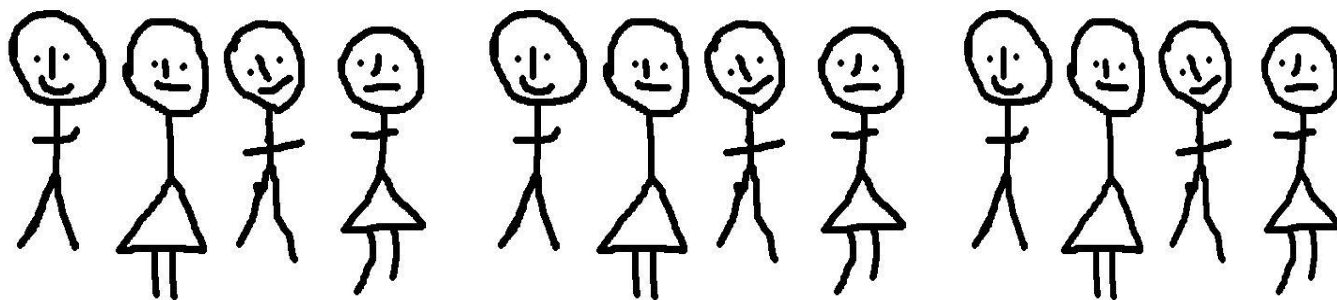




Population Estimate

Quarter 1 2006



**Economic, Planning, Development & Statistics Unit
Premiers Department – Government of Niue**

1. INTRODUCTION

There are several methods used to measure or in this case estimate a country or an area's population. However each method depends largely on the situation and condition of the concerned population.

Due to Niue's unique population situation, Statistics Niue has implemented this method to monitor the actual movements of the resident population at a certain period.

The main objectives of this method is:

- ❖ To identify the actual number of residents on Niue at a certain period of time.
- ❖ To identify the actual number of residents abroad at a certain period of time.
- ❖ To identify the purpose or reason of a departure in detail.
- ❖ To identify the gender and age groups of residents in Niue.
- ❖ To identify the gender and age groups of residents abroad.

The above exercise is carried out using the following data sources:

1. The National Headcount 2004 as the base for the estimate
2. The migration cards from the Immigration Office
3. Vital registrations from the Department of Justice, Lands and Survey

Errors may arise due to the following reasons:

- ❖ Errors contained in the migration cards used to monitor the arrivals and departures of residents and overseas births.
- ❖ Passengers failing to complete a migration card on arrival or departure
- ❖ Late registrations of births
- ❖ NZ births are sometimes not registered at the Justice Department
- ❖ Health referrals (length of absence is uncertain)
- ❖ Both residents and intending residents departing or arriving fail to state their correct length of absence or stay
- ❖ Lack of urgency from the involved department towards the collected data

It is important to minimize the above problems as much as possible in order to depict Niue's population accurately.

There are 2 types of population counts, the first being a **de-facto** count which refers to people "**actually present**" at that point in time of the enumeration where as a **de-jure** count refers to the people "**usually present**" despite their absence.

This method concentrates on the **de-jure population** as the population temporarily overseas are as stated in the Statistical Release Niue National Headcount – September 2004 "...the inclusion of the population temporarily away from the country was based on the understanding that; 1. Government expends money on their absence such as health referrals, scholarships and official duties..." Therefore the inclusion of these people is essential for planning purposes of Niue.

Again due to Niue's unique population situation as well as for the purpose of consistency in future estimates, those temporarily abroad are categorized as follow including how their absence is measured:

❖ **Students (including family members if any that accompany the student)**

- Duration of study.
- Number of times a student returns after each study year.
- Failing to return 3 months after completion of study.

❖ **Health referrals (including those accompanying the patient and patients going privately)**

- Failing to return after 12 months, taking into consideration further check ups.

❖ **Holidaymakers / Visiting Friends and Relatives**

❖ **Official Travelers**

- Information stated on their departure card.

❖ **Leaving permanently**

- Information stated on their departure card.

In regards to those returning to reside permanently on Niue, they will be included to the population after 3 months from their arrival date. However the following points will be taken into consideration:

❖ **Returning Niueans**

- Included after 3 months of arrival date
- Shown some indication of residing permanently (e.g. employment, attend school, community involvement, etc)
- Information stated in the arrival card

❖ **Non-Niueans**

- Expatriates who receive a contract to work for the Government
- Those seeking to reside permanently by applying for a residential permit

2. THE ESTIMATED POPULATION OF NIUE

Niue's estimated population for the 1st quarter of 2006 lies at 1,679 of which 815 are males and 864 are females. Of these 1,679 people 1,446 (705 males, 741 females) were present on Niue during this quarter and 233 (136 males, 156 females) were still overseas after the 31st of March 2006 as illustrated in the following table.

Table 1: Niue's Population by Location –QTR1 2006, QTR 4 2005

	QTR 4 – 2005			QTR 1 - 2006		
	Males	Females	Total	Males	Females	Total
ON	740	782	1522	705	741	1446
OFF	100	108	208	110	123	233
TOTAL	840	890	1730	815	864	1679

Table 2: Niue's Population Change by Location and Gender, QTR 1 2006 & QTR 4 2005

	Population Change QTR 4 2005 – QTR 1 2006		
	Males	Females	Total
ON	-35	-41	-76
OFF	10	15	25
TOTAL	-25	-26	-51

Table 2 shows that Niue's estimated population has decreased by 51 people, 25 males and 26 females.

Of the 1522 people present on Niue in the last quarter, 76 people moved abroad temporarily, decreasing Niue's estimate population still residing in Niue to 1446. These 76 people are included to those temporarily abroad in the last quarter, which increased to 284.

However 51 people are now removed from this group as explained in the introduction of this report (p.3).

Figure 1 & 2: Population by Gender and Location, QTR 1 2006 & QTR 4 2005

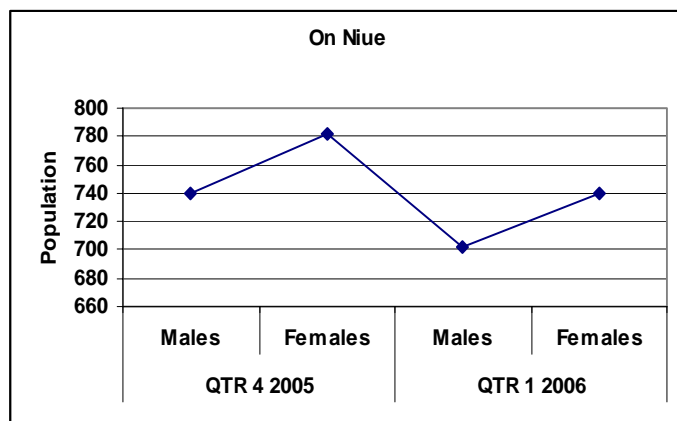
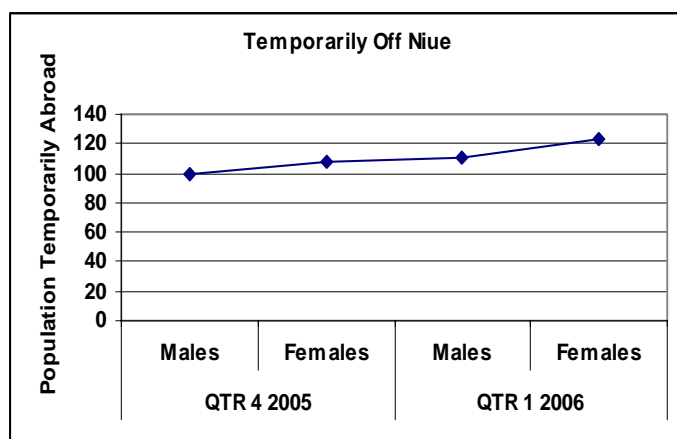


Figure 1 illustrates how Niue's male and female population has decreased from the last quarter to this quarter.

Both sexes have decreased however the male population appears to have decreased more than the female population.

Figure 2 depicting those that are temporarily overseas shows that both males and females have increased slightly from the last quarter to this quarter.



3. THE ESTIMATED POPULATION OF NIUE BY VILLAGE

Table 3: Niue's population by Gender, Location and Village – QTR 1 2006, QTR 4 2005

VILLAGE	ON NIUE		Total	TEMPORARILY OFF NIUE		Total	Grand Total
	Males	Females		Males	Females		
QTR 1 2006							
Makefu	28	26	54	6	4	10	64
Tuapa	52	56	108	6	6	12	120
Namukulu	10	7	17	0	0	0	17
Hikutavake	30	29	59	3	2	5	64
Toi	14	11	25	0	3	3	28
Mutalau	44	50	94	6	2	8	102
Lakepa	31	36	67	5	8	13	80
Liku	29	31	60	5	7	12	72
Hakupu	89	74	163	18	22	40	203
Vaiea	21	25	46	4	3	7	53
Avatele	78	80	158	9	6	15	173
Tamakautoga	54	64	118	3	4	7	125
Alofi South	147	167	314	31	45	76	390
Alofi North	78	85	163	14	11	25	188
Total	705	741	1446	110	123	233	1679
QTR 4 2005							
Makefu	27	27	54	8	3	11	65
Tuapa	55	58	113	4	4	8	121
Namukulu	9	6	15	1	0	1	16
Hikutavake	31	31	62	3	3	6	68
Toi	15	15	30	0	2	2	32
Mutalau	39	42	81	12	13	25	106
Lakepa	32	34	66	10	16	26	92
Liku	31	38	69	3	1	4	73
Hakupu	90	82	172	19	18	37	209
Vaiea	25	26	51	0	2	2	53
Avatele	74	75	149	13	12	25	174
Tamakautoga	57	64	121	5	9	14	135
Alofi South	164	197	361	18	21	39	400
Alofi North	91	87	178	4	4	8	186
Total	740	782	1522	100	108	208	1730

Alofi South remains the most populated village with 390 people of which 314 (147 males, 167 females) were present during this period and 76 (31 males, 45 females) were temporarily abroad. The next highest populated village is Hakupu with 203 people, 107 males and 96 females. Of these 203 people 163 were on Niue and 40 temporarily abroad. The population of Alofi North and Avatele are 188 and 173 respectively.

At the other end of the scale however is Namukulu with the lowest population of 17 of which all are present on Niue, followed by Toi with 28 people, (25 present, 3 abroad) The other low populated villages are Vaiea with 53 people followed by Hikutavake and Makefu with 64 people respectively.

Table 4: Population Change by Location, QTR 1 2006 & QTR 4 2005

VILLAGE	QTR 1 2006			QTR 4 2005			Population Change		
	On Niue	Temporarily Off Niue	Total	ON	Temporarily Off Niue	Total	On Niue	Temporarily Off Niue	Total
Makefu	54	10	64	54	11	65	0	-1	-1
Tuapa	108	12	120	113	8	121	-5	4	-1
Namukulu	17	0	17	15	1	16	2	-1	1
Hikutavake	59	5	64	62	6	68	-3	-1	-4
Toi	25	3	28	30	2	32	-5	1	-4
Mutalau	94	8	102	81	25	106	13	-17	-4
Lakepa	67	13	80	66	26	92	1	-13	-12
Liku	60	12	72	69	4	73	-9	8	-1
Hakupu	163	40	203	172	37	209	-9	3	-6
Vaiea	46	7	53	51	2	53	-5	5	0
Avatele	158	15	173	149	25	174	9	-10	-1
Tamakautoga	118	7	125	121	14	135	-3	-7	-10
Alofi South	314	76	390	361	39	400	-47	37	-10
Alofi North	163	25	188	178	8	186	-15	17	2
Total	1446	233	1679	1522	208	1730	-76	25	-51

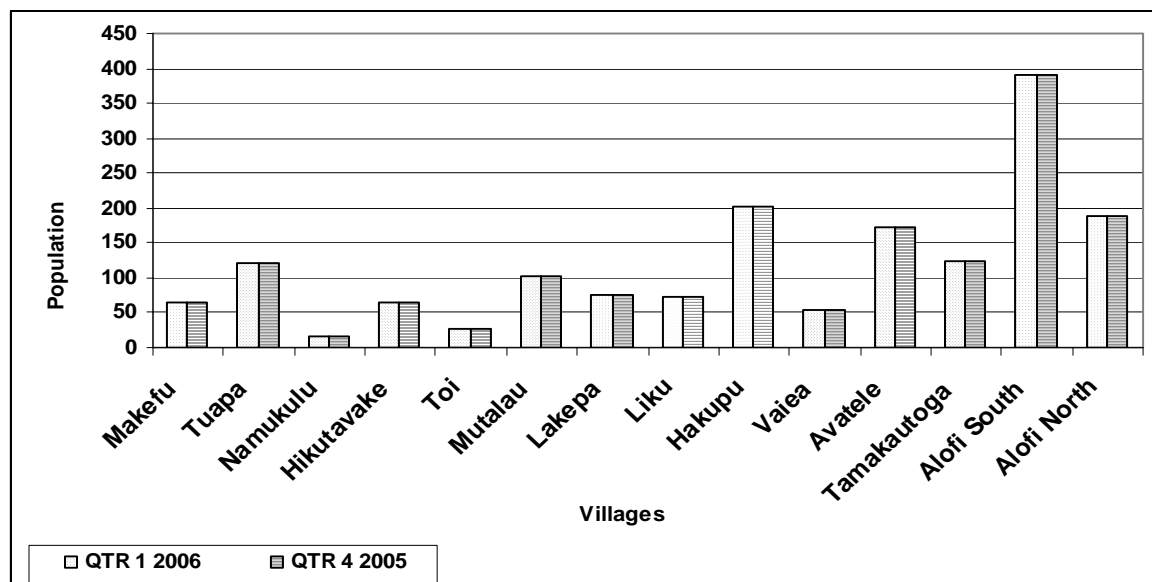
The above table and the graph below shows which villages has slight increases in their population and also villages that shows no change as well as those that have decreased.

Of the decrease of 51 people in this quarter, the village of Lakepa shows the highest decrease of 12 people and followed by Alofi South and Tamakautoga with a loss of 10 people respectively.

The village of Hakupu shows a loss of 6 persons followed by Hikutavake, Toi and Mutalau with a loss of 4 persons respectively.

Alofi North's population increased by 2 and Namukulu by 1 in this quarter.

Figure 3: Population by village, QTR1 2006 & QTR 4 2005



4. THE ESTIMATED POPULATION OF NIUE BY AGE & SEX DISTRIBUTION

Table 5: Niue's Population by Age & Sex – QTR 1 2006

Age Group	On Niue			Temporarily Off Niue			Grand Total
	Males	Females	Total	Males	Females	Total	
0 - 4	51	68	119	7	11	18	137
5 - 9	57	65	122	8	6	14	136
10 - 14	72	61	133	5	7	12	145
15 - 19	78	62	140	18	17	35	175
20 - 24	33	57	90	23	24	47	137
25 - 29	45	35	80	8	15	23	103
30 - 34	39	43	82	10	5	15	97
35 - 39	46	42	88	4	4	8	96
40 - 44	46	50	96	4	1	5	101
45 - 49	56	40	96	4	4	8	104
50 - 54	52	51	103	8	10	18	121
55 - 59	23	34	57	4	6	10	67
60 - 64	25	29	54	5	2	7	61
65 - 69	32	45	77		5	5	82
70 - 74	29	29	58	1	3	4	62
75+	21	30	51	1	3	4	55
Total	705	741	1446	110	123	233	1679
%							
0 - 4	7.2	9.2	8.2	6.4	8.9	7.7	8.2
5 - 9	8.1	8.8	8.4	7.3	4.9	6.0	8.1
10 - 14	10.2	8.2	9.2	4.5	5.7	5.2	8.6
15 - 19	11.1	8.4	9.7	16.4	13.8	15.0	10.4
20 - 24	4.7	7.7	6.2	20.9	19.5	20.2	8.2
25 - 29	6.4	4.7	5.5	7.3	12.2	9.9	6.1
30 - 34	5.5	5.8	5.7	9.1	4.1	6.4	5.8
35 - 39	6.5	5.7	6.1	3.6	3.3	3.4	5.7
40 - 44	6.5	6.7	6.6	3.6	0.8	2.1	6.0
45 - 49	7.9	5.4	6.6	3.6	3.3	3.4	6.2
50 - 54	7.4	6.9	7.1	7.3	8.1	7.7	7.2
55 - 59	3.3	4.6	3.9	3.6	4.9	4.3	4.0
60 - 64	3.5	3.9	3.7	4.5	1.6	3.0	3.6
65 - 69	4.5	6.1	5.3	0.0	4.1	2.1	4.9
70 - 74	4.1	3.9	4.0	0.9	2.4	1.7	3.7
75+	3.0	4.0	3.5	0.9	2.4	1.7	3.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 5 shows that of the whole estimate population of Niue in this quarter, 10.4 percent are aged between 15 – 19 years, followed by those 10 – 14 years with 8.6 percent and those 20 – 24 years and 0 – 4 years with 8.2 percent respectively.

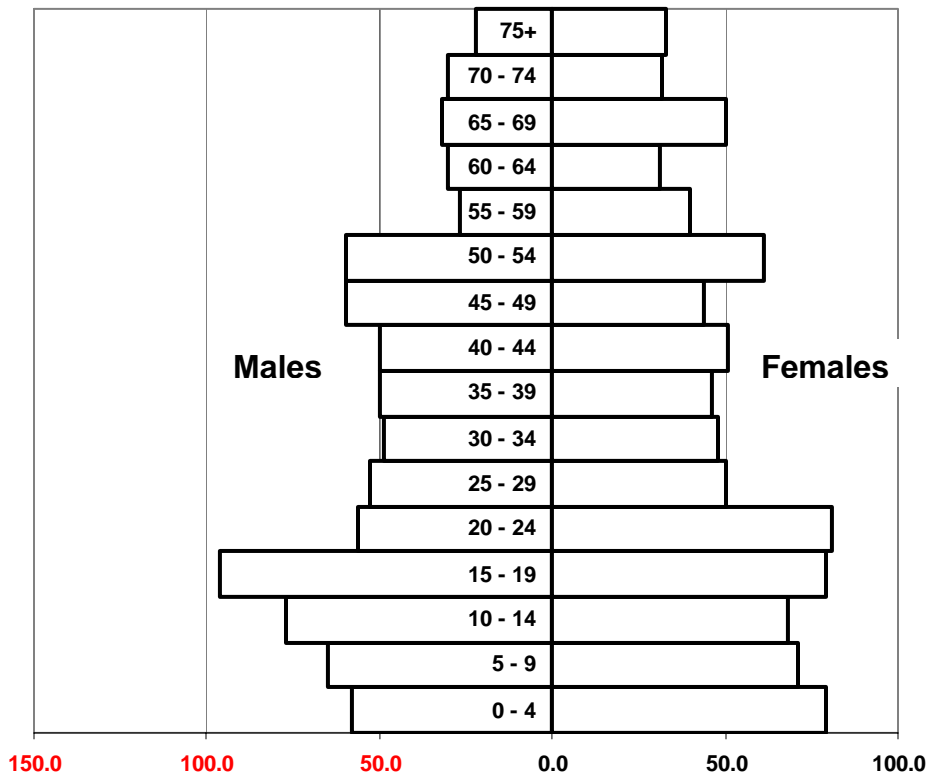
The sex ratio in this quarter is 94.3 males per 100 female compared to that in the last quarter which was 95.5. This means that for every 100 female there are about 94 males. According to international standards Niue's sex ratio has fallen outside the national sex ratio in the narrow range of 95 – 105. This is contributed to by Niue's high rate of emigration.

The age dependency ratio in this quarter is 67.7 for the total population, which means that for every 100 persons of working age there were 68 persons in the dependent ages. Looking back in the previous censuses it appears that the age dependency ratio has decreased. Taking for example in the 1997

Census the age dependency ratio was 84.5. This shows that the number of those who is in need of care by those in the working age has decreased due mostly to emigration and low fertility.

The estimated median age for this quarter is 30.2 years, which means that the population is divided equally at the age of 30. Half the estimated population in Niue is younger than 30 years and the other half is older therefore Niue's estimated population is an aging one.

Figure 4: Population Pyramid by Age and Sex – QTR 1 2006



The population pyramid for Niue indicates the following:

1. Again in this quarter the base appears to be shrinking, which indicates low fertility. It also shows that males in the age group 0 – 4 are less than that of females.
2. Mortality is also very low which means the older people tend to live longer due to good health and high living standards. The age group 75+ illustrates that there are more women than men, which is expected as women generally have a higher life expectancy than men at birth.
3. Migration is very high as expected in all age groups. The obvious age groups that are migrating are both males and females 25 – 29 years and males in the 20 –24 age group.
4. Almost everyone will survive until old age.
5. A low birthrate and a stable death rate indicate high emigration.

6. INTERNATIONAL OUT MIGRATION

Migration is one major aspect that contributes largely to Niue's declining population. This part of the analysis aims to portray the purpose of the 233 people that were abroad in this quarter.

Table 6: Niue's Estimated Population Abroad by Purpose, 1st Quarter 2005

Purpose	Male	Female	Total
Students	36	37	73
Official Business	12	9	21
Health	6	11	17
Holiday / VFR	39	54	93
Accompany Students	8	6	14
Accompany Health Referrals	7	4	11
Others	2	2	4
Total	110	123	233

Table 6 shows that of the 233 residents temporarily abroad in this quarter 93 are on holiday or visiting friends and relatives, 73 are studying and 14 people accompanied these students. 21 people were abroad for official business and 17 are away for medical reasons with 11 people accompanying them.

Fakaaue lahi mahaki.

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