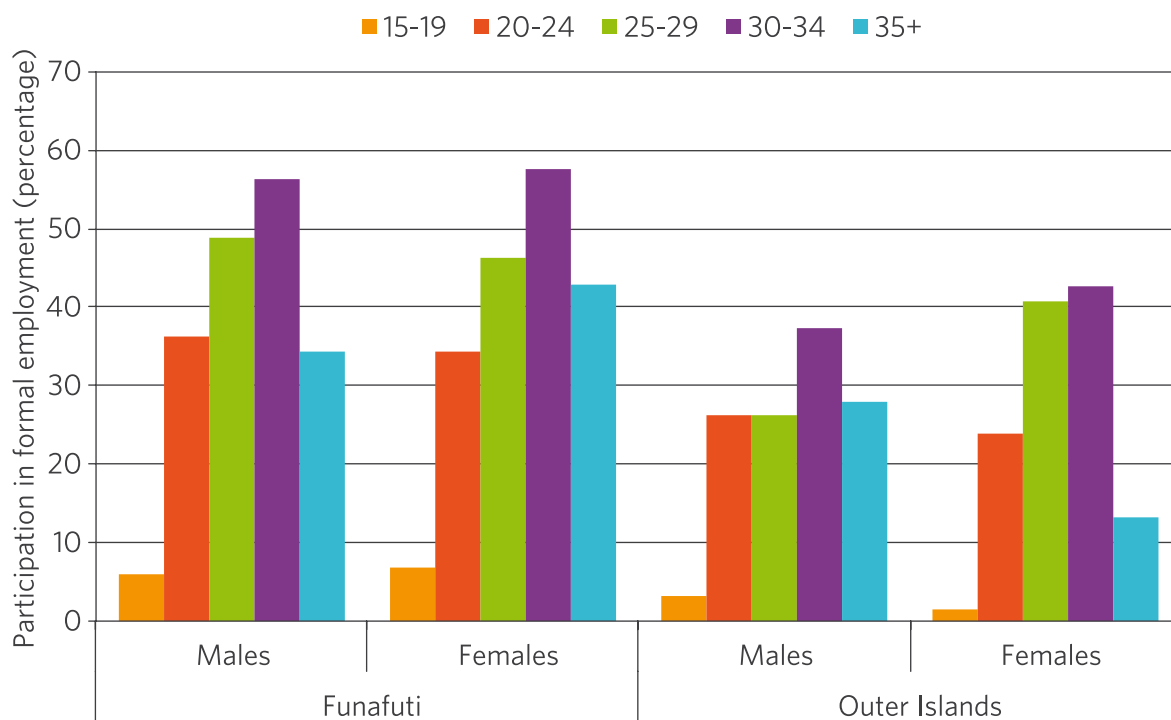


Figure C8: Participation rates in formal employment by age cohort and gender, Funafuti and Outer Islands 2012



Occupations

Figure C9 shows the occupational activity of all of those who were considered to be 'employed' in the census. Surprisingly few identified themselves as doing voluntary work or unpaid family work, although a few more claimed to be self-employed, producing for their own or their family's consumption or for sale. In the youth cohorts, an increasing proportion was in government employment, peaking in the 30-34 year cohort with 66 percent of females and 46 percent of females working for the government. A further eight and twelve percent respectively worked for State Owned Enterprises (SOE). For most cohorts aged over 20, the other significant occupational activity was as an employee in a private company.

The occupational type (Level 2) of youth workers aged 15 to 34 is shown in Table C2. The three largest occupational types were administrative and executive secretaries, statistical finance and insurance clerks and general office clerks, and these were in both government and private sectors and youth workers comprised about two-thirds of these workers. The two clerk categories were dominated by female employees whereas the administrative secretaries were more balanced between genders. Many of the subsequent occupational types are gendered such as primary school teachers of whom 78 percent were female, although the number of secondary school teachers was relatively gender balanced.

Figure C9: Occupational activity of employed youth workers by age cohort and gender 2012

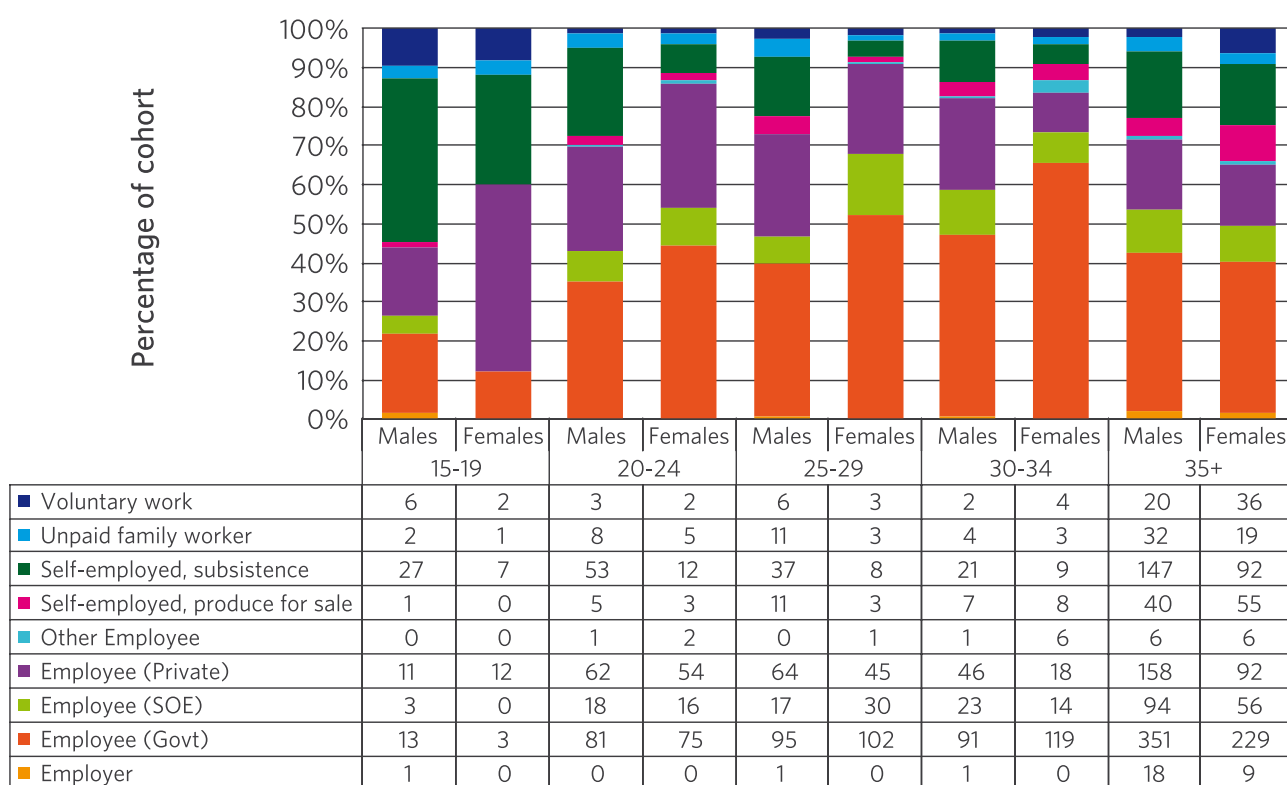


Table C2: Main occupations of workers aged 15-34 in 2012

Occupation type	Workers aged 15-34		
	Total no. in occupation	% female in occupation	as % of total population in occupation
Administrative and executive secretaries	79	56	48
Statistical finance and insurance clerks	74	69	81
General office clerks	70	80	80
Primary school teachers	69	78	61
Inland and coastal waters fishery workers	61	2	50
Shop sales assistants	61	66	69
Carpenters and joiners	46	0	41
Odd job persons	42	7	46
Elementary workers not elsewhere classified	40	88	31
Motor vehicle mechanics and repairers	38	0	49
Subsistence fishers hunters trappers and gatherers	37	0	43
Secondary education teachers	37	46	69
Cashiers and ticket clerks	37	92	76
Building construction labourers	36	3	63
Police officers	35	6	69
Subsistence crop farmers	34	0	45
Early childhood educators	31	100	58
Shelf fillers	28	0	90
Accounting and bookkeeping clerks	26	73	67
Nursing associate professionals	25	96	66
Shop keepers	23	61	33
Subsistence livestock farmers	22	5	71
Freight handlers	22	0	81
Car taxi and van drivers	18	6	39
Shop supervisors	15	47	42
Bank tellers and related clerks	13	46	93
Accountants	12	58	50
Cleaners and helpers in offices hotels etc.	11	82	20
Mixed crop and animal producers	11	9	50
Secretaries (general)	11	100	52
Handicraft workers in wood, basketry etc.	10	80	13
Total (all occupations)	1301	44	47

C5. Habits and health

An important aspect of the youth transition relates to the fact that young people increasingly gain control of many aspects of their life, and one of these is the control of behaviour which impacts on their own health, both positively and negatively. Many of these are difficult to measure in a census, such as nutritional intake or level of exercise that individuals undertake. However, the census asked questions about behaviours which could potentially be detrimental to health and which are relatively easy to measure. Specifically it asked questions about the consumption of

three products that are legally consumed within Tuvalu for those aged 18 and over, and that have significant health risks: alcohol, cigarettes and kava. In each case the question was similar: the person was asked if they drank alcohol, smoked, or consumed kava, with possible responses of never, no longer, sometimes, or regularly.

The consumption of alcohol varies a great deal according to gender and age. Of all males aged 15 to 34, 73 percent said they drank alcohol either regularly or sometimes, compared to only 16 percent of females. For males the highest incidence of alcohol consumption is in the cohort 20 to 24 years, with over 50 percent drinking regularly and another 23 percent sometimes (Figure C10). This consumption becomes a little more moderate with age, but even in the 30 to 34 year cohort, over 70 percent drank regularly or sometimes. A similar pattern is seen in female behaviour, although much more modest, with the 20 to 24 year cohort having about 20 percent of their group drinking sometimes or regularly. For both males and females, rates of consumption are shown to decline further after age 35.

Youth habits in relation to smoking are shown in Figure C11. Overall, 53 percent of males aged 15 to 34 smoked and 19 percent of females smoked. Interestingly, this is a significantly lower rate for males than the consumption of alcohol, but a slightly higher rate for females. The highest rates of smoking for both males and females was in their 20s, though the rates are very different, with well over 60 percent of males and nearly 25 percent of females having this habit. There is a slight contraction of smoking in the age cohort of 30 to 34 for both males and females, but then an increase at ages 35 and over.

Kava is less commonly consumed than alcohol or cigarettes, with 23 percent of males and less than three percent of females saying that they consumed it regularly or sometimes. Figure C12 shows that kava consumption was highest in the age cohorts between 25 and 34 for males and females, though the practice even at these ages is relatively uncommon for females.

Figure C10: Youth habits in relation to consumption of alcohol by age cohort and gender 2012

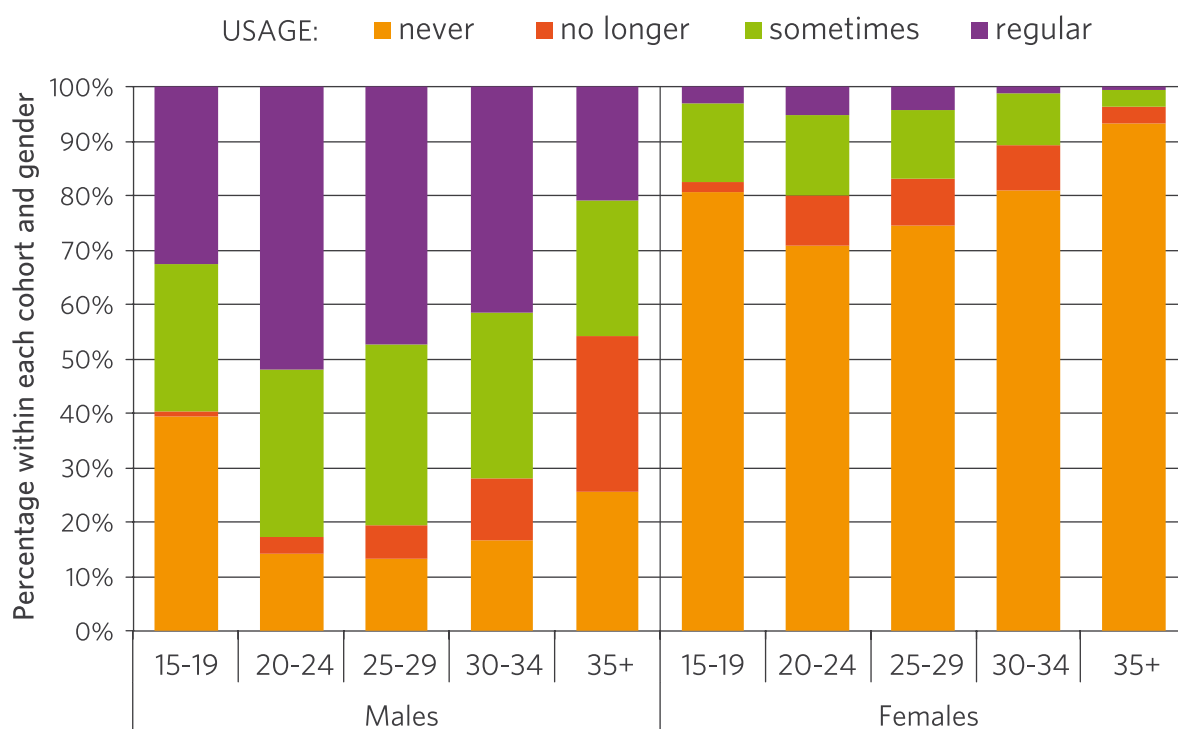


Figure C11: Youth habits in relation to smoking by age cohort and gender 2012

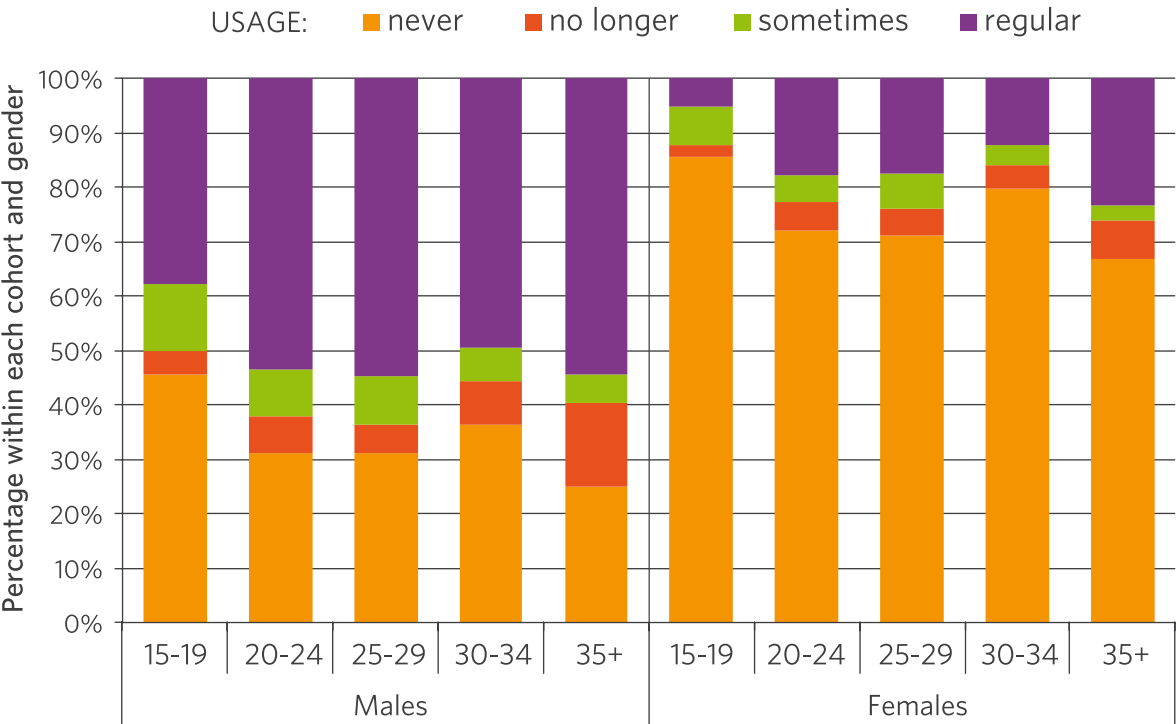
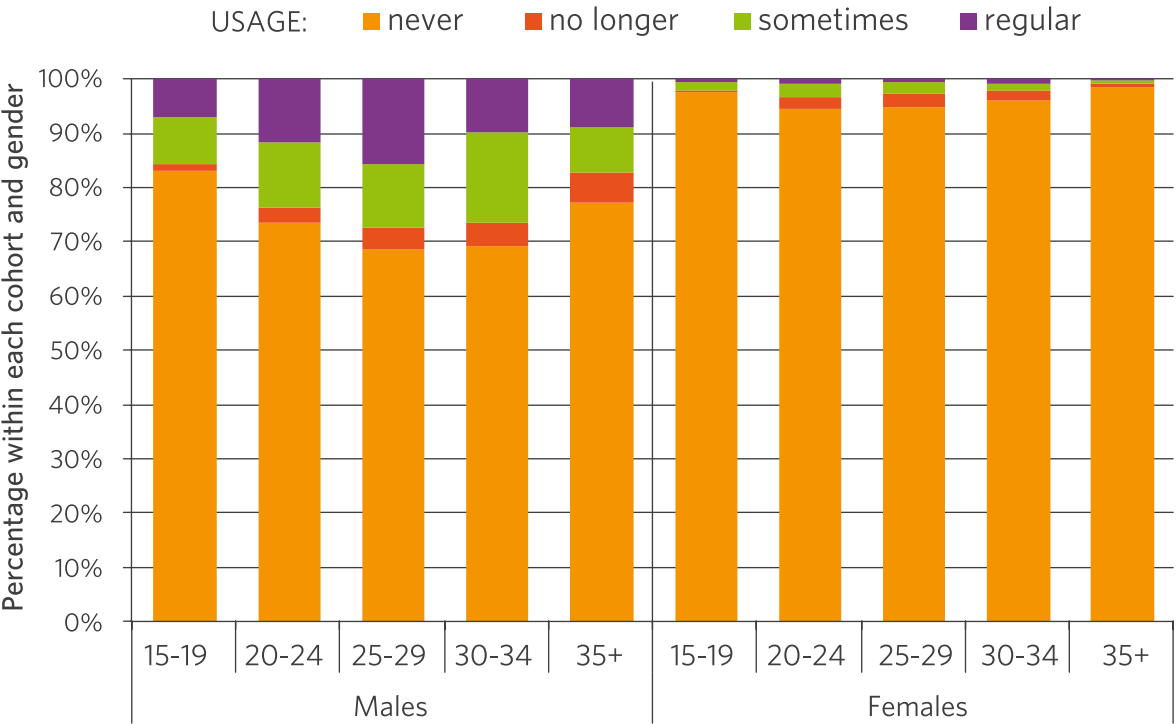


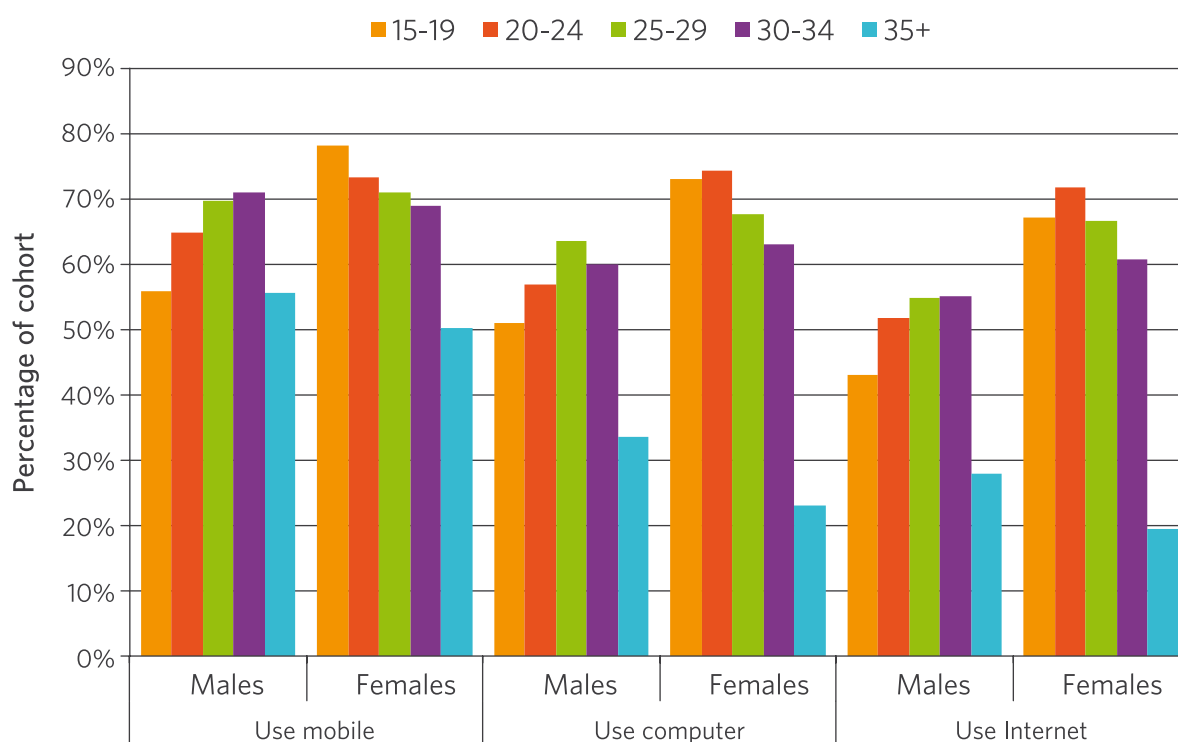
Figure C12: Youth habits in relation to the consumption of kava by age cohort and gender 2012



C6. Use of technology

Worldwide, young people have rapidly adopted new technologies, often at a much faster rate than the general population. This appears to be the case in Tuvalu as well. The census asked whether individuals had used a mobile phone, a computer or the internet in the 12 months preceding the census. For those aged 15 to 34, 69 percent had used a mobile phone (compared to 53 percent of those 35+), 63 percent had used a computer (versus 28 percent of 35+), and 58 percent had used the internet (versus 24 percent of 35+). For computers and the internet the contrast with older people was significant. Within the youth population, perhaps the most remarkable thing to note is the higher use of all three technologies by females over males (Figure C13). Younger females had a high rate of mobile phone usage with nearly 80 percent of those aged 15 to 19 having used one compared to only about 55 percent of males. In older cohorts this difference has diminished. The gender difference in usage of computers and the internet is more notable with females having very high rates in their teens and early twenties which then decline a little with age, while male rates of usage increase with age but still do not equal the female rate by age 35. These differences may partly relate to the fact that females have stayed in secondary school for longer periods and been more involved with the use of computers and internet at that point.

Figure C13: Use of technology by youth: mobile phone, computer, and internet usage by age cohort and gender 2012





C7. Youth Conclusions

This section of the report has presented a snapshot of some aspects of the situation of youth in Tuvalu, as background to the ongoing discussion about the ways in which the youth transition is taking place. One theme has been a gender gap in relation to some indicators. The greater retention of females in high school is notable, and this has resulted in a higher level of employment within the government, and perhaps in general a greater use of computers and the internet by young women. Young men are then more likely to be involved in occupations in the primary sector requiring different skills. For both males and females, it tends to take some time to become incorporated into the labour force, so that it is often into the late 20s or early 30s before some individuals find their 'economic niche'. Further, there is a significant proportion of the youth population that does not manage to do this, with unemployment persisting into older youth cohorts, in Funafuti, but even more so in the Outer Islands. Another aspect of a gender gap is in relation to behaviours which may be detrimental to health, with the consumption of alcohol, cigarettes and kava being much more common among men than women. One encouraging aspect of this is that there is a tendency for these rates of consumption to decline with age after peaking in the early 20s for both males and females.

This overview of the situation of youth in Tuvalu reveals only some of the possible analyses that could be carried out based on census data. They also suggest the scope of using census data for devising indicators of youth progress, in some cases by combining these data with information from other sources as well.

Endnotes

- 1 See Bedford, R. & Hugo, G. (2012) *Population movement in the Pacific: a perspective on future prospects*, New Zealand Department of Labour, Wellington.
- 2 The census questionnaire literally said "Where was name living three years ago?"
- 3 Borovnik, M. (2009) Transnationalism of merchant seafarers and their communities in Kiribati and Tuvalu, in H. Lee & S.T. Francis (eds) *Migration and Transnationalism: Pacific Perspectives*, ANU E-Press, Canberra, pp. 143-157; in 2014, the Tuvalu Maritime Training Institute was still training about 60 seafarers on an 18 month course (pers. com, CEO, TMTI).
- 4 Bedford, C., Bedford, R. & Ho, E. Engaging with New Zealand's Recognized Seasonal Employer work policy: the case of Tuvalu, *Asian and Pacific Migration Journal* 19(3):421-444 (p. 425); and information from Tuvalu Department of Labour.
- 5 Sources: Bedford et al. op cit and Department of Labour, Tuvalu.
- 6 Malua, S. (2104) *The Tuvalu community in Auckland: a focus on health and migration*. "Transnational Pacific health through the lens of tuberculosis" Research Group Report no. 4. Anthropology, School of Social Sciences, The University of Auckland, p. 9.
- 7 ibid
- 8 NZ Herald August 3, 2014. The judgement stated that this was not a precedent in relation to climate change refugee status, but that it was only one of a number of factors.
- 9 Malua, Op cit. p. 15
- 10 Statistics New Zealand (2014) 2013 Census Ethnic group profile: Tuvaluan, http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/ethnic-profiles.aspx?request_value=24724&parent_id=24706&tabname=#24724. Extensive information on the characteristics of the New Zealand Tuvaluan population is available here.
- 11 For more detail on this community, see Paton, K.L. (2009) *At home or abroad: Tuvaluans shaping a Tuvaluan future*, Masters thesis (Development Studies), Victoria University of Wellington, Wellington, pp. 137-145.
- 12 Data from Australian Bureau of Statistics, Table Builder
- 13 Tuvalu Government (2010) *Household Income and Expenditure Survey: Report*, Central Statistics Division, Funafuti
- 14 Hugo, G. & Bedford, R. p.41
- 15 Hugo & Bedford, op cit.; Connell (2011) 'Elephants in the Pacific? Pacific urbanisation and its discontents.' *Asia Pacific Viewpoint*, 52(2): 121-135.
- 16 Tuvalu Government (2011) *Tuvalu National Population Policy 2010-2015*, Department of Planning and Budget, Ministry of Finance and Economic Development, Funafuti.
- 17 See Tuvalu Government (2011) op cit. pp. 17-29 for demographic overview of this period.
- 18 Ibid, p.27
- 19 Government of Tuvalu (2011) *Tuvalu National Youth Policy 2012-2016*, Ministry of Education, Youth and Sports, Funafuti.



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