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NIUE

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1976 CENSUS of Population and Housing

REPORT

VOLUME 2: ANALYSIS OF DEMOGRAPHIC DATA

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Census Officer : SOL M. KALAUNI
Editor : MARTIN L. BAKKER
U.N. Demography &
Population Statistics
Adviser with the South
Pacific Commission

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II. POPULATION HISTORY

by R.D. Bedford, G. Mitchell and M. Mitchell

Unlike some other parts of the Pacific (especially countries to the west in Melanesia), there is no dearth of summary demographic data relating to Niue's population during the twentieth century. The information is scattered through a wide range of official reports, some of which are published while others are not readily available to those interested in the course of demographic development in this island country. In the short descriptive introduction to the 1971 census, a comment was made on population change over the five years since the previous enumeration in 1966. For some users of the volume this was an inadequate historical summary. As one reviewer remarked, the absence of comparable data for a much longer period was a major failing of the 1971 report - 'some of the summary results of hitherto unpublished enumerations would have been invaluable' (Douglas, 1975, p.8).

To satisfy the demand for some comparative information on the size, structure and processes affecting the population of Niue it was decided to include a more extensive historical overview in the 1976 census. During 1977 Grant and Maureen Mitchell, then graduate students in geography and history at the University of Canterbury, collected unpublished information on Niue's population while undertaking research into recent agricultural change on the island (Mitchell, 1977). They also collated much of the material contained in annual reports submitted by the Resident Commissioner on Niue to the New Zealand Government following annexation of the island in 1901. These reports are contained as Appendices to the Journal of the House of Representatives (AJHR).

A detailed report on the available statistics relating to Niue's population between 1900 and 1976 was submitted to the Census Commissioner in February 1979 (Bedford *et al.*, 1979). It was decided that part of this document should be summarized for inclusion in the second volume of the 1976 census. Most of the important demographic developments since 1945 are reviewed in chapters dealing with fertility, migration and life tables. Consequently the scope of the historical introduction has been confined to a brief descriptive analysis of trends up to the 1945 census.

Passing reference is made to several missionary censuses in the late nineteenth century, but detailed examination of these estimates and the factors underlying population change in the pre-colonial phase of contact with European traders, recruiters, missionaries and settlers is not attempted here. The course of population change during the twentieth century has been traced using available census data and the information on births, deaths and population movements contained in the AJHR. Emphasis is placed on the presentation of comparative data; explanation of the trends revealed in the various tables is kept to a minimum. There is scope for a much more detailed inquiry into the history of population change on Niue - this introduction to the second volume of the 1976 census report serves merely to provide part of the data base required for such a study.

1. POPULATION GROWTH

The population enumerated on Niue Island on the night of 28 September 1976 was the lowest recorded in official counts since the census of 20 April

1926, and the fourth smallest number listed for the island since the first available population estimate in 1859. Unlike the situation found in many small island nations of the Pacific, Niue's most pressing demographic problem in recent years has been depopulation, not excessive population growth. Since the late nineteenth century, international migration has had a profound impact on Niue's population history. The drift of people away from the island became much more extensive after the Second World War, but it is important to realise that as early as the 1880s the equivalent of around ten per cent of the estimated de facto population were resident overseas either temporarily or on a long-term basis. In tracing the course of population change on the island since the mid-nineteenth century it is essential to keep in mind constantly the role of population movement as a regulator of demographic development.

1.1 Nineteenth Century Estimates

Two sets of population estimates for the late nineteenth century have been published, one covering missionary enumerations by village since 1875 which is contained in the annual report for 1901 (AJHR, 1902 p.12), and the other, giving totals for the island since 1859, in the report for 1923 (AJHR, 1924, p.12). The numbers cited as being resident on Niue in the various years of the mission 'censuses' differ markedly in these two summaries (Table II-A1). It has been suggested in Table II-A1 that one set of estimates may refer to de facto populations, while the other relates to de jure totals including persons known to be 'absent from the island' (AJHR, 1902, p.12). In the 1901 report a distinction is made quite clearly between the island's de facto (4015) and de jure (4576) populations in 1900. The de jure total is listed with estimates for certain years between 1875 and 1895 - estimates which are substantially higher than those given in the 1923 report. The total for 1900 given in the latter report is the de facto population of 4015, and it is assumed that the other estimates referred to in this table are also de facto ones (the actual terms used in the report are 'mission estimate incomplete').

TABLE II-A1: POPULATION OF NIUE, 1859-1900

Year	"De facto" ¹	"De jure" ²	Absentees ³
1859	4300	?	?
1864	5010	?	?
1875	5076	5454	378
1884	5070	5573	503
1887	4726	5089	363
1891	4482	4851	369
1895	4433	4854	421
1900	4015	4576	561

NOTES:

1. AJHR (1924, p.12)

2. AJHR (1902, p.12)

3. Differences between the two sets of population estimates.

These assumptions about the precise domains of the population estimates before 1900 could be quite erroneous. They seem reasonable, however, in the light of the magnitude of differences between the figures

for particular years. The difference could correspond to the number of persons absent from Niue during the 'census' years; the island had been visited by labour recruiters from the early 1860s (McArthur, 1956, p.92). When the Germans began to develop plantations in Samoa, Niue quickly became a favoured source of labour because of the men's reputation as workers. McArthur (1956, p.92) notes that 'the first batch of young men were taken to Samoa in 1865, and, three years later, the notorious Bully Hayes kidnapped 60 males and 30 females who were subsequently sold in Tahiti. The recruitment of Niuean labour was regularised in 1871, when a number of young men were indented for guano digging in one of the southern Line Islands.' At the time of the 1900 mission 'census' 561 Niueans were cited as being 'away in the guano islands' (AJHR, 1902, p.4). The numbers of 'absentees' suggested in Table II-A1 for earlier years are all lower than this.

If one can regard the figures in the second column of Table II-A1 as de jure populations for Niue in the years stated, then it would seem that major declines in numbers had been caused by some process other than mobility during the seven years between 1884 and 1891 and in the five years before the 1900 estimate. Between 1884 and 1887 the population declined by almost 500 - nine per cent of the total given for the earlier year. In the last five years of the century the decline was less significant in numerical and proportional terms, but was of sufficient magnitude to suggest that unusually high mortality had led to absolute population decrease at various stages during the latter part of the nineteenth century. McArthur (1956, p.93) citing Thomson (1902) points out that there was an outbreak of measles in 1897 or 1898 which 'occasioned about one hundred deaths'. This could provide a partial explanation for the decline in numbers between 1895 and 1900. However, there is nothing of substance in Thomson's account which indicates possible sources of high mortality between 1884 and 1891. By this stage coughs, colds and yaws, all introduced in the late 1840s with the arrival of Samoan teachers, were quite common. In concluding her review of the scanty evidence, McArthur (1956, p.94) comments:

the course of population change in Niue [in the late nineteenth century] must have been determined by changes in the level of mortality; and the precise pattern of change would depend on whether or not this mortality altered the structure of the population, either suddenly as could happen in an epidemic or gradually over a period of years. The data available are clearly too meagre to allow of such diagnosis.

The pre-colonial population history of Niue is still to be written.

1.2 Decline and Growth, 1902-1945

In June 1901 Niue was placed under the protection of the New Zealand Government and in the same month in the next year the first official census was held on the island. Very little is known about the conduct of this census or the structure and distribution of the population which was enumerated. The total on the island (4074) was marginally higher than the number cited in the mission census of 1900 (4015) and included 23 'non-natives' (15 males and 8 females) (see Table II-A2). From the available data it would seem that some male absentees had returned to Niue between 1900 and 1902, given the eight per cent increase in this component of the population.

TABLE II-A2: POPULATION OF NIUE (ALL COMPONENTS) ENUMERATED DURING THE CENSUSES FROM 1900-1945

Census Date *	Population			Intercensal Change (%)		
	m.	fem.	tot.	m.	fem.	tot.
1900	1765	2250	4015			
June 1902	1908	2166	4074	+8.1	-3.7	+1.5
1 June 1906	1774	2048	3822	-7.0	-5.4	-6.2
17 November 1911	1855	2088	3943	+4.6	+1.9	+3.2
15 October 1916	1828	2052	3880	-1.5	-1.7	-1.6
17 April 1921	1736	2014	3750	-5.0	-1.9	-3.4
20 April 1926	1781	2014	3795	+2.6	0	+1.2
24 March 1936	1991	2113	4104	+11.8	+4.9	+8.1
25 September 1945	2054	2199	4253	+3.2	+4.1	+3.6

NOTE: * Except for the 1900 enumeration, these were official censuses conducted from 1906 in conjunction with the New Zealand census.

Data Sources: 1902: Report for Niue in AJHR (1912, p.47)
 1906: Appendix, 'Population of Annexed Pacific Islands', New Zealand Census, June 1906, p.lxiii.
 1911: Appendix, 'Population of Annexed Pacific Islands', New Zealand Census, April 1911, p.xix.
 1916: Appendix, 'Population of Annexed Pacific Islands', New Zealand Census, October 1916, p.xviii.
 1921: Appendix, 'Population of Cook and other Annexed Pacific Islands', New Zealand Census, April 1921, p.8.
 1926-1945: Volume 2 of the New Zealand Census (entitled 'Dependencies' in 1926 and 1936; 'Island Territories' in 1945).

Between June 1902 and June 1906 the resident population fell by six per cent - the greatest intercensal decline reported for any period except the last five years (1971 to 1976). In his report for the year ended 31 March 1907 the Resident Commissioner remarked that the decrease since 1902 was hard to explain as there had been no epidemics or adverse weather conditions which might promote ill health over the period (AJHR, 1907, p.37). Details of births and deaths are not available for these early years of the New Zealand administration, nor is the volume of population movement away from and back to the island known. During 1906, 235 people were officially recorded as leaving and another 20 suspected of going without paying the required fee. An estimated 250 returned to Niue in the same year. It is not known whether such a high level of in-migration was typical of earlier years, but if departures substantially outnumbered arrivals then it would not be difficult to account for the population decline. It should be noted that in 1901, 1903 and 1904 various attempts were made to control the flow of population away from Niue through legislation. For the most part the regulations governed recruitment of labour, not the free movement of individuals and families to visit/join relatives living in Tonga, Samoa and other parts of the Pacific.

From 1906 until 1945 enumerations on Niue were conducted as part of the five-yearly New Zealand censuses. Although birth and death regis-

tration was not covered by special legislation until 1916, records of these events were maintained on Niue, along with details of arrivals and departures. The figures for vital events and population movements relate to years ending on 31 March or 31 December and thus do not span periods between censuses perfectly. These figures could have been adjusted to approximate the census periods more precisely, but gaps in the records of arrivals and departures for certain years, plus an expectation that population movements in particular were not spread evenly through the year meant this would have been a rather spurious refinement. In spite of the deficiencies, it is possible to get an idea, if not an accurate measure, of how much of the change in numbers between censuses is due to natural increase and how much is due to net in- or out-migration.

A summary of the population changes between March 1906 and December 1920 is given in Table II-B1 along with the increases/declines for the three intercensal periods; 1906-1911, 1911-1916 and 1916-1921. In the two periods for which reasonably complete data on vital events and movements are available, net gains and losses generate population changes which are rather different from the observed patterns. The variations can be explained in part by lack of congruity in the temporal domains for the two sets of figures. However, it could also be that in the early period there was some under-registration of vital events. Between 1906 and 1911 population movements led to a net balance in favour of numbers resident on the island, and the evidence suggests that this process, rather than natural increase, was the main cause of growth during these five years. A decade later the roles of natural increase and net migration were reversed; a consistently higher incidence of deaths than births in all years made mortality the main cause of population decline between 1916 and 1921.

TABLE II-B1: COMPONENTS OF POPULATION CHANGE BETWEEN 1906 AND 1920

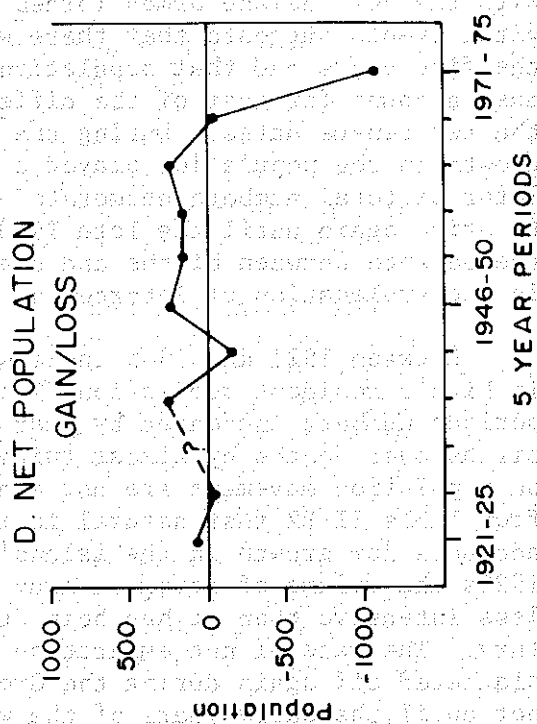
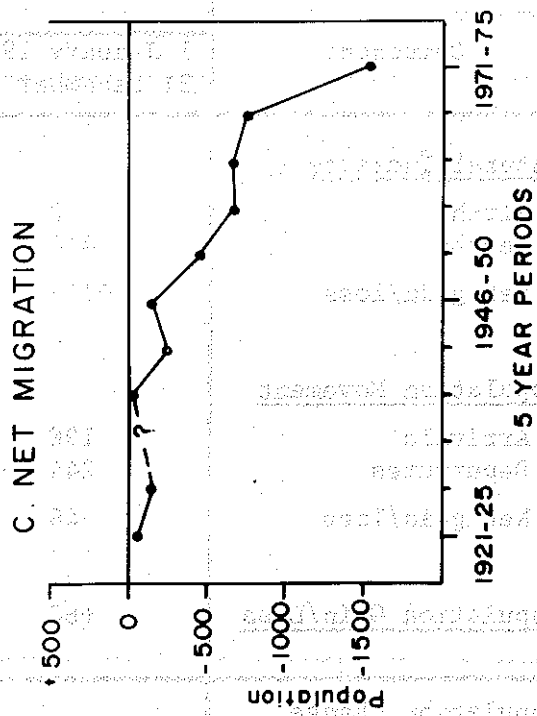
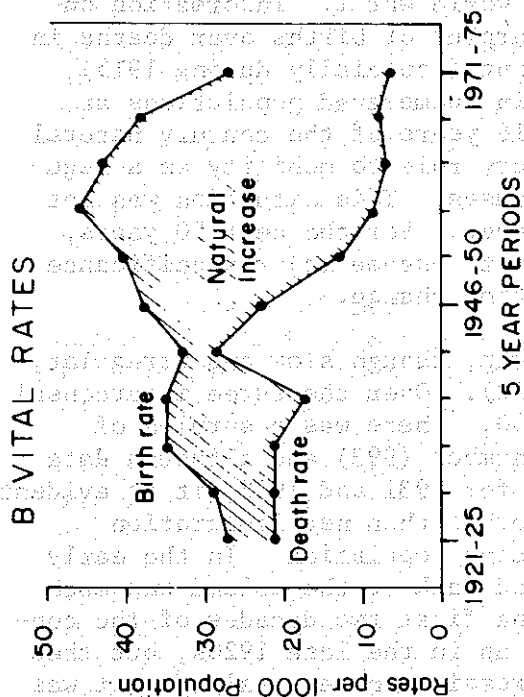
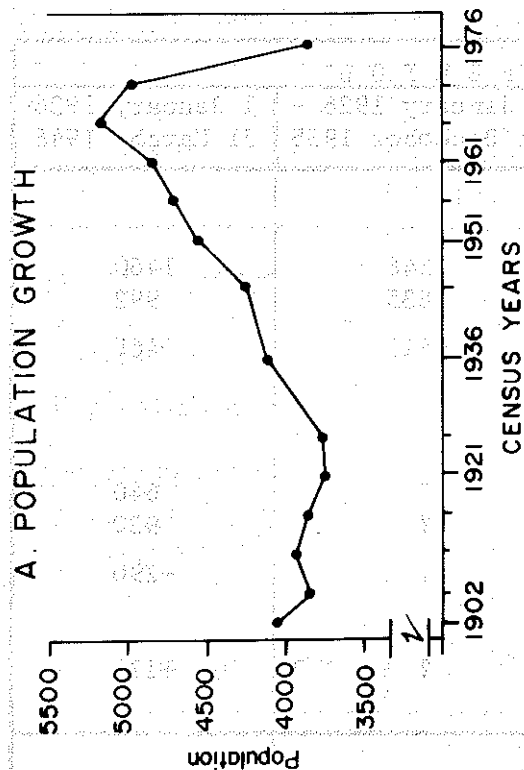
Component	P E R I O D		
	1 April 1906- 31 March 1911	1 April 1911- 31 March 1916	1 April 1916- 31 December 1920
<u>Natural Increase</u>			
Births	502	487	479
Deaths	481	429	670
Net gain/loss	+21	+58	-191
<u>Population Movements</u>			
Arrivals	903	?	456
Departures	847	?	426
Net gain/loss	+56	?	+30
<u>Population Gain/Loss</u>	+77	?	-161
Population Change between Censuses	+121	-63	-130

During the intervening period (1911 to 1916) the enumerated population declined by 63 persons (Table II-B1). As noted earlier, data on arrivals and departures are not available for the year ended March 1916 - a critical year in the context of Niueans leaving the island to serve with the New Zealand armed forces during World War I. Information on vital events suggests that there was a surplus of births over deaths in the five years and that population movement (especially during 1915) must account for most of the difference in enumerated populations at the two census dates. During the first 16 years of the century natural growth in the population played a secondary role to mobility as a regulator of total numbers enumerated in censuses. This situation was not to arise again until the late 1960s, however. For the next 50 years, the balance between births and deaths was to assume major significance in the explanation of intercensal population change.

Between 1921 and 1945 there was growth, though slow and irregular, in Niue's resident population (Table II-A2). Over the three intercensal periods numbers increased by just over 500. There was a surplus of births over deaths by almost twice this number (993) and although data on population movement are not available for 1931 and 1932, it is evident from Table II-B2 that natural increase rather than net immigration accounts for growth in the island's resident population. In the early 1920s the volume of movement away from and back to the island was much less intensive than it had been during the first two decades of the century. The rate of net emigration picked up in the late 1920s, but then slackened off again during the Great Depression in New Zealand. It was not until the early years of the war that departures began to exceed arrivals consistently again, a trend which continued almost without interruption to the end of 1976.

TABLE II-B2: COMPONENTS OF POPULATION CHANGE BETWEEN 1921 AND 1945

Component	P E R I O D		
	1 January 1921 - 31 December 1925	1 January 1926 - 31 December 1935	1 January 1936- 31 March 1946
<u>Natural Increase</u>			
Births	528	1246	1460
Deaths	414	835	992
Net gain/loss	+114	+411	+468
<u>Population Movement</u>			
Arrivals	198	?	640
Departures	244	?	930
Net gain/loss	-46	?	-290
<u>Population Gain/Loss</u>	+68	?	+178
Population Change between censuses	+45	+309	+149



FIGURES II-A, B, C and D: POPULATION CHANGE IN NUIE DURING THE 20th CENTURY

1.3 Summary

The course of population change in Niue during the twentieth century is outlined in Figure II-A. Trends in numbers enumerated at each census, the relationship between birth and death rates (and hence, natural increase), the net losses through emigration, and the pattern of population growth/decline since the census in 1921 are summarized in some simple graphs. The role of population movement in controlling growth during the post-war period is very clearly illustrated in Figures II-B and D. With crude birth rates rising as death rates fell, Niue should have experienced a classic 'population explosion' during the 1950s and 1960s. In fact, there was only modest growth in numbers during the years of rising rates of natural increase.

A summary of the gains and losses to Niue's population through natural increase and movement since 1906 is given in Table II-C. The absence of data on arrivals/departures for certain years makes precise comparison with the magnitude of population change between censuses for the period difficult. One point which does emerge from this table is the limited net emigration before the war, and the more important overall contribution of natural increase to population change during the first 45 years of the century. The gains in this period, together with those in the years of high crude birth rates in the 1950s and 1960s, have been almost cancelled out by emigration since 1960. As noted earlier, Niue's population in September 1976 was only marginally greater (21 persons) than that enumerated in 1906.

TABLE II-C: NET POPULATION GAINS AND LOSSES THROUGH VITAL EVENTS AND POPULATION MOVEMENT: A SUMMARY, 1906-1976

Period	Balance of births over deaths	Balance of arrivals over departures*	Net Population gain/loss.	Intercensal Population change.
1906 - 1945	881	(-274)	(607)	431
1946 - 1976	4103	-4444	-341	-410
1906 - 1976	4984	(-4718)	(266)	21

Note: * Incomplete data for period 1906-1945 - no records of arrivals and departures for 1915, 1931 and 1932.

2. STRUCTURE AND PROCESS

Since the late 1840s, following the arrival of Samoan missionary teachers, Niue has had a 'non-indigenous' component in its population. Until relatively recently the non-Niueans have rarely numbered more than 50 in any given year. During the first 45 years of administration by New Zealand, numbers at census dates fluctuated between 21 in 1906 and 59 in 1921; it was not until after 1945 that this component grew to exceed 100 persons (Table II-D). In the discussion of age-sex structure and demographic processes which follows, the small non-Niuean population is excluded from the statistics. Most of the available census tabulations and records of births, deaths and migration relate only to Niueans.

TABLE II-D: THE NIUEAN AND NON-NIUEAN POPULATIONS, 1902-1945

Census Year	Niuean			Non-Niuean			Total
	m.	fem.	tot.	m.	fem.	tot.	
1902	1893	2158	4051	15	8	23	4074
1906	1758	2043	3801	16	5	21	3822
1911	1829	2062	3891	26	26	52	3943
1916	N.A.	N.A.	3839	N.A.	N.A.	41	3880
1921	1703	1988	3691	33	26	59	3750
1926	1763	2000	3763	18	14	32	3795
1936	1978	2102	4080	13	11	24	4104
1945	2041	2189	4230	13	10	23	4253

2.1 Fertility, Mortality and Age-Sex Composition

The summary statistics in Tables II-E1 and 2 and population pyramids in Figure II-E give some indication of the radical changes in Niue's population structure during the first half of the twentieth century. In the early 1900s there was a sharp fall in proportions aged less than five years, suggesting either a decline in birth rates, or a rise in infant mortality, or a combination of both processes. From 1921 proportions aged between 15 and 44 also started to decline and the population pyramids reveal that by 1945 net emigration was having a profound influence on age-sex composition. Unfortunately the published statistics on births, deaths and migration do not permit very sophisticated analysis of the impact changes in the three processes had on population structure.

TABLE II-E1: POPULATION STRUCTURE: DISTRIBUTION BY AGE GROUP - A SUMMARY, 1902-1945

Census Year	Age Group*						Total
	0-4	5-14	15-44	45+	0-14	15+	
1902	16.4	22.9	N.A.	N.A.	39.3	60.8	4051
1906	12.9	25.2	N.A.	N.A.	38.1	61.9	3801
1911	9.9	20.2	47.4	22.4	30.1	69.8	3943
1916	9.6	19.2	48.8	22.4	28.8	71.2	3808
1921	10.5	20.7	46.5	22.3	31.2	68.8	3691
1926	12.0	19.1	46.0	22.5	31.1	68.5	3763
1936	15.3	22.5	40.7	21.5	37.8	62.2	4080
1945	14.0	27.8	39.4	16.3	41.8	58.1	4230

Note: * Excluding 'age not stated' cases.

TABLE II-E2: DEPENDENCY AND SEX RATIOS: A SUMMARY, 1902-1945

Census Year	Youthful Dependency ¹	Aged Dependency ²	Total Dependency ³	Sex Ratio ⁴
1926	52.5	16.4	68.9	93.2
1936	71.1	16.8	87.9	94.3
1945	80.5	12.1	92.6	88.2

1. Persons under 15 years of age per 100 aged 15-59 years.
2. Persons over 59 years of age per 100 aged 15-59 years.
3. Persons 0-14 and 60+ years per 100 aged 15-59 years.
4. Males per 100 females.

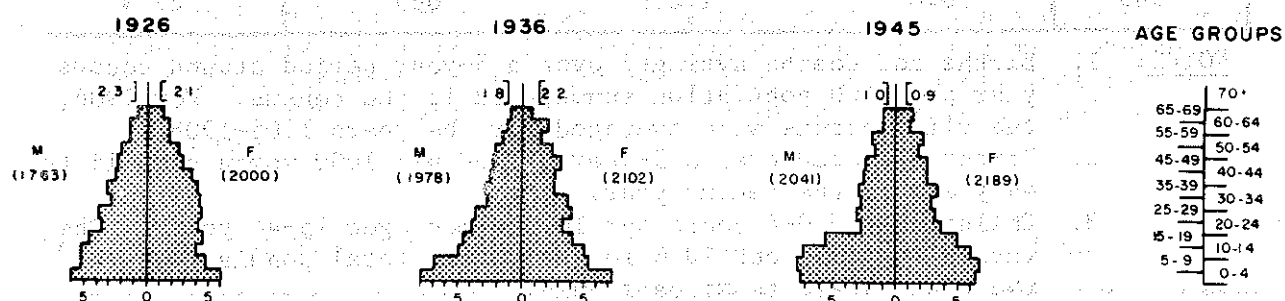


FIGURE II-E: AGE-SEX STRUCTURE OF THE NIEUAN COMPONENT OF THE POPULATION DURING THE 1926, 1936 AND 1945 CENSUSES

The statistics suggest a minor decline in the incidence of births per 1000 population in the early years of the New Zealand administration, followed by a substantial increase in rates between 1921 and 1945 (Table II-F). As far as the drop in crude birth rate between 1906 and 1916 is concerned, it is possible that factors other than declining fertility per se were responsible. Annual reports throughout the period make frequent reference to a high incidence of infant deaths, and if a child died within a few weeks of birth it is not unreasonable to suspect that it was never recorded as being born alive, especially before regulations were introduced to penalise those who failed to register births.

By 1900 the Niuean population had been introduced to a wide range of alien diseases. Epidemics of influenza, whooping cough, measles, dysentery and infectious hepatitis were not uncommon occurrences. Tuberculosis, while not widespread in the early years of the century, had been introduced and was to become a most important cause of death, second only to 'senility'. The course of change in crude death rates from 1906 is much more erratic than that found for birth rates before the Second World War. A bad outbreak of an infectious disease, a disastrous hurricane followed by food shortages and sickness, and what might have been a gradual improvement in death registration after the legislation introduced in 1916, account for the major fluctuations suggested in Table II-F. To a certain extent the effect of extreme events has been muted by taking five-year averages of deaths. The 'bad' years between 1915 and 1920 - the years

when considerable pressure was being put on the New Zealand government to construct a hospital on the island - clearly stand out in the summary statistics.

TABLE II-F: SOME CRUDE MEASURES OF FERTILITY AND MORTALITY, 1906-1945

Census Year	Crude Birth Rate ¹⁾	General Fertility Rate ²⁾	Child-Woman Ratio ³⁾	Crude Death Rate ¹⁾
1906	26.7	N.A.	N.A.	26.4
1911	24.6	89.6	362	21.8
1916	24.0	84.7	340	31.7
1921	26.7	101.6	393	31.2
1926	28.2	111.7	471	20.3
1936	37.0	177.4	731	19.5
1945	36.0	172.9	669	29.9

- NOTES: 1. Births and deaths averaged over a 5-year period around census year per 1000 population enumerated in the census. For 1906, the vital events were averaged for the years 1905-1908.
2. Births averaged over a 5-year period per 1000 women aged 15 to 44 years in the census year.
3. Children aged 0-4 years per 1000 women aged 15-44 years. The ratios for 1911 and 1916 relate to the total population; for the other years to Niueans only.

With regard to fertility levels and rates of population increase, it should be noted that syphilis and gonorrhoea were reported to be widespread on Niue. These diseases are known to reduce female fertility, and medical officers on the island before the First World War were suggesting that such complaints were 'the chief cause of so many of the women being childless' (AJHR, 1914, p.36). There was certainly considerable concern among the administration about the relatively low incidence of births on the island at this time. In 1920, for example, the medical officer strongly supported a suggestion by the Resident Commissioner that fertility should be encouraged using financial incentives, 'to spur the mothers on, to make them anxious for the welfare of their babies, nothing in my mind would appeal to them more than the knowledge that they will be rewarded' (AJHR, 1921, p.12). Official support for much higher fertility, the control of labour migration, the arrival of a Plunket nurse 'to look after the babies and instruct the mothers' in 1920, and a concerted effort to reduce the incidence of syphilis and gonorrhoea and infant mortality arising from complications associated with the customary early weaning in Niue, undoubtedly had some impact on crude birth rates. In 1921 the rate was at the level recorded for 1906; 15 years later it had risen by almost 40 per cent, the equivalent of 10 births per 1000 population each year. It is unlikely that these changes can be fully explained by differentiations in the coverage of the vital registration system.

Trends in two other summary measures of fertility suggest that the decline recorded for the crude birth rate before 1916 was a real one and not simply a function of changing population structure. The number of

births per 1000 women aged between 15 and 44 years also fell, along with the ratio of children under 4 years per 1000 reproductive women (Table II-F). There was little female net emigration until after the Second World War, and changes in ratios in which women between 15 and 44 years are the relevant population universe are likely to reflect variations in fertility more adequately than rates where the total population is the denominator in the equation.

2.2 International Migration

Movements away from and back to Niue were recorded by place of origin and destination in the early annual reports. A summary of the data available for the period April 1907 to March 1915 is contained in Table II-G. It should be borne in mind that the figures here include movements of foreigners as well as those by the Niuean population. As most of the non-Niueans were Europeans from New Zealand, it is likely that they account for the majority of movements to and from New Zealand at this stage. Movements to other Pacific island countries can be explained largely in terms of Niuean contract labour migration. Malden Island in the Southern Line group, Tonga and German (Western) Samoa were the most important destinations. The former was the site of a guano (phosphate) extraction industry (as was Makatea Island, the main destination for Niueans in French Polynesia), while the latter contained plantations run by Germans.

TABLE II-G: INTERNATIONAL POPULATION MOVEMENT, APRIL 1907 TO MARCH 1915

Place	Movements				Net Balance of Movement
	To Niue		From Niue		
	No.	%	No.	%	
New Zealand	119	9.7	130	11.8	- 11
Tonga	308	25.2	202	18.3	+106
German Samoa	248	20.3	189	17.2	+ 59
American Samoa	36	2.9	31	2.8	+ 5
Cook Islands	25	2.0	8	0.7	+ 17
Line Islands	362	29.6	406	36.9	- 44
French Polynesia	76	6.2	117	10.6	- 41
Papua New Guinea	40	3.3	15	1.4	+ 25
Others*	10	0.8	3	0.3	+ 7
TOTAL	1224	100.0	1101	100.0	+123

NOTE: * Australia and the United Kingdom.

The movement to Tonga was of special concern to the New Zealand authorities early in the century because there was increasing free as well as contract migration to this country. Tonga was particularly attractive to Niueans because liquor could be obtained there (the colonial administration did not permit the indigenous population to consume alcohol). To try and discourage Niueans from going to Tonga and not returning, a pass fee of 10 shillings was introduced in 1903 (AJHR, 1904). This does not appear to have had much effect because in 1910 the New Zealand administration encouraged the Tongan government to pass an ordinance prohibiting

the landing of Niueans unless they had written contracts for employment in the Kingdom; these contracts stipulated a date of departure for the labourers (AJHR, 1912). In the 1911 census it was established that of the 513 Niueans living abroad, 222 were in Tonga and 104 in German Samoa, and it was believed that most 'probably will never return' (AJHR, 1912).

The available figures on international population movement between 1907 and 1915 indicate that there was a sizeable net migration gain from Tonga over the period; in fact, as noted earlier, the excess of arrivals on Niue over departures between censuses in 1906 and 1911 accounts for more of the intercensal growth in numbers than natural increase. In spite of this net migration gain, it was argued repeatedly that restrictions on Niuean movement would be necessary if the population was to reverse a trend towards decline which was again evident in the census of 1916. In his report for 1917, for example, the Resident Commissioner commented that it was only the restricted shipping service that prevented greater numbers leaving; Niuean young men in particular were said to be very anxious to travel to other islands (AJHR, 1918). Two years later an 'Ordinance to impose restrictions upon the emigration of natives from Niue' was introduced; a fee of £1 had to be paid by all who left the island (AJHR, 1920). This financial disincentive seems to have had some short-term impact; whereas 133 departures were recorded for 1918, only 61 are mentioned in the 1919 annual report. Finally, as mentioned earlier, labour recruiting on Niue was prohibited in 1920.

In the annual report for 1923 there is a summary of population change since the late 1850s. Considerable emphasis in the report was placed on the role of international migration as a regulator of population numbers on the island. It is worth quoting the comments on this movement at some length because they provide a useful insight into official thinking about Niuean migration trends in the first quarter of the 20th century.

It is therefore clear that migration and not excessive mortality is the real danger in Niue. ... If further proof be wanted, the settlements of Niueans in Rarotonga, Apia, Pago Pago, and the larger islands of the Tongan group provide confirmation. Other Niueans are spread through the remaining islands of the Pacific; many are at sea as sailors; and there is also a large colony in Auckland, whence a few of the hardier spirits are beginning to scatter through New Zealand. The majority of the Natives who are away are now permanently domiciled in the islands in which they reside; many have, through marriage, acquired homes and plantations, and some of the younger Natives have even forgotten their own tongue. The prospect of seeing them again in Niue is therefore remote. Formerly practically every young man spent some time at sea or abroad. Also the scope for day labour in Niue is small. Therefore the younger men are clamorous to go; and though they are willing to promise to return, the Resident Commissioner is satisfied that such promises for the most part would not be honoured. It is only a lack of shipping which has kept men here of late years. (AJHR, 1924, p.12.)

In 1925 the New Zealand steamer 'Maul Pomare' began calling at Niue regularly, and net out-migration increased substantially. The economic recession in New Zealand during the early 1930s discouraged Niuean emigration and it was not until 1938 that more than 100 departures in any year were cited for Niue again in the annual reports. The attraction

of employment opportunities in New Zealand led to considerable movement away from the island between 1941 and 1943, setting the scene for the most important phase of international migration in Niue's recent history - the post-war drift to urban areas (especially Auckland) in the country where all Niueans have citizenship rights. This post-war emigration and especially emigration during the 1971-1976 intercensal period is discussed at length by Walsh in Chapter V of this Volume.

3. THE VILLAGES

In concluding this historical introduction some characteristics of the village populations are briefly reviewed. For all census years except 1936, data on the numbers of males and females resident in the named communities on the island are available. Information on the age-sex composition of individual communities is less complete. In the early enumerations (1906-1921) a coarse breakdown was provided and the details are available in the relevant appendices to the New Zealand censuses for these years. Between 1926 and 1945, data by age group were not published at the village level.

TABLE II-H: CHARACTERISTICS OF POPULATION GROWTH, STRUCTURE AND DISTRIBUTION WITHIN NIUE, 1900-1945

Characteristic	Village Group				Niue Island
	Alofi	West Coast	Eastern	Southern	
<u>Proportion of Niue's Population</u>					
1900	19.1	21.7	28.4	30.8	100.0
1911	19.7	22.7	28.6	29.0	100.0
1921	20.6	22.4	29.4	27.6	100.0
1945	20.4	21.1	32.3	26.2	100.0
<u>Intercensal Change (%)</u>					
1900 - 1921	- 1.0	-5.1	- 4.8	-17.6	- 8.1
1921 - 1945	+14.1	+8.7	+26.5	+ 9.3	+15.2
<u>Sex Ratio (per 100 women)</u>					
1900	88	84	70	77	78
1911	92	86	84	94	89
1921	89	81	84	88	86
1945	91	99	93	91	93
<u>Age Distribution (%)</u>					
<u>1911</u> 0 - 4	10.3	10.8	10.5	8.5	9.9
5 - 14	22.0	21.5	17.9	20.3	20.2
15 - 44	46.1	47.9	51.2	44.3	47.5
45+	21.6	19.8	20.3	26.9	22.4
<u>1921</u> 0 - 4	9.3	9.7	11.1	11.3	10.5
5 - 14	21.4	23.1	19.9	19.0	20.7
15 - 44	47.4	43.9	47.9	46.3	46.5
45+	21.8	23.2	21.0	23.4	22.3

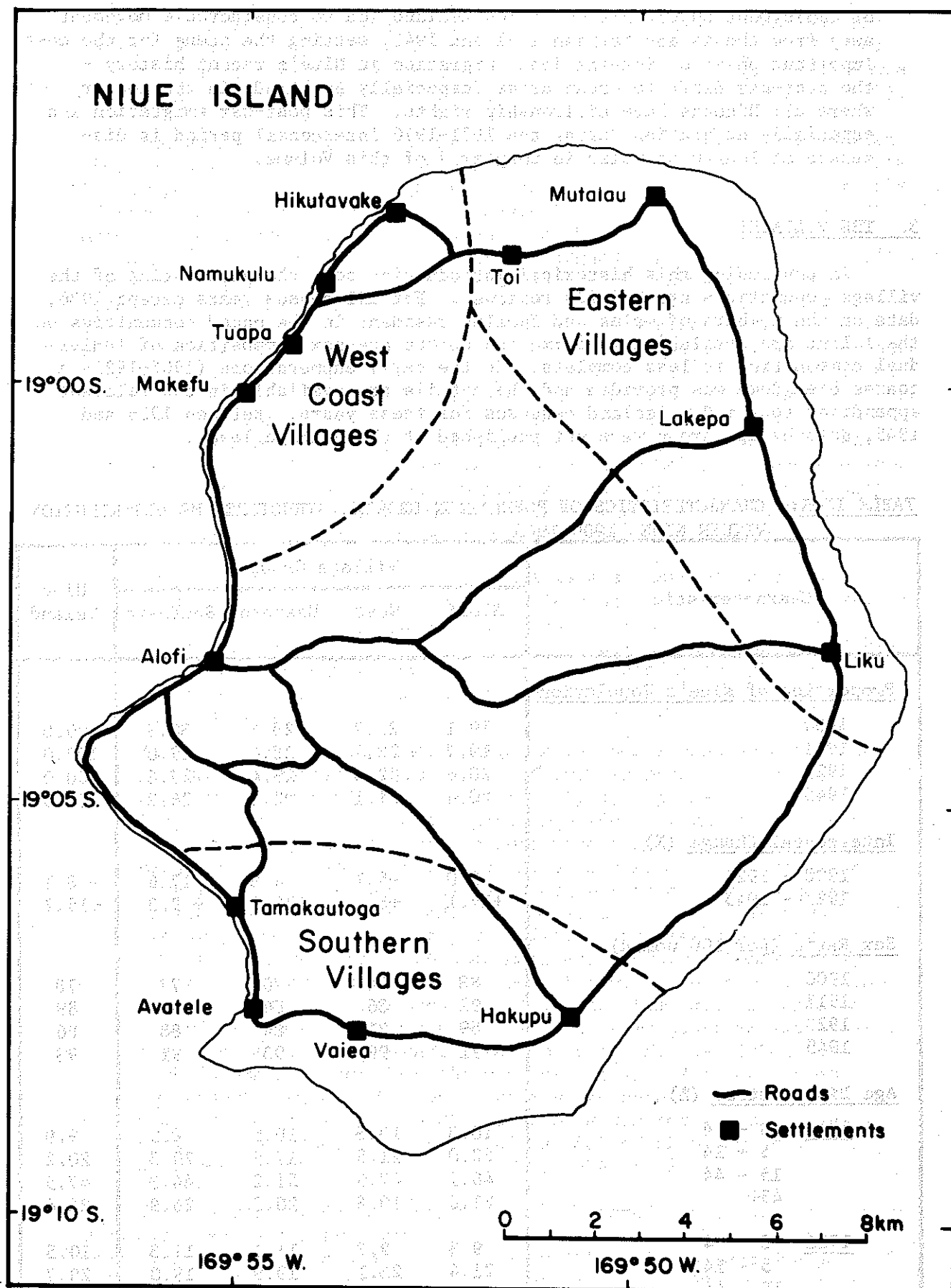


FIGURE II-F: MAP OF NIUE ISLAND

A generalised assessment of changes in the distribution, rates of growth and decline, and age-sex composition of the three main clusters of villages, west coast, eastern, southern (see Figure II-F) and Alofi, is contained in Table II-H. Over the 45 years there were some minor shifts in proportions of the total population living in different parts of the island. The eastern villages, less accessible from the government station than those in the west and south, had taken over from the latter as the places of residence for the largest proportion of population in the four areas by 1921. Although numbers in the east had declined between 1900 and 1921, the overall intercensal change had been smaller than in the west or south. The only area to record a population in 1921 that was very close to numbers in 1900 was Alofi, site of the government station as well as a large village.

Throughout the first 21 years of the century sex ratios remained relatively low - there were only 70 males per 100 females in the eastern villages according to the mission census in 1900. By 1921 all areas had at least 80 males per 100 females, but it is quite apparent from these sex distributions that contract labour migration of males was affecting the structure of population in all communities. The age compositions for 1911 and 1921 vary somewhat over the four areas as well as between the two years (Table II-H). In 1911 the southern villages had the lowest proportion of residents in the 15 to 44 age group and a smaller proportion of infants than was found in other areas. This area had suffered greater population decline between 1900 and 1911 than the other three, and seems to have been the most affected by net emigration. By 1921 proportions in the under 5 and 15 to 44 groups had risen, but at the expense of the 5 to 14 group. In this year, the west coast villages had the smallest proportion in the 15 to 44 year age group. These changes in rates of growth and age-sex composition cannot be explained on the basis of the limited statistical information available; intensive ethnographic research would be necessary before a satisfactory account of the course of population change at local level could be prepared.

4. A CONCLUDING COMMENT

In the introduction to this chapter, it was stressed that the population history of Niue has still to be written. McArthur (1956) has prepared a useful short review of pre-colonial estimates and examined selected aspects of birth and death registration, population structure and fertility and mortality. Walsh and Trlin (1973) have looked in depth at recent migration trends. A comprehensive analysis of historical, ethnographic and demographic evidence for the whole of the period for which estimates of the island's resident numbers are available has not been published yet. Hopefully the statistics introduced in this chapter and elsewhere in the census volume will go some way towards assisting someone in the task of completing such an analysis of demographic developments in one of the smallest self-governing countries in the world.