# CHAPTER 1 INTRODUCTION

# 1.1 HISTORY, GEOGRAPHY AND ECONOMY

#### 1.1.1 History

Nauru was first sighted in 1789 by Europeans and reported by Captain John Fearn of the whaling ship the Hunter. There was little contact after Fearn's visit until the 1830s when Nauru became an important source for food and water for the ships frequenting the area. Commander T. Beckford Simpson, Master of the Giraffe wrote in his diary in 1843 that 'this island and many others in the Pacific, are infested by Europeans who are either runaway convicts, expirees, or deserters from whalers, and for the most part men of the very worst description...' With them, these early Europeans brought diseases, and the taste for alcohol and firearms. The combination of these factors brought about and fueled the resulting warfare also known as the Ten Years Wars (1878–1888) (Taylor and Thoma 1983)

After this period, Nauru was administered by numerous countries. The Anglo-German Convention divided the western Pacific into spheres of influence; however, in 1888, Germans gunboat Eber landed at Nauru and proclaimed the island a German Territory. During the German annexation, alcohol and firearms were banned and evangelism began.

In 1900, phosphate was discovered and mining began in 1906 under the auspices of the Pacific Phosphate Company. Nauruans, however, played a very small role in mining because workers were imported from China and neighboring islands. Later, under the treaty of Versailles in 1914, Nauru's sovereignty was vested in the British Crown and was afterwards jointly administered by Australia, New Zealand and Great Britain.

In 1920, modernisation of Nauru began in earnest and the subsequent availability of purchasable commodities increased demands on monetary wealth, which was closely linked with phosphate royalties. From the 1920s to 1930s, phosphate mining continued and royalties on mined land slowly increased although expatriates continued to form the core of the labour force.

During the Japanese occupation during World War II, 1,201 Nauruans were sent to Truk (now Chuuk in the Federated States of Micronesia) where they suffered hardship, with over40 percent dying. It was reported that at the beginning of the war, the Nauruan population was 1,848, but by the end, it was 1,278, which equates to a reduction of approximately 30 percent.

In 1947, an agreement was signed by Australia, New Zealand and the United Kingdom under the United Nations trusteeship<sup>1</sup> system. Under the trusteeship, mining and export resumed, continuing for over 20 years until independence in 1968.

Nauru became an independent sovereign nation in 1968, with a president elected by members of parliament.

Since independence, the phenomenal profits gained from phosphate mining resulted in a boom period in the economy. The profits were used to run national and local governments, provide social services, and purchase overseas investments in various enterprises, and were invested in the Nauru Phosphate Royalties Trust (NPRT)<sup>2</sup>. All of these were designed to sustain the flow of income after the exhaustion of phosphate. Royalty interests from the sale of phosphate were duly distributed to shareholders on a financial year basis until the late 1990s when the economy collapsed. Although much emphasis was placed on individual incomes from phosphate, in reality, the wealth was not uniformly distributed. Distribution was determined according to ownership and proportions of land.

<sup>&</sup>lt;sup>1</sup> The international system of promoting political, economic and social advancement of the territories and their development towards self-government and self-determination.

<sup>&</sup>lt;sup>2</sup> A sovereign wealth fund developed by the government of the Republic of Nauru in which the government invested money from the state owned mining company, Nauru Phosphate Corporation.

A legacy of the phosphate mining and subsequent abundance of money resulted in a heavy reliance on imported goods. Consumables of any nature were imported, including food, drinks, cigarettes, vehicles and entertainment systems. Unfortunately, this trend continues, despite the economic collapse and gloomy economic and financial forecasts.

The composition of Nauru's population is largely the result of the mining industry. Workers almost a century ago were imported from various parts of the world to work the mines. Early accounts reveal that in 1939, the foreign population was equal to the indigenous population of Nauruans. In 1977, the proportions were 60 percent foreigners and 40 percent indigenous Nauruans. These proportions increased in 1992 to 70 percent foreigners, 30 percent indigenous Nauruans. In 2006, the proportion of foreigners dwindled to only 6 percent as a result of a mass outflow of migrant workers and their families due to the collapse of the phosphate mining industry. The phosphate industry continues to drive Nauru's economy, trade and foreign relations, and will likely continue to have a clear and direct impact on the country's population in the future (SPC 2002).

# 1.1.2 Geography

Nauru is a raised coral atoll in the central Pacific, about 60 km south of the equator. It belongs to the Pacific subregion of Micronesia. Its nearest neighbor is Banaba (Ocean Island) in the Republic of Kiribati, about 330 km to the east. Nauru is bordered by Solomons Islands to the southwest, and by the Republic of the Marshall Islands and the Federated States of Micronesia to the northwest.

Nauru has a total land area of  $21.1 \text{ km}^2$ , and measures 6 km by 4 km, with a circumference of 19 km. Nauru is the smallest independent nation in the world.

# 1.1.3 Economy

Nauru's land tenure system has survived colonisation, and land access rights and land use rights are still held by family clans. However, with the transition to a monetary economy, poverty has increased and governance has changed considerably. Both of these have contributed to the country's heavy reliance upon phosphate productions as a source of income to buy imported goods. Due to Nauru's hierarchical and hereditary nature of customary land ownership, the distribution of lands is uneven. The result is that modernisation has caused disparities among the population due to the distribution of wealth. This disparity is further increased through the current lands registration system, and through abuse, corruption and inconsistencies within the judicial process. Traditionally, coastal fisheries and subsistence agriculture served as the major sources of livelihood for most people. The last 50 years have brought significant population growth, as well as increasing economic monetisation, with the result being that subsistence livelihoods are no longer an option for the majority of the population. Today, Nauruans are highly urbanised and depend greatly on the island's diminishing phosphate reserves and on overseas investments to finance imports (particularly of food). The ability of the natural environment to sustain the island's population has been seriously compromised by phosphate mining activities, and now depends on rehabilitation activities being undertaken by the government-owned mining entities.

The bulk of the population depends on cash incomes and imported goods for sustenance, but employment opportunities are largely limited to the public sector. The government is the main employer, and the private sector has contracted in recent years. In 2004, the public sector accounted for 41 percent of wage employment, and the average annual earnings of national government employees (AUD13,275) was more than 1.5 times higher than the average for the private sector. There is still much debate on whether a flourishing private sector should drive the next surge in economic growth (unlike in the past), or whether Nauru should remain a welfare-type society that is highly dependent on government employment. Nauru's geographic isolation and resulting high transportation and communications costs — coupled with a deteriorating infrastructure, and poor access to financial and banking institutions, among others — have hindered economic growth.

Nauru's GDP and per capita GDP have declined rapidly since the late 1980s, falling from among the highest per capita in the world to a considerably lower (but currently undisclosed) level. Current per capita GDP has been estimated by the Pacific Islands Forum Secretariat — with

assistance from the Secretariat of the Pacific Community (SPC) — and through a subsequent report from the Asian Development Bank (ADB), with technical assistance by consultants from the Pacific Financial and Technical Assistance Centre based in Fiji. Both estimates were assisted by the Nauru Bureau of Statistics (BOS). The slow recovery from 2001 to 2004 has been driven by higher government expenditure, fuelled by Compact bump-up funds,<sup>3</sup> the commencement of transfers under the new Compact economic package in 2004, and increased financial assistance from Taiwan.

# **1.2 POPULATION**

Population censuses have been carried out in Nauru since 1921, mostly at 10-year intervals. Table 1.1 provides a summary of the basic demographic indicators available for Nauru from the census data for 1921–2006. Nauru's population has increased three times since 1921, from around 2,000 in 1921 to over 6,000 in 1966. The population grew rapidly between 1933 and 1966 (reaching a growth rate of 5.4 percent in 1966), but the population growth rate subsequently slowed to 1.3 percent in 1977. More rapid growth in the 1980s and 1990s has been followed by a recent population decline (-2.1 percent in 2006), which was likely due to the steadily failing economy caused by the depletion of Nauru's phosphate resources.

Nauru's population density has increased significantly, from 98 people/km<sup>2</sup> in 1921 to 479 people/km<sup>2</sup> in 2002. Life expectancy declined by about five years between 1992 and 2002. Female life expectancy (56.9 years) in 2002 was higher than male life expectancy (49.0 years). Nauru is completely urban in terms of its population distribution.

	1921	1933	1947	1954	1961	1966	1977	1983	1992	2002	2006
Total population	2066	2641	2855	3473	4613	6057	6966	7674	9919	10065	9257
Intercensal growth rate (in %t)		2	0.6	2.8	4.1	5.4	1.3	1.5	2.9	0.1	-2.1
Density (population/sq km)	98	126	136	165	220	288	332	365	472	479	441
Percent urban	100	100	100	100	100	100	100	100	100	100	100
Life expectancy											
Male	-	-	-	-	-	-	-	-	54.4	49	-
Female	-	-	-	-	-	-	-	-	61.2	56.9	-
Total	-	-	-	-	-	-	-	-	57.6	52.6	-
equals to unknown (not available)											
Source: 2002 Nauru Census Main R	eport										

 Table 1.1: Basic demographic indicators, selected demographic indicators, Nauru

 1921-2006

# 1.3 POPULATION AND HEALTH POLICIES AND PROGRAMMES

# 1.3.1 Evolution of population policy

Nauru experienced an alarming drop in its population (to around 1,000 people) around 1920 due to an influenza epidemic. The effect of the flu was particularly ravaging because the epidemic occurred at a time when the population was recovering from a disastrous dysentery epidemic. The country's population and health situation was in a tenuous state, causing fear for the continuing survival of Nauruans. A policy known as 'populate or perish' was adopted, with 1,500 set as a target for a sustainable population. This target was met in 1932 (although it dropped below this again during WWII), and was a cause for celebration. This national event — called Angam Day — continues to be celebrated today.

Subsequent rapid growth, combined with low life expectancy raised considerable concerns on the part of the government, which sought to implement programmes and plans to cope with the resulting demand for both social and economic services. Changes in socioeconomic conditions, such as improvements in health status, and the need for better information on policy-making were

<sup>&</sup>lt;sup>3</sup> Financial borrowing from other commercial banks or similar financial institutions and countries.

the driving forces that lead to the undertaking of the demographic and health survey (DHS). Significant population expansion has placed pressure on the educational system, and increased the need for jobs, while high infant mortality and low life expectancy point to the need to review health policies and services, particularly given the current economic hardship. The DHS supports current activities, including family planning, HIV awareness, efforts to reduce gender disparity, the creation of district public healthcare workers, and public health programmes, and also assists in making assessments of health policies and services, and the health statistics framework.

The escalating prices of commodities and services and the drop in household income from worker wages and salaries lent urgency to the need to ascertain the general health of Nauru's population. The DHS was viewed as a means to establish a baseline for many basic health indicators, and a basis for a review and reformulation of Nauru's health policy. The economic climate and stricter budget policy placed a greater focus on the health and education sectors, and on the improved use of data and statistics for policy- and decision-making. The decision to implement the DHS was taken with the intent of assisting Nauru in developing health indicators and health data to assist with policy-making, reviews and meeting reporting obligations under the Millennium Development Goals (MDGs), and national targets under the Nauru National Sustainable Development Strategies (NSDS) plan.

# **1.4 SURVEY OBJECTIVES**

The 2007 Nauru Demographic and Health Survey (2007 NDHS) was executed from 13 August to 5 October 2007 by Nauru's BOS in conjunction with the Ministry of Health (MOH), using a nationally representative sample of almost 400 households. All women aged 15–49 in these households were eligible to be individually interviewed, and all men aged 15 and over in every seconded selected households were eligible to be interviewed.

The main objective of the 2007 NDHS was to provide current and reliable data on fertility and family planning behaviour, child mortality, adult and maternal mortality, children's nutritional status, the use of maternal and child health services, and knowledge of HIV and AIDS. Specific survey objectives were to:

- collect data at the national level that will allow key demographic rates to be calculated;
- analyse the direct and indirect factors that determine fertility levels and trends;
- measure the level of contraceptive knowledge and practice among women and men (by method);
- collect high-quality data on family health, including immunisation coverage among children, prevalence and treatment of diarrhoea and other diseases among children under age 5 years, and maternity care indicators, including antenatal visits, assistance at delivery, and postnatal care;
- collect data on infant and child mortality;
- obtain data on child feeding practices, including breastfeeding, and collect 'observation' information to use in assessing the nutritional status of women and children; and
- collect data on knowledge and attitudes of women and men about sexually transmitted infections (STIs) and HIV and AIDS, and evaluate patterns of recent behaviour regarding condom use.

This information is essential for informed policy decisions and the planning, monitoring, and evaluation of health programmes in general, and reproductive health programmes in particular. A long-term objective of the survey is to strengthen the technical capacity of government organisations to plan, conduct, process and analyse data from complex national population and health surveys. Moreover, these estimates of population and health indicators from the 2007 NDHS are anticipated to be comparable with data collected in similar surveys in other Pacific Island DHS pilot countries and in other developing countries.

# **1.5 SURVEY ORGANISATION**

The 2007 NDHS was carried out under the ADB/SPC Pacific Regional Pilot DHS Project, and was executed by Nauru's BOS in collaboration with the MOH. SPC and Macro International Inc

(through its MEASURE DHS project) provided technical assistance. The survey was funded by ADB.

A steering committee was formed to be responsible for coordination, oversight, advice and decision-making on all major aspects of the survey. The steering committee comprised representatives from various ministries and key stakeholders including MOH and BOS.

# **1.6 SAMPLE DESIGN**

The 2007 NDHS sample was designed to provide reliable estimates of total fertility and infant mortality rates at the national level. The survey used a two-stage, stratified probability sample design. The most recent census in 2002 provided the basic sample design information.

The primary sampling units (PSUs) consisted of 14 census enumeration areas or districts, with the inclusion of an area (called Location) based on its population density. In total, 15 PSUs were selected with probability proportional to size, with size being the number of households according to the census.

# **1.7 QUESTIONNAIRES**

Three questionnaires were used in the survey: a household questionnaire, a women's questionnaire and a men's questionnaire. The contents of these questionnaires were based on model questionnaires developed by the MEASURE DHS programme at Macro International.

In consultation with MOH, NDHS staff modified the model questionnaires to reflect relevant issues relating to population, family planning, HIV and AIDS, and other health matters in Nauru. The questionnaires were also translated into Nauruan.

The household questionnaire was used to list all of the usual members and visitors in the selected households. Some basic information was collected on the characteristics of each person listed, including age, sex, education, and relationship to the head of the household. The main purpose of the household questionnaire was to identify women and men who were eligible for the individual interview. The household questionnaire also collected information on characteristics of the household's dwelling unit, such as the source of water, type of toilet facilities, materials used for the floor and roof of the house, and ownership of various durable goods. In addition, this questionnaire was also used to record the nutritional status of children under age 6 years through height and weight measurements.

The women's questionnaire was used to collect information from all women aged 15–49. Women were asked about their:

- educational background, residential history and media exposure;
- reproductive history and child mortality;
- knowledge and use of family planning methods;
- fertility preferences;
- prenatal and delivery care;
- breastfeeding and infant feeding practices;
- vaccinations and childhood illnesses;
- marriage and sexual activity;
- work and their husband's background characteristics;
- awareness and behaviour about AIDS and other STIs; and
- domestic violence.

The men's questionnaire collected similar information contained in the women's questionnaire, but was shorter because it did not contain questions on reproductive history, maternal and child health, nutrition or domestic violence.

# 1.8 LISTING, PRETEST, TRAINING AND FIELDWORK

# 1.8.1 Listing

A household listing operation was implemented immediately prior to data collection. Teams of listers visited each PSU to list the households living there and to update maps provided by the Nauru Rehabilitation Cooperation. These lists formed the framework for the second stage of selection. The secondary sample units (SSUs) consisted of households. Households were selected in each PSU, with a total of 400 households selected.

All women aged 15–49 who slept in the sample household on the night prior to the interview date were eligible to be interviewed with the women's questionnaire. Every second household was sub-selected for the men's survey. All men aged 15 or over in sub-selected households were eligible to be interviewed.

## 1.8.2 Pretest

The pretest was undertaken from 2–13 July 2007. For the pretest, 9 women and 2 men were recruited and trained for two weeks to be interviewers. Pretest training consisted of classroom lectures, demonstration interviews, front-of class interviews, mock interviews, quizzes and tests, and some field practice that consisted of interviewing sample selected households. The interview team spent less than one week interviewing 11 households. After the pretest, the NDHS team reviewed and discussed the results. The pretest resulted in revising the translation of some questions and skip instructions in the questionnaires

# 1.8.3 Training

Potential 2007 NDHS staff were trained from 23 July–11 August 2007. In total, 17 women and 2 men were selected to be trained to implement the survey, including one person to act as project manager, two to act as team supervisors, and four nurses to conduct biometric measurements. Each survey team consisted of four female interviewers, one male interviewer, two biometric nurses, one field editor and one team supervisor. Training, which was mostly done by SPC technical specialists to the project, consisted mainly of lectures followed by mock interviews between trainees. Towards the end of the training, participants conducted practice interviews in households close to the training site. Several quizzes were also administered, graded and reviewed.

This process of assessment and training made sure that field supervisors, field editors, interviewers and data processors were of very high caliber, and this was demonstrated in the high degree of team work and quality data obtained.

## 1.8.4. Fieldwork

Two teams collected data, each team comprising one supervisor, one field editor, four female interviewers, two male interviewers and four biometric nurses. One senior NDHS staff who was designated as DHS manager also acted as field coordinator. Data collection started on 13 August 2007 and was completed on 5 October 2007.

It was agreed that the main enumeration would be conducted at Nauru General Hospital (central location) mainly due to the survey's objective and confidentiality issues. Senior NDHS staff made periodic visits to field teams to monitor the quality of data collection. Problems during data collection included unreliable rental vehicles for respondent pickup, prolonged processing of funds from the Treasury (which sometimes delayed reimbursement of expenses), and rescheduling of respondent appointments to the central location.

# **1.9 DATA PROCESSING**

Completed questionnaires were returned periodically from the field to the central office. Data processing began on 27 August 2007 and was completed in the first week of December 2007. Data processing staff consisted of one supervisor from BOS, one questionnaire

administrator/coding clerk, and three data entry operators. Data were entered using CSPro<sup>4</sup> software. All data were entered twice (i.e. 100 percent verification). The concurrent processing of the data was a distinct advantage for data quality, since NDHS staff were able to advise field teams of errors detected during data entry.

Upon completion of the data entry, final editing was undertaken in the second week of December 2007. Once the sampling weights became available, these were incorporated into the household and individual records and preliminary tables were generated.

# 1.10 RESPONSE RATES

Table 1.2 shows response rates for the 2007 NDHS. In total, 400 households were selected in the sample, of which 392 were found to be occupied at the time of the fieldwork. Of the existing households, 389 were successfully interviewed, yielding a household response rate of 99 percent.

In the households interviewed during the survey, 655 eligible women (aged 15–49) were identified, of whom 618 were successfully interviewed, yielding a response rate of 94 percent. With regard to the men's survey results, 392 eligible men (aged 15 and over) were identified, of whom 354 were successfully interviewed, yielding a response rate of 90 percent. The lower response rate for men reflects the relatively high refusal of men to answer questions, and their absences during contact times. Because household surveys were conducted during normal weekday working hours, men (who were in most instances the breadwinners) were not present. Workers in households were in some instances unable to attend their interview appointments, as some employers refused to grant leave to their respective employees. A letter explaining the survey and selection of individuals was provided on request by the survey agency, which included a supporting medical certificate from the public health hospital for this purpose.

In total, 972 individuals (or cases of eligible females and males) were successfully interviewed for the 2007 NDHS.

## Table 1.2: Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Nauru 2007

Result	Total
Household interviews	
Households selected	400
Households occupied	392
Households interviewed	389
Household response rate1	99.2%
Interviews with women aged 15–49	
Number of eligible women	655
Number of eligible women interviewed	618
Eligible women response rate <sup>2</sup>	94.4%
Interviews with men aged 15+	
Number of eligible men	392
Number of eligible men interviewed	354
Eligible men response rate <sup>2</sup>	90.3%

<sup>1</sup> Households interviewed/households occupied.

<sup>2</sup> Respondents interviewed/eliaible respondents.

<sup>&</sup>lt;sup>4</sup> A census and survey processing system that was designed for entering, editing, tabulating and mapping census and survey data.

# CHAPTER 2 HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS

This chapter focuses on the characteristics of the household population and the housing situation of survey respondents, and includes characteristics such as age-sex structure, literacy and education, household arrangements (headship, size) and housing facilities (e.g. sources of water supply, sanitation facilities, dwelling characteristics and household possessions). Because there is no discernable distinction in Nauru between urban and rural settings, all corresponding data and analysis within this chapter refer to an urban setting.

Besides providing a background for better understanding of many social and demographic phenomena discussed in the following chapters, this general description is useful for assessing the level of economic and social development of Nauru's population.

# 2.1 HOUSEHOLD POPULATION BY AGE AND SEX

The 2007 NDHS included a household questionnaire that gathered information on the socioeconomic characteristics of usual residents and visitors who had spent the previous night in the selected households. Table 2.1 shows the reported distribution by proportions of the *de facto* household population in five-year age groups and by sex. Data show that there are slightly more women (1,181) than men (1,168) in Nauru; or represented in percentages, women represented 51 percent of the population and men 49 percent. The only noticeable case was the 20–24 age group, where the population of women was three percentage points higher than for men, suggesting a sex ratio of 130 females for every 100 males. The table further depicts Nauru's population as a young population, with a large proportion of the population being in the younger age groups. The population under age 15 years accounted for 39 percent of the total population, while the population aged 60 and over was very small at 1.8 percent.

# Table 2.1: Household population byage, sex, and residence

Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Nauru 2007.

Age	Males	Females	Total
<5	12.7	14.1	13.4
5–9	12.9	12.3	12.6
10–14	13.6	12.3	12.9
15–19	10.2	9.9	10.1
20–24	9.7	12.6	11.1
25–29	9.1	8.1	8.6
30–34	7.3	7.4	7.4
35–39	6.2	5.1	5.7
40–44	5.7	4.8	5.3
45–49	4.0	5.7	4.9
50–54	4.0	3.9	4.0
55–59	2.4	1.8	2.1
60–64	0.6	0.6	0.6
65–69	0.4	0.3	0.3
70–74	0.3	0.6	0.5
75–79	0.3	0.3	0.3
80 +	0.1	0.1	0.1
Don't know/missing	0.4	0.2	0.3
Total	100.0	100.0	100.0
Number	1,168	1,181	2,349

Table 2.1 shows the percentage distribution of the *de facto* household population by five-year age groups and by sex. In total, 2,349 people were sampled from the total population of Nauru's 12 districts. A thirteenth enumeration area, known as the 'Location', was included due to its density. In this sample of 2,349 people, there were 1,181 females and 1,168 males. More than one-half (54 percent, of women fell within the child-bearing ages of 15–49 years, 13 percent were less than 5 years, while 8 percent were aged 50 and over. The smaller proportion of women aged 15–19 (as compared to those aged 10–14) may have been a result of interviewers intentionally placing women from the 15–19 age group into the 10–14 age group in order to avoid having to conduct interviews. This same pattern was not as evident in the male population.

About 13 percent of the male population is aged 5 years and younger, and 39 percent of the male population is aged 15 and younger. Males younger than 15 years were not interviewed in the 2007 NDHS. The remaining male population aged 15 and over (61 percent) were prospective candidates eligible to be interviewed for the relevant sections of the 2007 NDHS.

The population of women in the 20–24 age group was proportionately larger than the population of women in the 15-19 and 25-29 age groups, which can be attributed to misreporting of ages from both respondents and interviewers, or could be a result of a sample selection. Differences in proportions are clearly illustrated in Figure 2.1.

Nauru is depicted as having a young population: 49 percent of its population is younger than 20 years. Figure 2.1 shows that the older age groups make up a small proportion of the population (1.8 percent. The dependency ratio is 69.5, which suggests that the bulk of the population is between 15 and 59 years. The population pyramid in Figure 2.1 reflects a broad population-base pattern that is characteristic of a rapidly growing population. The impact of this population structure will likely be felt in the future when eventually the young population reaches reproductive ages.

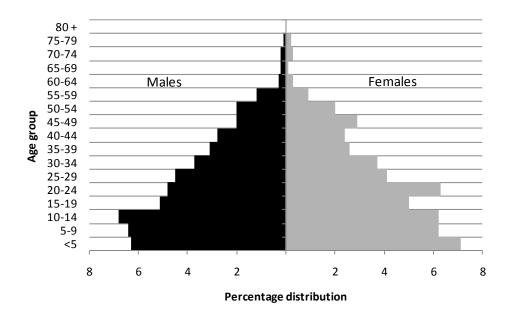


Figure 2.1 Percentage distribution of *de facto* household population by age and sex, Nauru 2007

# 2.2 HOUSEHOLD COMPOSITION

Table 2.2 shows the percentage of households by sex of household heads and household size; mean household size, and the percentage of households with orphans and foster children under age 18 according to residence. Of the 389 households interviewed, two-thirds, or 69 percent, were headed by men. The remaining 31 percent were households headed by women. About 35 percent

of the total number of households having reported foster and/or orphan children living within them, and 29 percent of households reported cases of fostering children.

About 39 percent of households had between 1 and 4 usual members per household, 41 percent had between 5 and 8 members, and approximately one-fifth of households were found to have 9 or more usual household members, yielding a mean (average) household size of 6.1 members.

# 2.3 FOSTERHOOD AND ORPHANHOOD

The high number of households fostering children depended on the phrasing of the question. By the local definition, fostering can be interpreted to mean temporary babysitting and/or caring for a child other than one's own child, which most often involves relatives and close family members. It is highly worth considering that the possibility of respondents misinterpreting this question has occurred, which would account for the high proportions within the categories 'fosterhood' and 'orphanhood'. Table 2.2 shows that more than one-third (34.5 percent) of households are either fostering or are guardians of orphans, whether permanent or temporary. About 29 percent of households were fostering children less than 18 years of age. Only 2.5 percent of households reported having two orphans, with just under one-tenth (9.9 percent) reporting having a single orphan.

Overall, a majority (65 percent) of children under age 18 are living with both parents (Table 2.3.1). An average of only 1 percent reported being orphaned with both parents dead. Approximately 13 percent of all children under age 18 reported that both parents were alive. An average of 15 percent were living with only their mothers. A higher proportion (11 percent) reported that their fathers were alive but were not living in the household, and about 4 percent reported that their fathers were dead. About 16 percent of children under age 18 reported not living with a biological parent and 8 percent of them had one or both parents dead.

## Table 2.2: Household composition

Percentage of households by sex of household head and by household size; mean size of household, and percentage of households with orphans and foster children under age 18, according to residence, Nauru 2007

Characteristic	Total
Household headed by	
Male	69.4
Female	30.6
Total	100.0
Number of usual members	
1	7.9
2	5.1
3	11.1
4	14.6
5	13.7
6	9.4
7	11.5
8	6.2
9+	20.6
Total	100.0
Mean household size	6.1
Percentage of households with orphans and foster children under 18	
Foster children <sup>1</sup>	29.2
Double orphans	2.5
Single orphans	9.9
Foster and/or orphan children	34.5
Number of households	389

Note: Table is based on *de jure* household members (i.e. usual residents).

<sup>1</sup> Foster children are those under age 18 living in households with neither their mother nor their father present

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Table 2.3.1:

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, the percentage of children not living with a biological parent, and the percentage of children with one or both parents dead, according to background characteristics, Nauru 2007

	Living with		Living with mother but not with father	Living with father but not with mother	th father t with her			Not living with either parent	ither paren			Percentage not living with	Percentage with one or	
Background characteristic	both parents	Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Missing information on father/mother	Total	a biolo- gical parent	both parents dead	Number of children
Age														
0-4	70.2	11.5	2.7	1.1	0.0	11.9	0.0	0.6	1:1	1.0	100.0	13.5	4.4	319
~~	68.9	12.7	4.4	0.0	0.0	11.8	0.0	0.0	0.0	2.2	100.0	11.8	4.4	124
2–4	71.0	10.8	1.7	1.8	0.0	11.9	0.0	0.9	1.7	0.2	100.0	14.5	4.3	194
5-9	69.5	10.2	2.4	1.9	0.9	11.8	0.6	0.2	1.2	1.1	100.0	13.9	5.4	301
10–14	60.6	11.8	4.9	2.5	1.2	12.1	2.2	2.5	1.2	0.9	100.0	18.0	12.1	304
15–17	51.4	8.8	8.0	4.3	0.0	17.7	0.7	2.2	0.7	6.2	100.0	21.3	11.6	129
Sex														
Males	64.9	10.3	4.9	2.9	0.2	12.3	1.2	0.6	0.5	2.2	100.0	14.6	7.4	526
Females	65.0	11.4	2.9	1.4	1.0	12.9	0.7	1.8	1.7	1.1	100.0	17.2	8.1	527
Wealth quintile														
Lowest	57.6	16.0	9.8	1.1	0.9	11.1	0.6	0.9	0.8	1.1	100.0	13.5	13.1	205
Second	69.69	8.3	2.3	0.5	0.7	15.1	1.2	0.8	0.5	1.1	100.0	17.5	5.4	211
Middle	64.0	15.5	1.4	3.0	0.0	12.3	0.8	1.5	0.0	1.4	100.0	14.7	3.8	230
Fourth	64.2	7.9	1.3	3.6	1.5	12.8	0.0	2.0	2.6	4.1	100.0	17.5	7.4	208
Highest	69.4	6.1	5.3	2.5	0.0	11.8	2.0	0.9	1.8	0.4	100.0	16.3	9.9	199
Total <15	66.8	11.2	3.4	1.8	0.7	11.9	0.9	1.1	1.2	1.0	100.0	15.1	7.2	924
Total <18	64.9	10.9	3.9	2.1	0.6	12.6	6.0	12	1	1.6	100.0	15.9	7.8	1 053

Note: Table is based on de jure members (i.e. usual residents).

One-quarter of children in the lowest wealth quintile were living in households without their father; this figure includes the 9.8 percent of children in this quintile whose fathers were dead. There were more younger children at age 0-4 reporting their father alive but were living with their mother only. Female children were more likely to live with their mother only as compared to male children (11.4 percent and 10.3 percent). Data also show that there was small proportion of children living with the father alone. However the same proportion of children by different age (less than 20 percent) were reported not living with their parent even though both parent were alive.

# 2.4 EDUCATIONAL LEVEL OF HOUSEHOLD POPULATION

Education affects many aspects of life, including individual demographic and health behaviour. Studies have shown that educational attainment level is strongly associated with contraceptive use, fertility, and the general health status, morbidity and mortality of children. In each household, for all members aged 5 or older, data were collected on the highest level of education attended and the highest grade completed at that level.

## 2.4.1 Educational attainment of the female household population

Table 2.4.1: Educational attainment of the female household population

In Table 2.4.1, the percentage age distribution of females by educational attainment and median years of completion is tabulated. The data show that the majority of Nauruan females had attended but did not complete school. For example, only about 7 percent of females aged 6 and over had no education while only 4 percent had completed primary education. Interestingly, older people between the ages of 20 and 65+ were more likely to attain some secondary level of education.

Background characteristic	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary	Don't know/ missing	Total	Number	Median years completed
Age		p	p			•••••				
6-9	44.2	54.6	0.0	1.2	0.0	0.0	0.0	100.0	118	0.0
10–14	3.6	46.9	21.3	25.9	0.0	0.0	2.3	100.0	145	4.9
15–19	0.5	3.2	5.2	74.1	14.7	1.1	1.2	100.0	117	8.7
20–24	1.5	1.4	1.4	74.1	15.3	5.1	1.1	100.0	148	9.4
25–29	0.5	1.8	0.0	68.5	22.6	6.6	0.0	100.0	95	9.9
30–34	0.0	1.9	0.0	73.6	19.5	5.0	0.0	100.0	87	9.5
35–39	0.0	0.8	0.0	76.1	19.5	2.9	0.6	100.0	60	9.7
40-44	1.7	0.7	1.7	48.5	46.7	0.8	0.0	100.0	57	10.0
45–49	0.0	0.0	0.0	58.2	28.1	7.7	6.1	100.0	68	10.1
50–54	0.0	0.0	1.0	71.3	16.5	5.2	6.1	100.0	46	9.6
55–59	0.0	0.0	4.8	74.0	7.3	6.1	7.8	100.0	21	9.5
60–64	0.0	0.0	0.0	53.3	11.3	35.5	0.0	100.0	7	11.5
65+	14.9	0.0	0.0	44.4	0.0	18.8	21.9	100.0	16	9.3
Wealth quintile										
Lowest	7.4	13.8	4.2	55.8	9.7	4.7	4.4	100.0	205	8.6
Second	5.4	16.3	3.5	56.5	13.9	1.8	2.6	100.0	191	9.1
Middle	5.6	19.2	4.6	54.9	13.1	2.1	0.6	100.0	220	8.6
Fourth	10.1	9.1	4.7	51.6	19.8	2.6	2.0	100.0	189	9.0
Highest	4.0	12.8	4.0	52.6	18.0	7.3	1.3	100.0	183	9.4
Total	6.5	14.4	4.2	54.3	14.7	3.6	2.2	100.0	987	9.0

Percent distribution of de facto female household population age six and over by highest level of schooling attended or completed and median grade completed according to background characteristics. Nauru 2007

<sup>1</sup> Completed 6 years at the primary level

<sup>2</sup> Completed 5 years at the secondary level.

Total includes 3 persons with missing information on age who are not shown separately.

When comparing the wealth status and educational attainment of female household members, females in the lowest wealth quintile (7.4 percent) were the most likely to have no formal education compared with females in the highest quintile (4.0 percent). Similarly, when comparing the completed secondary education results, people in the lowest quintile (9.7 percent) face difficulties in completing a secondary level education compared with people in the highest quintile (18.0 percent). Generally speaking, women in the poorest wealth quintile tend to have no education or are struggling to complete a secondary education, compared with women in the highest quintile.

#### 2.4.2 Education attainment of the male household population

In Table 2.4.2, the percentage distribution of males by educational attainment and median years of completion is tabulated. The results show a similar pattern to that of females; that is, the majority of males had attended but did not complete school. The highest proportion of males in the 'No education' category indicates were those in the 10-14 (6.2 percent) and 15-19 (3.9 percent) age groups. These figures are quite high considering the fact that in Nauru, school is compulsory for everyone aged 6–16, and that education is free. Based on the remaining outcomes, there is no variation in the variables by other background characteristics.

#### Table 2.4.2: Educational attainment of male household population

Percent distribution of the de facto male household populations aged six and over by highest level of schooling attended or completed and median grade completed, according to background characteristics, Nauru 2007

Background characteristic	No education	Some primary	Complete d primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary	Don't know/ missing	Total	Number	Median years completed
Age										
6–9	43.8	55.6	0.0	0.0	0.0	0.0	0.6	100.0	117	0.2
10–14	6.2	51.4	18.4	21.2	0.0	0.0	2.8	100.0	159	4.5
15–19	3.9	5.7	3.7	74.3	11.8	0.0	0.6	100.0	120	8.4
20–24	1.6	2.3	7.6	69.3	15.0	1.6	2.6	100.0	113	9.2
25–29	0.9	6.6	4.1	67.2	11.6	3.7	5.8	100.0	107	8.8
30–34	1.9	0.0	3.0	65.2	19.6	6.9	3.4	100.0	86	9.6
35–39	0.0	1.4	4.7	74.5	14.7	4.8	0.0	100.0	73	9.5
40-44	0.0	0.9	1.4	63.4	16.6	6.7	10.9	100.0	67	9.6
45-49	0.0	1.7	2.2	54.2	31.1	7.9	2.9	100.0	46	10.1
50–54	0.0	2.1	2.0	61.2	16.4	7.8	10.5	100.0	47	9.6
55–59	0.0	3.6	0.0	64.1	3.6	14.3	14.3	100.0	28	9.5
60–64	0.0	23.6	0.0	42.1	0.0	0.0	34.3	100.0	7	9.2
65+	0.0	0.0	15.6	63.6	0.0	7.6	13.3	100.0	13	9.8
Wealth quintile										
Lowest	7.7	16.1	8.9	46.6	10.2	2.3	8.2	100.0	193	7.6
Second	9.3	19.5	4.6	53.9	7.9	2.5	2.4	100.0	191	7.5
Middle	7.4	18.1	6.3	55.4	7.0	2.8	3.0	100.0	188	8.5
Fourth	6.1	16.7	4.3	52.0	12.4	3.9	4.5	100.0	204	8.6
Highest	5.4	15.7	5.2	50.7	15.2	4.5	3.2	100.0	209	9.0
Total	7.1	17.2	5.8	51.7	10.7	3.2	4.3	100.0	986	8.3

<sup>1</sup> Completed 6 years at the primary level.

<sup>2</sup> Completed 5 years at the secondary level.

Total includes 5 persons with missing information on age who are not shown separately.

When comparing the wealth status of men, poor males in the lowest wealth quintile are most likely to have no education (7.7 percent) or will struggle to complete a secondary education (10.2 percent), compared with males in the highest wealth quintile, where 5.4 percent have no education and 15.2 percent struggle to complete a secondary education. Correspondingly, the likelihood of reaching 'more than secondary level of education' is much greater among the wealthiest Nauruans than those from poorer households.

## 2.4.3 Primary school attendance ratio

Nauru uses a 3-6-4 formal education system: three years of pre-school, six years of primary and four years of secondary. The official age ranges for these levels are 4–6 years, 7–12 years and 13–16 years, respectively.

The net attendance ratio (NAR) for the primary level is the percentage of primary school-age children (ages 6–12) attending primary school. Overall, the primary school NAR is 88 percent in Nauru (see Table 2.5).

There is very little variation in the NAR by wealth quintiles. The NAR is lowest among schoolage children in the lowest wealth quintile households (82 percent) and highest for children in the fourth wealth quintile (94 percent). The NAR for children in all other wealth quintiles ranges between 84 percent and 90 percent. Even though primary education is free, not all children from the different wealth categories attend primary education. Most of the children not attending primary education are found in the lower wealth quintiles.

The gross attendance ratio (GAR) measures attendance irrespective of the official age at each level. The GAR for primary school is the total number of primary school-age students (ages 5–24), expressed as a percentage of the official primary school-age population (ages 6–12). A major contributing factor to high GAR is children starting primary school later than the recommended age of 6 years. Overall, the primary school GAR is 99 percent, with the highest GAR in the fourth wealth quintile (109 percent), which is followed by 101 percent in the highest quintile. However, when comparing GAR by sex for primary and secondary level, the proportion of female students to male students is greater.

The gender parity index (GPI) is a measure of the ratio of females to males attending school, regardless of age. For primary school, the GPI is 1.14, indicating that female students outnumber male students (i.e. for every 100 males there are 114 females). There is not much variation in the GPI for the primary school GAR by background characteristics; however, the ratios that are below the national average are in the second and fourth wealth quintiles with ratios of 1.08 in both wealth quintiles.

## 2.4.4 Secondary school attendance ratio

The concept of NAR at the secondary level is similar to that at the primary level; that is, the percentage of secondary school-age children (13–18 years) attending secondary school. Overall, only 60 out of 100 secondary school-age children in Nauru attend secondary school. The secondary NAR for males is 52 percent and is 69 percent for females.

The secondary school NAR increases with wealth from about 42 percent in the lowest wealth quintile to 68 percent in the wealthiest quintile, with the two lowest wealth quintiles falling below the national average of 60 percent. The secondary school GAR is 65 for the nation as a whole, and similar patterns are seen at the primary level where females outnumber males 72 to 58. Similar to the NAR, the secondary GAR increases as wealth increases: GAR is 44 percent among youth in the poorest households and 74 percent among youth in the wealthiest households.

#### Table 2.5: School attendance ratios

25.3

41.9

52.1

69.4

68.9

52.1

60.5

63.7

71.5

76.7

67.0

68.6

Wealth guintile

Lowest

Second

Middle

Fourth

Highest

Total

Background		Net attenda	nce ratio1			Gross attend	lance ratio <sup>2</sup>	
characteristic	Males	Females	Total	GPI <sup>3</sup>	Males	Females	Total	GPI <sup>3</sup>
			Prima	ary School				
Wealth quintile								
Lowest	66.0	96.8	82.2	1.47	85.9	100.8	93.8	1.17
Second	84.7	84.8	84.8	1.00	90.8	97.9	93.9	1.08
Middle	84.0	95.4	89.9	1.14	86.3	110.3	98.6	1.28
Fourth	95.2	92.4	94.2	0.97	105.7	114.4	108.8	1.08
Highest	83.7	97.8	90.4	1.17	94.1	107.9	100.6	1.15
Total	83.3	93.5	88.1	1.12	92.5	105.8	98.7	1.14

Secondary School

2.39

1.52

1.37

1.10

0.97

1.32

28.1

49.3

66.2

69.4

76.6

58.0

62.2

68.9

74.3

79.6

69.7

71.5

44.0

58.2

71.2

74.5

73.8

64.6

2.21

1.40

1.12

1.15

0.91

1.23

41.8

51.8

64.2

73.0

68.1

60.2

Net attendance ratios (NARs) and gross attendance ratios (GARs) for the de facto household population by sex and level of schooling; and the gender parity index (GPI), according to background characteristics, Nauru 2007

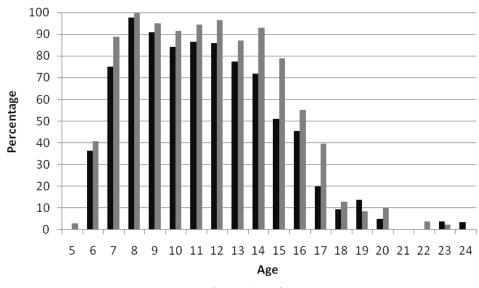
<sup>1</sup> The NAR for primary school is the percentage of primary school-age children (aged 7–12 years) attending primary school. The NAR for secondary school is the percentage of secondary school-age children (13–17 years) that is attending secondary school. By definition, NAR cannot exceed 100 percent.

<sup>2</sup> The GAR for primary school is the total number of primary school-age children, expressed as a percentage of the official primary school-age population. The GAR for secondary school is the total number of secondary school-age children, expressed as a percentage of the official secondary school-age population. If there are significant numbers of over-age and under-age students at a given level of schooling, the GAR can exceed 100 percent.

<sup>3</sup> The GPI for primary school is the ratio of the primary school NAR (GAR) for females to the NAR (GAR) for males. The GPI for secondary school is the ratio of the secondary school NAR (GAR) for females to the NAR (GAR) for males.

The GPI for the secondary school GAR is 1.23, indicating that, among students of all ages, for every 10 male students in secondary school there are approximately 20–21 female students. This ratio is higher than the GPI for the primary school GAR, and varies by background characteristics. Male students are outnumbered by female students in all levels of the wealth quintiles except for the highest. The GPI for the secondary school GAR is especially low in the highest wealth quintile households, indicating a slight gender inequality gap in favor of males.





■ Males ■ Females

## 2.4.5 Age-specific attendance rates

Figure 2.2 presents information on school attendance among youth aged 5–24, by age. The figure includes students who attended primary school, secondary school, or a higher education level during the 2007 school year.

By age 7, the vast majority of children in Nauru attend school (over 75 percent). Rates of attendance range from 75–100 percent among males and females aged 7–13, which peak at age 8 for both sexes. Starting at age 9, attendance rates decline slightly for male children, with female attendance rates declining dramatically at ages 15 and 16. By ages 20–24, attendance rates are very low (i.e. below 10 percent), indicating very low attendance at the tertiary and vocational level.

Figure 2.2 also shows a small variance for students aged 5 years due to the small sample size. It should be noted that the small sample has limited the analysis by background characteristics; therefore, the observed rate misrepresents the whole population. However, when considering children aged 6 against background characteristics, the results indicate that around 60percent of all children in this age group do not attend school, even though primary schooling in Nauru is free.

# 2.5 HOUSING CHARACTERISTICS

Increased access to safe drinking water results in improved health outcomes in the form of reduced cases of water-borne diseases such as dysentery and cholera. Information was collected in the 2007 NDHS about certain characteristics of household drinking water, including source of drinking water, time taken to collect water, people who usually collect the water, water treatment prior to drinking, and type of sanitation facility.

Table 2.6 shows that 89 percent of households use improved water sources, and that 89 percent of households rely on rainwater as their primary source of drinking water. With regards to the amount of time taken to collect water, 97 percent of households collect their water on their premises.

Water from an improved source can be contaminated at collection, during transportation, and during storage. Information was collected on whether or not water was treated prior to drinking. The majority of households (76 percent) use an appropriate treatment method — such as boiling, bleaching or filtering — on their drinking water, while 23 percent use no treatment. The most commonly reported method of treatment is boiling. Seven in ten households (70 percent) boiled water prior to drinking.

#### Table 2.6: Household drinking water

Percent distribution of households and de jure population by source, time to collect water, and person who usually collects drinking water; and percentage of households and the de jure by treatment of drinking water, according to residence, Nauru 2007

	# households	Population
Characteristic	Total	Total
Source of drinking water		
Improved source	88.6	90.1
Rainwater	88.6	90.1
Non-improved source	9.2	8.3
Unprotected dug well	0.4	0.1
Tanker truck/cart with small tank	8.8	8.2
Other	2.2	1.6
Total	100	100
Percentage using any improved source of drinking water	88.6	90.1
Time to obtain drinking water (round trip)		
Water on premises	97.2	97.9
Less than 30 minutes	0.4	0.6
30 minutes or longer	0.7	0.1
Don't know/missing	1.7	1.5
Total	100	100
Person who usually collects drinking water		
Adult females 15+	1	0.8
Adult males 15+	0.7	0.5
Other	0.5	0.3
Water on premises	97.2	97.9
Missing	0.5	0.5
Total	100	100
Water treatment prior to drinking <sup>1</sup>		
Boiled	70.1	68.2
Bleach/chlorine	2.7	3.5
Strained through cloth,	15.8	18
ceramic, sand or other filter	0.2	0.1
Other	0.7	0.7
No treatment	22.8	24.3
Percentage using an appropriate treatment method <sup>2</sup>	75.9	74.7
Number	389	2,360

<sup>1</sup> Respondents may report multiple treatment methods, so the sum of treatment may exceed 100 percent.

<sup>2</sup> Appropriate water treatment methods include boiling, bleaching, straining, filtering, and solar disinfecting.

# 2.6 HOUSEHOLD SANITATION FACILITIES

Poor sanitation coupled with unsafe water sources increases the risk of water-borne diseases and illnesses due to poor hygiene. This has contributed immensely to Nauru's disease burden. Households without proper toilet facilities are more exposed to the risk of diseases such as dysentery, diarrhoea and typhoid fever than those with improved sanitation facilities. Table 2.7 shows that about seven in ten households (70 percent) use improved toilet or latrine facilities compared with about three in ten households (30 percent) that use non-improved toilet or latrine facilities. Households with improved toilet facilities that are flush/pour flush to piped sewer systems accounted for 28 percent, while those with flush/pour flush to septic tanks accounted for 32 percent. The 2007 NDHS results support what was found by the 2002 Nauru Population and Housing Census.

## Table 2.7: Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, according to residence, Nauru 2007

	# households	Population
Type of toilet/latrine facility	Total	Total
Improved, not shared facility		
Flush/pour flush to piped sewer		
system	27.6	24.1
Flush/pour flush to septic tank	32.4	35.2
Flush/pour flush to pit latrine	10.9	12.9
Non-improved facility		
Any facility shared with other		
households	24.6	23.3
Flush/pour flush not to sewer/septic		
tank/pit latrine	0.4	0.7
No facility/bush/field	0.6	0.6
Other	2.4	2.2
Missing	1.2	1.1
Total	100.0	100.0
Number	389	2,360

# 2.7 HOUSEHOLD CHARACTERISTICS

Table 2.8 provides information relating to other dwelling characteristics, such as whether or not the household has electricity, the main construction materials used for the floor, the number of rooms used for sleeping, and information on type of power or fuel used for cooking and location of cooking.

Nearly 100 percent of households in Nauru have access to electricity, which is similar to what was found by the 2002 Population and Housing Census.

The type of material used for floors may be viewed as an indicator of the quality of housing (a wealth dimension) as well as an indicator of health risk. Some floor materials, such as earth and sand, pose a health problem since they can act as breeding grounds for pests and may be a source of dust. They are also more difficult to keep clean.

Overall, over eight out of every ten Nauruan households (82 percent) have floors made of vinylasphalt strips, ceramic tiles or cement, followed by parquet or polished wood (13 percent). Only 4 percent of households have wood or plank floors, while a very small proportion of households have palm (0.7 percent) or earth (0.2 percent) floors.

The number of rooms used for sleeping gives an indication of the extent of crowding in households. Crowding in one sleeping room increases the risks of infection by diseases. Overall, 16percent of all households use only one room for sleeping. A higher percentage of households (64percent) in Nauru are more likely to use three or more rooms for sleeping.

Smoke from solid fuels for cooking such as charcoal, wood and other biomass fuels is a major cause of respiratory infections. The type of fuel used for cooking, the location where food is cooked, and the type of stove used are all related to indoor air quality and the degree to which household members are exposed to the risk of respiratory infections and other diseases. A majority of Nauruan households (87 percent) cook within the same house with while 9 percent cook outdoors, followed by 3 percent who use a separate building for cooking.

Cooking fuel affects air quality for household members. Clean fuel is not affordable in most cases, and most households resort to using solid fuels that emit considerable amounts of smoke. As a result, household members are likely to be exposed to air pollution. Reducing the proportion of the population relying on solid fuels is an MDG. In Nauru, 8 percent of households cook with solid fuels.

Table 2.8 shows that electricity is the main fuel source used for cooking in 84 percent of all households, while wood is used in 7 percent of households. LPG/natural gas/biogas is used by 4 percent of all households, while kerosene is used by 4 percent of all households. Chimneys help reduce the exposure of household members to smoke from cooking fires. Results show that 73 percent of households use open fires/stoves without chimneys for cooking, which wastes energy and exposes household members to harmful smoke.

#### Table 2.8: Household characteristics

Percent distribution of households and de jure population by housing characteristics and percentage using solid fuel<sup>1</sup> for cooking; and among those using solid fuels, percent distribution by type of fire/stove, according to residence, Nauru 2007

	# households	Population
Housing characteristic	Total	Total
Electricity		
Yes	99.8	99.9
No	0.2	0.1
Total	100.0	100.0
Flooring material		
Earth, sand	0.2	0.4
Wood/planks	3.8	3.4
Palm/bamboo	0.7	0.5
Parquet or polished wood	13.2	13.8
Vinyl or asphalt strips	18.1	17.7
Ceramic tiles	17.4	16.9
Cement	46.4	47.1
Other	0.2	0.1
Total	100.0	100.0
Rooms used for sleeping		
One	16.4	11.8
Тwo	18.7	15.6
Three or more	63.9	71.8
Missing	1.0	0.8
Total	100.0	100.0
Place for cooking		
In the house	87.2	84.7
In a separate building	2.8	3.6
Outdoors	9.2	10.8
Other	0.5	0.8
Missing	0.4	0.2
Total	100.0	100.0
Cooking fuel		
Electricity	84.0	81.8
LPG/natural gas/biogas	4.4	4.1
Kerosene	3.5	5.2
Wood	7.1	8.3
No food cooked in household	0.4	0.2
Other	0.6	0.5
Total	100.0	100.0
Percentage using solid fuel <sup>1</sup> for cooking	7.1	8.3
Number of households	389	2,360

#### Table 2.8 (continued)

Housing characteristic	# households Total	Population Total
Type of fire/stove among households using solid fuel <sup>1</sup>		
Open fire/stove with hood	7.7	3.0
Open fire/stove without chimney or hood	72.9	80.1
Other	3.5	1.9
Missing	15.9	14.9
Total	100.0	100.0
Number of households/ population using solid fuel <sup>1</sup>	27	196

LPG = liquid petroleum gas

<sup>1</sup> Includes coal/lignite, charcoal, wood/straw/shrubs/grass, agricultural crops, and animal dung.

# 2.8 HOUSEHOLD ASSETS

The 2007 NDHS also collected information on household ownership of selected assets that are believed to have a strong association with poverty levels. Some of these can be used to measure household welfare when combined with other indicators to generate a wealth index. Information was collected on household ownership of radios and televisions as a measure of access to mass media; telephones (both mobile and non-mobile) as an indicator of access to an efficient means of communication; refrigerators as an indication of the capacity for hygienic food storage; and means of transportation (bicycle, motorcycle, boat with or without a motor, or private car or truck) as a sign of the household's level of access to public services and markets as well as exposure to developments in other areas. In addition, ownership of agricultural land indicates the household's access to means of production. Ownership of farm animals such as local pigs or chickens indicates the level of assets that a household possesses, which could be used to meet household demands.

Table 2.9 shows that 39 percent of households in Nauru own a radio. Overall, 71 percent of households own television sets, while 3 percent of households own a non-mobile telephone, and 79 percent own a refrigerator. About 37 percent of households own a motorcycle, while 36 percent own cars or trucks.

Over a quarter of all households (29 percent) own agricultural land. Pigs and chickens were the most commonly owned types of livestock, each owned by 30 percent of all Nauruan households.

## Table 2.9: Household durable goods

	# households	Population
Possession	Total	Total
Household effects		
Radio	38.5	39.6
Television	71.2	75.3
Non-mobile telephone	3.0	4.1
Refrigerator	79.1	80.9
Electric generator	14.3	16.3
Washing machine	43.0	43.9
Computer	17.5	21.3
Water pump	46.1	49.8
Video or DVD player	70.7	74.8
CD/cassette player	30.8	31.7
Sewing machine	16.8	18.6
Fan	96.1	97.2

Percentage of households and de jure population possessing various household effects, means of transportation, agricultural land and livestock/farm animals by residence. Nauru 2007

#### Table 2.9 (continued)

	# households	Population
Possession	Total	Total
Table	89.1	90.3
Chair	82.8	83.0
Clock	81.8	83.7
Bed	82.9	82.3
Means of transport		
Bicycle	31.9	35.5
Motorcycle/scooter	36.6	43.7
Car/truck	35.5	41.2
Boat with a motor	6.1	7.8
Ownership of agricultural land	29.2	32.6
Ownership of farm animals <sup>1</sup>	30.6	38.0
Number	389	2,360

<sup>1</sup> Pigs, ducks or chicken

# 2.9 WEALTH QUINTILES

The 2007 NDHS did not collect information on household income or consumption. The wealth index is a proxy for the long-term standard of living of the household. Household assets covered in previous sections of this report were used to calculate the wealth index, which included items such refrigerators, televisions, and cars; dwelling characteristics such as floor material; type of drinking water source; toilet facilities; and others that relate to wealth status. All of the information gathered on household assets and dwelling characteristics was used to create the index that best represents the wealth status of the households interviewed.

To construct the wealth index, each household asset for which information was collected was assigned a weight or factor score generated through principal components analysis. The resulting asset scores were standardised in relation to a standard normal distribution with a mean of zero and a standard deviation of one.

Each household was assigned a standardised score for each asset, where the score differs depending on whether or not the household owned that asset (or, in the case of sleeping arrangements, the number of people per room). These scores were summed by household, and individuals were ranked according to the total score of the household in which they reside. The sample is then divided into population quintiles (i.e. five groups with the same number of individuals in each). The 20 percent of the population with the lowest total asset scores become the individuals in the lowest wealth quintile, the next 20 percent become members of the second wealth quintile, and so forth. At the national level, approximately 20 percent of the household population is in each wealth quintile.

In other words, the wealth index measures the standard of living of a household relative to other households in Nauru. It indicates that an individual living in a household in the second wealth quintile has a better socioeconomic status than someone in the lowest wealth quintile and a worse socioeconomic status than someone in the middle wealth quintile.

In defining wealth quintiles, a single asset index is developed on the basis of data from the entire country sample and used in all tabulations presented. Separate asset indices are not prepared for rural and urban population groups on the basis of rural or urban data.

Wealth quintiles are expressed in terms of quintiles of individuals in the population, rather than quintiles of individuals at risk for any one health or population indicator. Thus, for example, the quintile rates for infant mortality refer to the infant mortality rates per 1,000 live births among all people in the population quintile concerned, as distinct from quintiles of live births or newly born infants, who constitute the only members of the population at risk of mortality during infancy.

The assets index has been found to be highly comparable to both poverty rates and GDP per capita for India, and against expenditure data from household surveys in Nepal, Pakistan and Indonesia (Filmer and Pritchett 1998) and Guatemala (Rutstein 1999).

Table 2.10 shows almost equal distribution of *de jure* population by level of wealth quintile. For example 20 percent of the population were living in the lowest wealth quintile as compared to 19.8 percent living in the highest wealth quintile.

## Table 2.10: Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, Nauru 2007

		٧	Vealth quintile	9			Number of
Residence/region	Lowest	Second	Middle	Fourth	Highest	Total	population
Total	20.0	19.7	20.4	20.1	19.8	100.0	2,360

# 2.10 BIRTH REGISTRATION

The birth registration system in Nauru is considered to be good but needs considerable quality control checks to improve proper recording and maintenance. It is the first legal acknowledgment of a child's existence, and as such, the registration of births is fundamental to the realisation of a number of rights and practical needs, including but not limited to, provision of access to social services. However, the period between birth and registration can be as much as four years. This is due to the lack of incentive for parents to register their child, which is a direct result of seizures in the payment of social benefits such as child support allowances. Only when the child turns 4 years old, coinciding with their first year of school (kindergarten), are parents obliged to register their child's birth in order to access the educational services offered. In this sense, although registration is considered good, total registration can take time achieve. The other issue of concern is registration by ethnicity. Birth registration in a well established and functioning system ensures that the country has an up-to-date and reliable database for planning. This is as useful for national level planning and government bodies as it is for community groups that are responsible for maintaining education, health and other social services for the community and within.

## Table 2.11: Birth registration of children under age 5

	Percentage of	s are registered			
Background characteristic	Had a birth certificate	Did not have a birth certificate	Total registered	Number of children	
Age					
<2	14.3	63.4	77.7	124	
2–4	8.4	77.3	85.7	194	
Sex					
Male	9.8	69.4	79.3	150	
Female	11.5	74.1	85.5	169	
Wealth quintile					
Lowest	6.5	64.1	70.6	62	
Second	15.6	67.1	82.7	67	
Middle	12.6	82.2	94.8	67	
Fourth	9.3	65.7	75.0	59	
Highest	8.9	79.3	88.2	64	
Total	10.7	71.9	82.6	319	

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Nauru 2007

Table 2.11 shows that 83 percent of children in Nauru are registered. There is not much variation in birth registration among the household wealth quintiles, ranging from 70 percent in the lowest, to 95 percent in the middle quintile. Surprisingly, 72 percent reported having no birth certificates, imposing fees for the issuance of birth certificates may have played a similar role upon the obligations of parents. There were few differences between the sexes, only that female proportions were much greater than male in all three variables of registrations.

# 2.11 KEY RESULTS

The major findings identified in this chapter — based on the characteristics of the household population and housing of the survey respondents — include the following.

- 1. Results of the NDHS 2007 show that Nauru's population is made up of slightly more women than men, that is 50.3 percent are women and 49.7 percent are men. Regarding the total population distribution, an estimated of 38 percent are less than 14 years of age, and less than 1 percent are 70 years and older. This indicates a young population structure and a very low life expectancy.
- 2. Seven out of ten households in Nauru are headed by men, and one in five households have more than nine people who are usual members living in one household, indicating overcrowding in these households. The average household size is 6.
- 3. About one in five children under the age of 18 are not living with a biological parent, 11 percent live with their mother only (even though the father is alive), and the parents of 8 percent of children under 18 years are dead.
- 4. The median number of years for completing an education in Nauru is slightly higher for females (9 years) than for males (8 years). Even though primary education is free in Nauru, only 4 percent of females and 6 percent of males completed a primary education level (6 years). Secondary education on the other hand, is achieved by 15 percent of all females and 11 percent of all males. The low number completing a secondary education can attributed to limited opportunities and costs of a secondary education.
- 5. The NAR for primary level education is the percentage of primary school-age children (ages 6–12) attending primary school. This measure also applies to secondary level education. The NAR is higher for primary (88 percent) than for secondary level (60 percent), implying there are less secondary-age children attending secondary education.
- 6. Age-specific attendance rates among youth aged 5–24 show that there is a high rate of attendance, ranging from 75–100 percent, among males and females aged 7–13. Starting at age 9, attendance rates slightly decline for male children and dramatically decline for female children at age 15 years.
- 7. About 89 percent of households reported using an improved source of drinking water, while 9 percent used a non-improved source. One out of five households reported not applying any appropriate treatment method for their drinking water. One in every three households reported using a non-improved facility.
- 8. Almost all households (99.8 percent) had electricity, about half of all households had cement flooring (46 percent), 16percent had one room for sleeping, 3percent used a separate building for cooking, 7 percent used solid fuel for cooking, and 73 percent cooked on open fire or stove without a chimney.
- 9. Of the total households surveyed, only 38 percent had a radio, 37 percent owned a motorcycle and 29 percent owned agricultural land.
- 10. About the same proportion of the population (20 percent) is found to be living in each wealth quintile (i.e. from the lowest to the highest).
- 11. The majority of children (83 percent) under age 5 years are reported to be officially registered with the civil authorities as according to the NDHS 2007 results. Registration took place mostly when children were between 2 and 4 years of age (86 percent).

This chapter describes the background characteristics of men and women of reproductive age (i.e. the age at the time of the survey, marital status, residence, education, literacy, and media access). This information — in addition to factors such as employment, occupation, earnings and continuity of employment, which affect the empowerment of women — help in understanding the context of the reproductive and health status of men and women. An analysis of these variables provides the socioeconomic context in which demographic and reproductive health issues are examined in later chapters.

# 3.1 CHARACTERISTICS OF SURVEY RESPONDENTS

Table 3.1 presents the background characteristics of the 667 women and 653 men (aged 15–49) interviewed in the 2007 NDHS. The distribution of respondents according to age show that women outnumbered men in all age groups. There is a high peak in the number of women aged 20–24, which is attributed to the intentional displacement of women in this age group by enumerators. As expected of Nauru's age structure, the proportion of respondents in each age group declines with increasing age for both sexes. More than half (56 percent) of the overall population was below the age of 30; the proportion below 30 by gender was basically equal. Women in the 15–19 and 45–49 age groups represented almost one-third (30 percent) of the female population. About 40 percent of women and 38 percent of men were aged 15–24, 29 percent of women and 34 percent of men were aged 25–34, and the remaining respondents were aged 35–49.

Overall, almost half of all respondents (52.7 percent females, 48.7 percent males) were formally married.<sup>5</sup> Male respondents were much more likely than female respondents to have never married (38.3 percent for males, 30.1 percent for females). Almost an equal proportion of males and females reported living together with a partner (9.8 percent females, 10.2 percent males). A higher proportion of females (6.4 percent) than males (2.8 percent) reported either being divorced, separated or widowed, showing women are less likely to remarry.

Table 3.1 shows that the proportion of women and men (weighted<sup>6</sup> and unweighted<sup>7</sup>) with no education were equal, while women were more likely than men to acquire education beyond the primary level. The proportion of men (6.4 percent) with only a primary education was higher than that of women (1.9 percent). About 90 percent of women had some secondary education, compared with 87 percent of men, and 8 percent of women attained an education level higher than secondary, compared with 7 percent of men.

<sup>&</sup>lt;sup>5</sup> In this report, 'married' refers to those in a formal or official marriage, while 'living together' refers to those in informal or consensual unions. In the remainder of the report, marriage refers to both categories (i.e. formal and informal unions).

<sup>&</sup>lt;sup>6</sup> Refers to the unweighted number of cases in this case the number of women and men adjusted for the sampling weights and the non-responds adjustments.

<sup>&</sup>lt;sup>7</sup> Refers to the actual number of cases in this instance, the actual number of women and men in the sample.

# Table 3.1: Background characteristics of respondents

		Women		Men			
Declaman data di 111	Weighted	M/-1.1.1.1	United to a	Weighted	M/-1-1-		
Background characteristic	percent	Weighted	Unweighted	percent	Weighted	Unweighted	
Age							
15–19	18.9	117	118	19.2	60	61	
20–24	21.1	131	138	18.4	57	60	
25–29	15.6	96	94	18.1	56	56	
30–34	13.8	85	87	15.6	48	48	
35–39	9.9	61	58	12.5	39	39	
40–44	10.0	62	58	8.8	27	25	
45–49	10.7	66	65	7.5	23	25	
Marital status							
Never married	30.1	186	188	38.3	119	119	
Married	52.7	325	321	48.7	151	149	
Living together	9.8	60	64	10.2	32	36	
Divorced/separated	4.7	29	29	1.7	5	6	
Widowed	2.7	17	16	1.1	3	4	
Education							
No education	0.2	1	1	0.2	1	1	
Primary	1.9	12	14	6.4	20	22	
Secondary	89.8	555	551	86.6	270	269	
More than secondary	8.2	50	52	6.8	21	22	
Wealth quintile							
Lowest	20.6	127	113	14.5	45	39	
Second	20.4	126	126	21.5	67	68	
Middle	20.9	129	134	20.5	64	77	
Fourth	18.8	116	123	20.5	64	62	
Highest	19.3	119	122	23.0	72	68	
Religion							
Nauru Congregational	41.5	257	260	31.8	99	96	
Roman Catholic	34.8	215	227	31.3	97	106	
Nauru Independence	11.7	72	65	12.6	39	32	
Assembly of God	8.5	53	45	0.0	0	0	
No Religion	0.5	3	3	2.8	9	7	
Other	2.8	17	17	21.6	67	73	
Ethnicity							
Nauruan	88.8	549	550	89.1	277	282	
Part Nauruan	6.9	43	43	5.6	18	19	
Ikiribati	1.9	12	12	2.3	7	5	
Tuvaluan	0.5	3	4	1.4	4	4	
Other	1.8	11	9	1.6	5	4	
Total 15–49	100.0	618	618	100.0	311	314	
50+	na	na	na	na	43	40	
Total men 15+	na	na	na	na	354	354	

Percent distribution of women and men aged 15–49 by selected background characteristics, Nauru 2007

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.

na = not applicable

Total for women includes one woman with missing information on religion who is not shown separately.

The wealth quintiles show that females were almost evenly distributed across all quintiles, although the proportion decreased in the two upper quintiles. Males, however, show an opposite trend, with a higher proportion concentrated in the upper quintiles. The highest proportion of males is in the wealthiest quintile, and the lowest in the lowest quintile. Conversely, the lowest proportions of women are found in the upper (fourth and fifth) quintiles. Figure 3.1 shows that overall, women earn less than their male counterparts, as reflected by the higher proportions of women in the lower wealth quintiles, and lower proportions in the upper quintiles, as compared with men. The proportions in the middle (third) wealth quintile were almost even.

About 42 percent of Nauruan were from the Nauru Congregational church. The second common church was Roman Catholic. The population of Nauru was composed by 89 percent Nauruan, 7 percent part Nauruans, about 2 percent Ikiribati and others and the rest of about 1 percent were from Tuvalu.

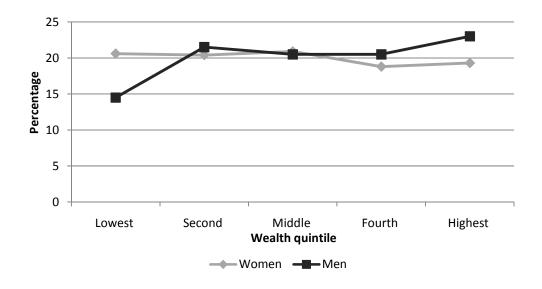


Figure 3.1: Percent distribution of women and men aged 15–49 by wealth quintile, Nauru 2007

# **3.2 EDUCATIONAL ATTAINMENT BY BACKGROUND CHARACTERISTICS**

Tables 3.2.1 and 3.2.2 show the distribution of respondents aged 15–49 by gender and according to the highest level of schooling attended. Both tables show that young people were more likely to attend secondary school than older people, although there is also a higher tendency for them to drop out and not complete secondary school. Older people were more likely to attain 'more than secondary level education'. The percentage of both women and men lacking formal education is almost negligible, accounting for less than 2 percent of women (all aged 40-44) just 1.2 percent of men (aged 25-29). Most respondents had some secondary education (68 percent of women, less than 72 percent of men), but considerably fewer (22 percent of women, 15 percent of men) completed a secondary education. Understandably, people within the youngest age group (15–19) have not yet completed their secondary schooling. Generally, older people are more likely to be better educated and to reach a higher education level than are younger people, which will have a direct impact on future skill levels. The median years completed at school ranges from 9 to less than 11 years for the respective age groups for women, which is slightly higher than for men (between 8 and 10). Nauru's education policy does not favour women, but the figures suggest that women tend to stay in school longer than men, due to their social and economic circumstances.

#### Table 3.2.1: Educational attainment by women

			Highest lev		_				
Background characteristic	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary	Total	Median years completed	Number of women
Age									
15–24	0.0	0.0	2.8	75.4	13.7	8.1	100.0	9.2	247
15–19	0.0	0.0	3.0	80.7	12.8	3.5	100.0	9.0	117
20-24	0.0	0.0	2.6	70.6	14.6	12.2	100.0	9.4	131
25–29	0.0	2.0	0.8	69.7	19.7	7.9	100.0	9.9	96
30–34	0.0	0.0	0.0	77.0	16.3	6.7	100.0	9.4	85
35–39	0.0	0.9	0.0	72.0	19.8	7.3	100.0	9.8	61
40-44	1.9	0.6	1.9	46.3	43.5	5.9	100.0	10.0	62
45–49	0.0	0.0	0.0	58.4	28.0	13.6	100.0	10.3	66
Wealth q	uintile								
Lowest	0.0	0.6	2.6	77.1	13.6	6.2	100.0	9.2	127
Second	0.0	1.6	0.9	70.3	19.0	8.2	100.0	9.6	126
Middle	0.9	0.0	1.2	72.5	18.9	6.5	100.0	9.5	129
Fourth	0.0	0.0	1.7	68.4	22.9	7.1	100.0	9.7	116
Highest	0.0	0.0	0.8	59.1	26.9	13.2	100.0	10.2	119
Total	0.2	0.5	1.4	69.6	20.1	8.2	100.0	9.6	618

Percent distribution of women aged 15–49 by highest level of schooling attended or completed, and median grade completed, according to background characteristics, Nauru 2007

<sup>1</sup> Completed six years at the primary level.

<sup>2</sup> Completed five years at the secondary level.

# Table 3.2.2: Educational attainment by men

Percent distribution of men aged 15–49 by highest level of schooling attended or completed, and median grade completed, according to background characteristics, Nauru 2007

					Median				
Background characteristic	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary	Total	years completed	Number of men
Age									
15–24	0.0	3.6	4.2	74.2	15.3	2.7	100.0	8.8	117
15–19	0.0	2.3	5.3	74.7	15.0	2.7	100.0	8.7	60
20–24	0.0	5.0	3.1	73.7	15.6	2.6	100.0	9.1	57
25–29	1.2	2.5	5.5	76.2	8.8	5.7	100.0	8.8	56
30–34	(0.0)	(0.0)	(1.7)	(68.1)	(19.5)	(10.7)	100.0	9.7	48
35–39	(0.0)	(2.3)	(6.5)	(75.8)	(10.3)	(5.1)	100.0	9.4	39
40-44	(0.0)	(0.0)	(6.9)	(63.7)	(13.2)	(16.2)	100.0	9.5	27
45–49	(0.0)	(0.0)	(0.0)	(64.6)	(21.3)	(14.1)	100.0	9.9	23
Wealth quintile									
Lowest	(0.0)	(6.5)	(12.9)	(63.4)	(11.6)	(5.6)	100.0	8.5	45
Second	1.0	2.8	6.2	74.0	11.2	4.8	100.0	8.9	67
Middle	0.0	0.0	1.1	78.9	12.2	7.9	100.0	9.3	64
Fourth	0.0	1.4	2.6	64.8	18.6	12.6	100.0	9.5	64
Highest	0.0	1.2	1.3	76.6	17.6	3.4	100.0	9.6	72
Total 15–49	0.2	2.1	4.3	72.2	14.4	6.8	100.0	9.2	311
50+	(0.0)	(5.4)	(4.8)	(66.2)	(8.3)	(15.3)	100.0	9.3	43
Total men 15+	0.2	2.5	4.3	71.5	13.7	7.8	100.0	9.3	354

<sup>1</sup> Completed six years at the primary level.

<sup>2</sup> Completed five years at the secondary level.

# **3.3 LITERACY ACHIEVEMENT**

An individual's literacy level determines their ability to read all, part or none of a simple sentence in English. Questions assessing literacy were asked of each respondent who had not attended any school and who had attended primary level or higher. The 2007 NDHS interviewed people aged 15–49 who had not attended school and those who had only attended primary level. Those with a secondary or more than a secondary education (97.9 percent for women, 93.4 percent men) were considered literate and therefore were not given literacy test. The interviewer prompted respondents to read a simple sentence in English, and then recorded whether or not respondents could read the entire sentence, only parts of it, or could not read the entire sentence.

## 3.3.1 Literacy achievement: women and men

Literacy levels were determined for those who had attended secondary or higher education. It is expected that people who have attained a higher education level will show higher literacy levels than those who with only a primary education. It would be useful to assess literacy levels in Nauruan, which (in contrast to English) is not taught in schools. The figures quoted here may well be overestimates, because comprehension was not determined (this would involve interpreting what was read in English into the spoken language, Nauruan). In this author's opinion an evaluation based on comprehension would produce a much more accurate picture of literacy in Nauru. Caution should be exercised when using or referring to the following tables on literacy, because the figures shown represent both unweighted and weighted aggregates.

Data in Tables 3.3.1 and 3.3.2 reveal that literacy levels for Nauruan women (99.3 percent) are slightly higher than for men (96.1 percent). Only about 1.0 percent of both men and women could not read at all; this figure was expected to be somewhat higher.

Literacy levels were expected to be higher among respondents from wealthier households. This is most evident among poor men, where 86.2 percent were literate in the lowest quintile, while more than 95 percent were literate in all other wealth quintiles.

## Table 3.3.1: Literacy of women

Percent distribution of women aged 15–49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Nauru 2007

		No scho	oling or prima	ry school			
Background characteristic	Secondary school or higher	Can read a whole sentence	Can read part of a sentence	Cannot read at all	Total	Percent- age literate <sup>1</sup>	Number
Age							
15–19	97.0	1.1	1.1	0.8	100.0	99.2	117
20–24	97.4	1.8	0.0	0.9	100.0	99.1	131
25–29	97.2	2.0	0.8	0.0	100.0	100.0	96
30–34	100.0	0.0	0.0	0.0	100.0	100.0	85
35–39	99.1	0.0	0.0	0.9	100.0	99.1	61
40–44	95.6	0.0	1.9	2.5	100.0	97.5	62
45–49	100.0	0.0	0.0	0.0	100.0	100.0	66
Wealth quintile							
Lowest	96.8	1.0	1.6	0.6	100.0	99.4	127
Second	97.5	1.5	0.0	1.0	100.0	99.0	126
Middle	97.9	1.2	0.0	0.9	100.0	99.1	129
Fourth	98.3	0.7	1.0	0.0	100.0	100.0	116
Highest	99.2	0.0	0.0	0.8	100.0	99.2	119
Total	97.9	0.9	0.5	0.7	100.0	99.3	618

<sup>1</sup> Refers to women who attended secondary school or higher and women who can read a whole sentence or part of a sentence.

#### Table 3.3.2: Literacy of men

Percent distribution of men aged 15–49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Nauru 2007

			No schooling o	or primary school				
Background characteristic	Secondary school or higher	Can read a whole sentence	Can read part of a sentence	Cannot read at all	Missing	Total	Percent- age literate <sup>1</sup>	Number
Age								
15–19	92.5	0.0	1.1	2.7	3.7	100.0	93.6	60
20–24	91.9	0.0	0.0	4.9	3.2	100.0	91.9	57
25–29	90.7	1.6	2.5	0.0	5.1	100.0	94.9	56
30–34	(98.3)	(1.7)	(0.0)	(0.0)	(0.0)	100.0	(100.0)	48
35–39	(91.2)	(0.0)	(5.2)	(0.0)	(3.7)	100.0	(96.3)	39
40-44	(93.1)	(6.9)	(0.0)	(0.0)	(0.0)	100.0	(100.0)	27
45–49	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(100.0)	23
Wealth quintile								
Lowest	(80.6)	(0.0)	(5.6)	(6.0)	(7.9)	100.0	(86.2)	45
Second	90.0	4.0	1.0	0.0	4.9	100.0	95.1	67
Middle	98.9	0.0	0.0	0.0	1.1	100.0	98.9	64
Fourth	96.0	0.0	1.4	1.3	1.4	100.0	97.4	64
Highest	97.5	1.3	0.0	1.2	0.0	100.0	98.8	72
Total 15–49	93.4	1.2	1.3	1.4	2.7	100.0	95.9	311
50+	(89.8)	(8.1)	(0.0)	(0.0)	(2.1)	100.0	(97.9)	43
Total men 15+	93.0	2.0	1.2	1.2	2.6	100.0	96.1	354

Note: Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> Refers to men who attended secondary school or higher and men who can read a whole sentence or part of a sentence.

# 3.4 ACCESS TO MASS MEDIA

Access to information is essential for the development of knowledge and awareness, which may influence perceptions and behaviour. Exposure to media was assessed by asking respondents how often they read a newspaper, watch television, or listen to a radio. Current infrastructure limitations means that media coverage (particularly of radio and television) is limited to areas within range of media telecasts.

Most of Nauru's population is exposed to some form of media. In general, men are more likely than women to have access to all types of mass media. Tables 3.4.1 and 3.4.2 show that television is the most popular medium. The tables also show that around 70 percent of women and 84 percent of men watch television a minimum of once per week, and 50 percent of men listen to radio each week, compared with 26 percent of women. Men were more likely (46 percent) to read newspapers at least once a week compared with women (26 percent). About 28 percent of men access all three types of media at least once a week compared with 9 percent of women. Younger men aged 15–24 were more likely to read a newspaper or watch television than women in this same age group. Not surprisingly, women were more likely to have no access to media (19 percent) than men (8 percent).

#### Table 3.4.1: Exposure to mass media: Women

Percentage of women aged 15–49 who are exposed to specific media on a weekly basis, by background characteristics, Nauru 2007

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media at least once a week	No access to media at least once a week	Number
Age						
15–19	18.7	83.3	12.2	4.4	14.0	117
20–24	26.4	79.3	18.4	8.0	14.5	131
25–29	31.4	75.9	32.0	11.5	14.0	96
30–34	25.8	77.7	23.5	14.5	15.0	85
35–39	29.5	65.7	26.1	7.8	21.0	61
40–44	25.6	53.3	32.6	8.0	27.4	62
45–49	22.1	57.3	34.4	7.1	26.5	66
Education						
Less than secondary	*	*	*	*	*	13
Secondary	25.2	73.0	23.5	7.7	17.5	555
More than secondary	32.3	77.0	33.3	21.5	12.6	50
Wealth quintile						
Lowest	20.6	54.3	12.8	7.1	35.4	127
Second	22.6	72.8	25.5	5.0	18.0	126
Middle	21.3	78.9	24.5	9.2	12.7	129
Fourth	24.3	83.4	19.3	3.4	10.1	116
Highest	39.1	76.7	38.3	18.6	10.9	119
Total	25.4	73.0	24.0	8.6	17.6	618

Note: Figures in parentheses are based on 25–49 unweighted cases. Education categories refer to the highest level of education attended, whether or not that level was completed.

#### Table 3.4.2: Exposure to mass media: Men

Percentage of men aged 15–49 who are exposed to specific media on a weekly basis, by background characteristics, Nauru 2007

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media at least once a week	No access to media at least once a week	Number
Age						
15–19	24.4	88.6	26.0	10.7	11.4	60
20–24	27.5	81.0	43.2	15.9	6.5	57
25–29	49.5	81.3	48.8	32.9	11.0	56
30–34	(40.9)	(88.8)	(39.8)	(21.4)	(6.4)	48
35–39	(57.6)	(77.2)	(65.1)	(41.1)	(9.7)	39
40–44	(66.3)	(82.0)	(67.6)	(36.1)	(5.8)	27
45–49	(55.9)	(86.0)	(58.2)	(39.7)	(6.7)	23
Education						
Less than secondary	*	*	*	*	*	20
Secondary	43.5	86.0	47.1	25.9	6.6	270
More than secondary	*	*	*	*	*	21

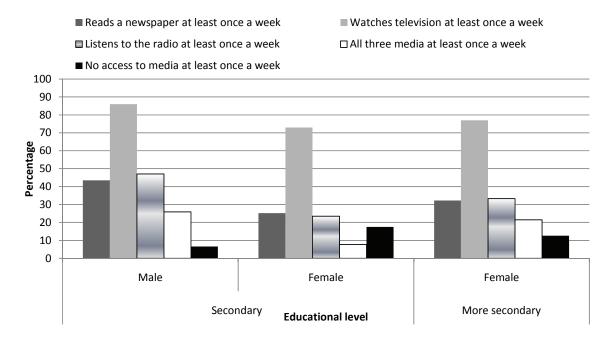
## Table 3.4.2 (continued)

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media at least once a week	No access to media at least once a week	Number
Wealth quintile						
Lowest	(32.8)	(77.3)	(47.0)	(24.6)	(16.1)	45
Second	34.0	78.6	41.2	13.6	6.8	67
Middle	38.9	81.1	40.9	20.4	11.4	64
Fourth	38.1	88.5	42.5	26.8	8.4	64
Highest	62.6	90.7	59.3	40.9	3.2	72
Total 15–49	42.2	83.7	46.4	25.5	8.6	311
50+	(77.5)	(87.7)	(75.7)	(58.1)	(1.8)	43
Total men 15+	46.5	84.2	49.9	29.5	7.8	354

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases. Education categories refer to the highest level of education attended, whether or not that level was completed.

The lack of providers — of television, radio, newspapers and the Internet — affects mass media coverage. Radio and television are operated by the government, meaning the content is limited to government-sponsored programmes and telecasts. Newspapers and newsletters are in circulation only sporadically — during campaigns, promotions, etc. — and are usually phased out after each election year. Coverage of global or regional news is available through imported (e.g. from Australia or Fiji) newspapers or magazines. The Internet, which provides independent accounts of both national and global issues, should have been included as a news source. The Internet in Nauru is provided on a user-pay basis, and is only available to official workers only. Access to the Internet (measuring growth trends by the number of subscribers) would be worth investigating and analysing.

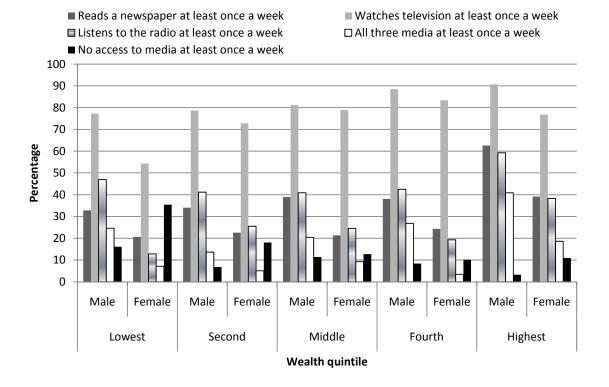
Exposure to media is positively associated with educational attainment in the case of women, but this comparison could not be made for men, due to the low number of respondents (only figures for men with a secondary level education are included in Table 3.4.2). As indicated in Table 3.4.1, 22 percent of women with more than a secondary education are exposed to at least one form of media each week, compared with only 8 percent of women with only a secondary education (a ratio of almost 3:1). The pattern is reflected for all forms of media, including newspapers (32 percent of women with a post-secondary education read newspapers once per week, compared with 25 percent with a secondary education) television (accessed by 77 percent with a postsecondary education, and 73 percent with a secondary education), and radio (accessed by 34 percent with a post-secondary education, and 23 percent with a secondary education). Among men, a majority watch television at least once a week. A comparison of women and men can be made only for respondents with a secondary education; the proportion of men accessing radios and newspapers is approximately double that of women. The common media being reported is television, which is watched at least once a week (or more frequently) by 73 percent of women and 86 percent of men with a secondary education. The proportion of men (7 percent) who lack media access at least once a week is much lower than that of women (18 percent).



#### Figure 3.2: Media access by educational attainment and sex

Wealth plays a significant role in whether a person has access to the media, and also indicates the level of affluence of the resident population, and to some extent the nation. If knowledge and awareness are the foundations of active participation in Nauru's society, then it is likely that residents who lack capacity (in the form of wealth) are more disadvantaged than those who do not.

Analysis of media access by wealth quintiles indicates that men have better access than women across all quintiles, with access generally increasing with wealth. For example, 7 percent of women from the poorest households are exposed to at least one form of media each week, compared with 19 percent from the richest households. Similarly, 14 percent of men from the poorest households are exposed to at least one form of media each week, compared with 40 percent from the richest households.



## Figure 3.3: Media access by quintiles and sex

# 3.5 EMPLOYMENT STATUS

Like education, employment can be a source of empowerment for women, especially by helping them to attain decision-making positions and acquire control over their income. The empowerment of women is often under-reported, especially in terms of women's work related to family or home duties, which are most commonly referred to as informal work or home duties.

Tables 3.5.1 and 3.5.2 show that 52 percent of women and 74 percent of men are classified as currently employed in Nauru. The proportion that is currently employed increases with age (and is highest in the 35–39 age group for both sexes) and with the number of living children. Women who were married or living together with a partner are the most likely to be employed (54 percent), followed by those who were divorced, separated, or widowed (53 percent). Women who never married are the least likely to be employed (46 percent), while 61 percent of never-married men are employed.

Current employment levels of both women and men are positively associated with educational attainment, and particularly so for women. Women attaining more than secondary level education are more likely to be employed (77 percent) than those with just a secondary education (50 percent). Comparisons across education levels could not be made for men because of an insufficient number of respondents, but a comparison between women and men can be made for those with a secondary education).

#### Table 3.5.1: Employment status of women

Percent distribution of women aged 15–49 by employment status, according to background characteristics, Nauru 2007

		the 12 months I the survey	Not employed in the			
Background characteristic	Currently employed <sup>1</sup>	Not currently employed	12 months preceding the survey	Total	Number of women	
Age						
15–19	25.9	4.1	70.0	100.0	117	
20–24	47.3	5.9	46.8	100.0	131	
25–29	58.0	0.0	42.0	100.0	96	
30–34	53.0	4.8	42.1	100.0	85	
35–39	68.5	3.3	28.2	100.0	61	
40–44	63.0	2.0	35.0	100.0	62	
45–49	67.6	0.0	32.4	100.0	66	
Marital status						
Never married	45.5	3.8	50.7	100.0	186	
Married or living together	54.3	3.0	42.7	100.0	386	
Divorced/separated/widowed	(52.9)	(2.5)	(44.6)	100.0	46	
Number of living children						
0	45.7	4.7	49.7	100.0	245	
1–2	54.0	2.0	44.0	100.0	155	
3–4	55.6	2.8	41.6	100.0	106	
5+	57.1	2.2	40.7	100.0	113	
Education						
Less than secondary	*	*	*	100.0	13	
Secondary	50.0	3.6	46.4	100.0	555	
More than secondary	77.2	0.0	22.8	100.0	50	
Wealth quintile						
Lowest	32.1	1.3	66.6	100.0	127	
Second	52.7	4.0	43.4	100.0	126	
Middle	44.8	4.0	51.2	100.0	129	
Fourth	62.5	5.3	32.3	100.0	116	
Highest	68.0	1.6	30.4	100.0	119	
Total	51.6	3.2	45.2	100.0	618	

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases. Education categories refer to the highest level of education attended, whether or not that level was completed.

<sup>1</sup> 'Currently employed' is defined as having done work in the past seven days, and includes people who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Differences between women and men are significant: 73 percent of men who have only a secondary education are employed, compared with 50 percent of women. Relatively small proportions (ranging from 1 percent to 10 percent) reported not being currently employed throughout all wealth quintiles for both sexes. As expected, employment generally increases with wealth for both men and women, but the proportion of employed males is higher than that of females. For example, the percentage range for women varies from 32 percent (in the lowest quintile) to 68 percent in the highest, with a mid-range of approximately 50 percent. For men employment was less associated with wealth, ranging from 66 percent in the fourth quintile to 83 percent in the highest, with a mid-range of approximately 75 percent.

The government is the primary employer, but it operates through a variety of agencies and instruments, leading to a lack of standardisation of pay-grades or basic wages. The private sector has recently begun contracting, which will add pressure on the government to provide additional employment.

## Table 3.5.2: Employment status of men

Percent distribution of men aged 15–49 by employment status, according to background characteristics, Nauru 2007

		the 12 months the survey	Not employed in the 12 months			
	Currently	Not currently	preceding the		Number of	
Background characteristic	employed <sup>1</sup>	employed	survey	Total	men	
Age						
15–19	32.6	6.0	61.4	100.0	60	
20–24	83.6	6.1	10.3	100.0	57	
25–29	83.1	12.3	4.6	100.0	56	
30–34	(86.0)	(0.9)	(13.1)	100.0	48	
35–39	(88.0)	(2.1)	(9.9)	100.0	39	
40–44	(83.1)	(0.0)	(16.9)	100.0	27	
45–49	(80.4)	(4.7)	(14.8)	100.0	23	
Marital status						
Never married	61.0	6.6	32.4	100.0	119	
Married or living together	81.9	4.6	13.5	100.0	183	
Divorced/separated/widowed	*	*	*	100.0	9	
Number of living children						
0	65.3	6.9	27.8	100.0	165	
1–2	87.8	5.0	7.2	100.0	53	
3–4	78.8	4.5	16.7	100.0	51	
5+	(87.8)	(0.0)	(12.2)	100.0	42	
Education						
Less than secondary	*	*	*	100.0	20	
Secondary	72.8	5.5	21.7	100.0	270	
More than secondary	*	*	*	100.0	21	
Wealth quintile						
Lowest	(72.9)	(9.2)	(17.9)	100.0	45	
Second	75.6	5.6	18.8	100.0	67	
Middle	73.2	3.3	23.5	100.0	64	
Fourth	65.6	4.2	30.2	100.0	64	
Highest	83.0	5.2	11.9	100.0	72	
Total 15–49	74.4	5.3	20.4	100.0	311	
50+	(75.0)	(0.0)	(25.0)	100.0	43	
Total men 15+	74.4	4.6	20.9	100.0	354	

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases. Education categories refer to the highest level of education attended, whether or not that level was completed.

<sup>1</sup> 'Currently employed' is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

# **3.6 OCCUPATION**

Respondents who were currently employed were asked to state their occupation (Fig. 3.4, and Tables 3.6.1 and 3.6.2). More currently employed women (36 percent) than men (12 percent) were engaged in 'professional, technical and managerial' occupations, while men (35 percent) were more likely to be employed in 'sales and services' than were women (30 percent). The high proportion of men (33 percent) employed performing unskilled manual labour, and the greater employment of women as professionals reflects gender biases towards certain occupation types, and the mechanics of the selection process. This is particularly the case with respect to professionally classified occupations — such as nurses and teachers, as well as clerical jobs — compared with labour and service-oriented occupations.

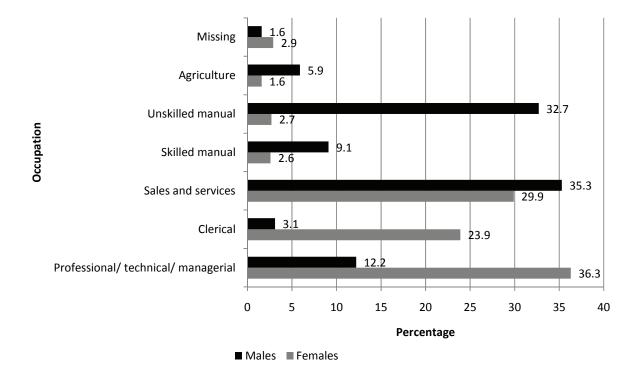


Figure 3.4: Occupation of men and women aged 15-49 by sex

Most men who are engaged in non-agricultural activities work in unskilled manual labour, sales and services occupations, or skilled manual labour occupations. Most women not in agriculture are engaged in sales and services or clerical occupations. The professional, technical, and managerial occupations, which require more skill and have higher income-earning potential, employ almost two in five working women and about one in ten working men (12.2 percent).

Table 3.6.1 shows the distribution of women employed in the 12 months preceding the survey by type of occupation, according to their background characteristics. In general, women are more likely than men to be employed in skilled, higher income-earning occupations. Data also show that education positively associated with the type of occupation and the level of wealth quintile women living in, for example, women with higher education were more likely to hold higher occupation and more likely to be living in higher wealth quintile.

Skilled or unskilled manual occupations are filled primarily by women under age 25 (such women are also more likely to have never married, to not have children, to have low levels of education, and to be in less wealthy households). Professional/technical managerial or related occupations are most likely to be filled by women over age 30, who are also more likely to have higher levels of education, and be from wealthier households.

## Table 3.6.1: Occupation of women

Percent distribution of women aged 15–49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Nauru 2007

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agricul- ture	Missing	Total	Number of women
Age	manayenai	Clerical	Services	manuai	Illallual	luie	wissing	Totai	women
15–19	(16.4)	(16.6)	(35.0)	(8.7)	(4.5)	(0.0)	(18.6)	100.0	35
20–24	(10.4) 30.1	(10.0) 29.4	(35.0) 30.2	(8.7)	(4.5)	(0.0) 3.4	(18.6)	100.0	35 70
20–24 25–29	30.1	29.4 36.5	30.2 26.3	4.7 1.7	1.1	3.4 0.0	1.1	100.0	70 56
25–29 30–34			26.3 27.1			0.0	0.0	100.0	
	41.5	23.2		1.5	6.6				49
35–39	(52.1)	(15.1)	(28.1)	(1.8)	(0.0)	(2.9)	(0.0)	100.0	44
40-44	(43.3)	(23.3)	(30.3)	(0.0)	(3.1)	(0.0)	(0.0)	100.0	40
45–49	(39.1)	(15.1)	(34.2)	(0.0)	(3.5)	(4.1)	(4.0)	100.0	45
Marital status									
Never married	34.0	25.2	25.2	6.0	2.6	0.0	7.1	100.0	92
Married or living together	38.3	23.2	30.2	1.5	2.8	2.5	1.5	100.0	221
Divorced/separated/widowed	(27.6)	(25.5)	(44.0)	(0.0)	(3.0)	(0.0)	(0.0)	100.0	26
Number of living children									
0	28.2	27.2	27.5	5.0	5.2	0.9	5.9	100.0	123
1–2	35.6	28.8	30.4	3.0	0.9	1.2	0.0	100.0	87
3–4	39.3	23.9	33.5	0.0	0.0	1.9	1.3	100.0	62
5+	49.5	11.4	30.2	0.0	3.1	3.1	2.7	100.0	67
Education									
Less than secondary	*	*	*	*	*	*	*	100.0	2
Secondary	33.3	24.9	32.2	2.2	3.1	1.2	3.1	100.0	297
More than secondary	(62.0)	(14.6)	(10.7)	(6.1)	(0.0)	(4.7)	(2.0)	100.0	39
Wealth quintile									
Lowest	(34.3)	(4.8)	(43.3)	(3.7)	(10.2)	(0.0)	(3.6)	100.0	43
Second	39.9	21.4	26.0	5.5	2.2	2.8	2.2	100.0	71
Middle	28.9	33.6	26.2	2.4	2.8	2.0	4.1	100.0	63
Fourth	37.4	23.0	31.5	0.0	1.0	2.8	4.3	100.0	79
Highest	39.0	29.2	27.8	2.2	0.9	0.0	0.9	100.0	83
Total	36.3	23.9	29.9	2.6	2.7	1.6	2.9	100.0	339

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25-49 unweighted cases.

Among men, unskilled manual occupations are more likely to be filled by Nauruan men in the age group 30–39. Marital status shows little correlation with unskilled manual labour, but these jobs are more likely to be filled by men from poorer households. Men aged 30 and older, those with higher levels of education, and from wealthier households are somewhat more likely to be in professional/technical managerial-related occupations.

# Table 3.6.2 : Occupation of men

Percent distribution of men aged 15–49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Nauru 2007

Background characteristic	Professi- onal/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agricul- ture	Missing	Total	Number of men
Age	-								
15–19	(9.9)	(0.0)	(50.9)	(2.0)	(24.4)	(6.6)	(6.2)	100.0	23
20–24	5.9	3.8	60.3	3.2	25.1	1.7	0.0	100.0	51
25–29	6.2	2.7	32.9	5.2	41.1	12.0	0.0	100.0	54
30–34	(7.3)	(0.0)	(31.9)	(31.8)	(20.6)	(6.3)	(2.0)	100.0	42
35–39	(11.5)	(2.6)	(35.0)	(9.8)	(32.3)	(8.9)	(0.0)	100.0	35
40–44	*	*	*	*	*	*	*	100.0	23
45–49	*	*	*	*	*	*	*	100.0	20
Marital status									
Never married	8.6	1.8	41.3	5.8	32.5	7.2	2.8	100.0	81
Married or living together	9.8	4.2	37.3	11.4	31.6	5.7	0.0	100.0	159
Divorced/separated/widowed	*	*	*	*	*	*	*	100.0	9
Number of living children									
0	8.8	2.9	42.1	6.9	29.5	8.0	1.9	100.0	119
1–2	8.4	0.0	42.5	12.9	26.5	9.7	0.0	100.0	49
3–4	(13.4)	(2.1)	(33.4)	(10.5)	(37.3)	(3.3)	(0.0)	100.0	43
5+	(11.6)	(10.4)	(27.5)	(12.4)	(35.7)	(2.4)	(0.0)	100.0	36
Education									
Less than secondary	*	*	*	*	*	*	*	100.0	17
Secondary	10.4	3.5	40.9	9.4	28.4	6.8	0.7	100.0	211
More than secondary	*	*	*	*	*	*	*	100.0	20
Wealth quintile									
Lowest	(3.9)	(0.0)	(28.6)	(9.8)	(47.8)	(6.1)	(3.9)	100.0	37
Second	8.4	6.6	35.0	11.7	35.6	2.8	0.0	100.0	54
Middle	12.8	4.0	44.0	7.8	26.3	5.1	0.0	100.0	49
Fourth	(5.5)	(5.7)	(39.3)	(14.0)	(25.3)	(8.3)	(1.9)	100.0	44
Highest	15.7	0.0	42.6	5.8	25.4	10.5	0.0	100.0	63
Total 15–49	9.9	3.3	38.5	9.5	31.1	6.7	0.9	100.0	248
50+	(29.8)	(2.2)	(10.1)	(6.0)	(44.9)	(0.0)	(6.8)	100.0	32
Total men 15+	12.2	3.1	35.3	9.1	32.7	5.9	1.6	100.0	280

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

# **3.7 EARNINGS, TYPE OF EMPLOYER, AND CONTINUITY OF EMPLOYMENT**

Table 3.7 and Figure 3.5 show the distribution of women by their employment status. The data indicate that the majority (over 97 percent) of employed women receive payment in cash only, 3 percent are paid both in cash and in kind, 2 percent receive no payment for their work, and 1 percent receive payments in some form other than those previously mentioned.

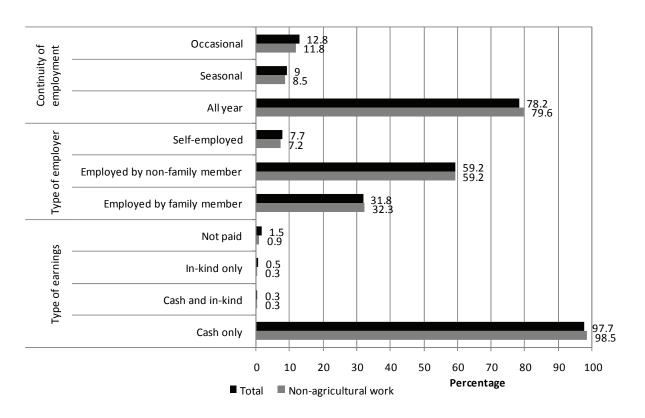


Figure 3.5: Type of employment for women

Most women (59.2 percent) are employed by a non-family member, about 32 percent by a family member, and 7 percent of working women are self-employed. Most women (78.2 percent) work all year, while 12.8 percent work occasionally, and 9 percent work seasonally.

#### Table 3.7: Type of employment for women

	Non-agricultural	
Employment characteristic	work	Total
Type of earnings		
Cash only	98.5	97.7
Cash and in-kind	0.3	0.3
In-kind only	0.3	0.5
Not paid	0.9	1.5
Total	100.0	100.0
Type of employer		
Employed by family member	32.3	31.8
Employed by non-family member	59.2	59.2
Self-employed	7.2	7.7
Total	100.0	100.0
Continuity of employment		
All year	79.6	78.2
Seasonal	8.5	9.0
Occasional	11.8	12.8
Total	100.0	100.0
Number of women employed during the last 12 months	323	339

Percent distribution of women aged 15–49 employed in the 12 months preceding the survey, by type of earnings, type of employer, and continuity of employment, for non-agricultural and total, Nauru 2007

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases.

Total includes 5 women employed in agriculture and 10 for whom the type of employment is missing, who are not shown separately

# **3.8 KNOWLEDGE AND ATTITUDES TOWARD TUBERCULOSIS**

Tuberculosis (TB) is one of the largest causes of death in the world. Knowledge of TB in a society is critical to understanding how people deal with the disease. The 2007 NDHS asked questions about knowledge and attitudes toward TB. Tables 3.8.1 and 3.8.2 show several indicators relating to respondents' knowledge and attitudes concerning TB, including percentages who have heard of the disease, who know that TB is spread through the air by coughing, who believe that TB can be cured, and who would want to keep it secret that a family member has TB.

Knowledge of TB among women (68 percent) was much lower than among men (80.8 percent). Many Nauruans (74 percent of women, 31 percent of men) who had heard of TB reported that it is spread through the air.

#### Table 3.8.1: Women's knowledge and attitudes concerning tuberculosis

Percentage of women aged 15–49 who have heard of tuberculosis (TB), and among women who have heard of TB, the percentage who know that TB is spread through the air by coughing, the percentage who believe that TB can be cured, and the percentage who would want to keep secret that a family member has TB, by background characteristics, Nauru 2007

	Among all re	espondents	Am	ong respondents	who have heard of	ТВ
Background characteristic	Percentage who have heard of TB	Number	Percentage who report that TB is spread through the air by coughing	Percentage who believe that TB can be cured	Percentage who would want a family member's TB kept secret	Number
Age						
15–19	57.8	117	59.1	47.4	36.0	68
20–24	62.9	131	66.5	60.3	33.5	82
25–29	69.8	96	77.1	60.5	19.8	67
30–34	65.6	85	77.1	61.3	16.6	56
35–39	83.8	61	81.3	70.3	14.9	51
40–44	74.6	62	83.0	61.7	17.1	46
45–49	78.0	66	84.2	71.0	8.6	52
Education						
Less than secondary	*	13	*	*	*	4
Secondary	67.5	555	73.8	59.6	22.1	374
More than secondary	85.0	50	(82.0)	(77.6)	(23.4)	43
Wealth quintile						
Lowest	67.0	127	77.0	63.6	27.8	85
Second	61.9	126	78.2	63.9	21.5	78
Middle	63.9	129	72.8	45.7	25.8	83
Fourth	71.4	116	76.9	66.3	22.0	83
Highest	77.9	119	67.0	65.4	15.4	93
Total	68.2	618	74.2	61.1	22.4	422

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25-49 unweighted cases.

About 61 percent of women and 43 percent of men who have heard of TB believe it can be cured. In general the proportion of women and men who believe that TB can be cured increases with age. This pattern is not evident for educational background and wealth quintile.

## Table 3.8.2: Men's knowledge and attitudes concerning tuberculosis

Percentage of men aged 15–49 who have heard of tuberculosis (TB), and among men who have heard of TB, the percentage who know that TB is spread through the air by coughing, the percentage who believe that TB can be cured, and the percentage who would want to keep secret that a family member has TB, by background characteristics, Nauru 2007

	Among all re	espondents	Am	ong respondents	who have heard of	тв
Background characteristic	Percentage who have heard of TB	Number	Percentage who report that TB is spread through the air by coughing	Percentage who believe that TB can be cured	Percentage who would want a family member's TB kept secret	Number
Age						
15–19	69.5	60	(9.1)	(33.8)	(21.9)	41
20–24	73.7	57	(36.5)	(33.0)	(36.7)	42
25–29	76.4	56	(31.8)	(45.1)	(19.6)	43
30–34	(94.1)	48	(27.7)	(40.0)	(22.8)	46
35–39	(83.6)	39	(54.3)	(49.0)	(7.8)	32
40–44	(91.7)	27	*	*	*	25
45–49	(93.0)	23	*	*	*	22
Education						
Less than secondary	*	20	*	*	*	12
Secondary	81.8	270	29.3	42.8	20.6	220
More than secondary	*	21	*	*	*	19
Wealth quintile						
Lowest	(74.7)	45	(21.6)	(29.7)	(20.5)	34
Second	76.4	67	23.1	48.1	25.9	51
Middle	77.1	64	37.6	40.6	23.6	49
Fourth	87.3	64	28.3	48.0	11.0	56
Highest	86.3	72	38.5	44.7	19.0	62
Total 15–49	80.8	311	30.7	43.3	19.7	251
50+	(96.1)	43	(45.5)	(83.8)	(19.6)	41
Total men 15+	82.7	354	32.8	49.0	19.7	293

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25-49 unweighted cases.

Only 22 percent of women who have heard about TB would want a family member's TB status kept a secret, while the proportion of men is even lower (19.6 percent). The proportion of women and men who would not want to reveal whether a family member had TB dropped with increased wealth.

Overall, Nauruan women appear to have a better understanding of the disease, its cause and the extent to which it can be cured compared with men. However, women are more likely than men to not reveal that a family member has TB.

## **3.9 TOBACCO USE**

Tobacco use among women (62 percent) was higher than among men (55 percent). Fewer women (46.8 percent) than men (49.6 percent) reported not using tobacco (Figure 3.6). In general, the data show that the proportion of women using cigarettes increases from 45 percent up to 56.5 percent for women aged 15–29. The proportion then declines to 52 percent for women in the age 30–34 age group, and to 49 percent in the 40–44 age group. The highest proportion of women using cigarettes was reported for women aged 45–49. More than half of women aged 15–19 do not using tobacco (54 percent). However the proportion declines to 44 percent of women aged 25–29 and then increases to 48 percent among women aged 30–34 and to 51 percent for women aged 40–44.

The use of cigarettes and tobacco among men did not show any pattern with age. However, the highest peak in tobacco use is seen among men aged 20–24.

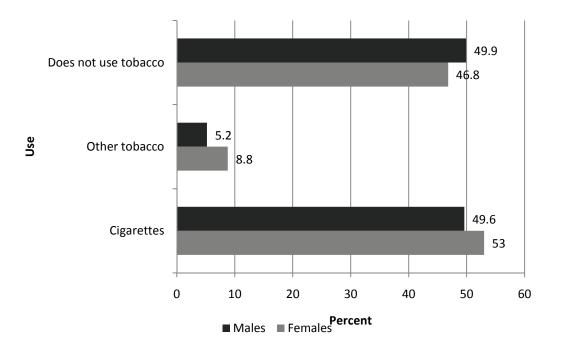


Figure 3.6: Tobacco use by sex

Increased education among women is associated with a slight decrease in tobacco use (data for men are not broken down by education level). There is no clear association between an increase in wealth and a decrease in tobacco use. Both women and men show a lower proportion of tobacco use with increased wealth.

Overall, older, less educated Nauruan women living in low income households are more likely to be heavy tobacco users (Table 3.9.1). Among men, heavy tobacco use is prevalent among younger, poorly educated men living in low income households (Table 3.9.2). A majority of the men and women aged 15 and older use tobacco heavily, which may have serious ramifications, both on their personal health and on the future health and well-being of the population.

# Table 3.9.1: Tobacco use by women

Percentage of women aged 15–49 who smoke cigarettes or a pipe or use other tobacco products and the percentage of cigarette smokers by number of cigarettes smoked in the preceding 24 hours, according to background characteristics and maternity status, Nauru 2007

					Number of cigarettes in the last 24 hours						Number
Background characteristic	Cigarettes	Other tobacco	Does not use tobacco	Number of women	1–2	3–5	6–9	10+	Don't know/ missing	Total	of cigarette smokers
Age											
15–19	45.0	8.3	53.9	117	11.9	29.1	23.0	31.6	4.5	100.0	53
20–24	56.4	4.5	43.6	131	8.8	23.6	8.0	54.6	5.0	100.0	74
25–29	56.5	10.6	43.5	96	6.0	12.3	13.0	68.6	0.0	100.0	54
30–34	52.3	7.8	47.7	85	(1.8)	(13.5)	(9.7)	(70.4)	(4.5)	100.0	45
35–39	50.3	14.8	49.7	61	(0.0)	(13.8)	(7.5)	(73.6)	(5.1)	100.0	31
40-44	49.4	12.5	50.6	62	(5.8)	(10.2)	(15.1)	(65.6)	(3.4)	100.0	30
45–49	62.1	7.9	37.9	66	(2.2)	(5.2)	(10.4)	(76.7)	(5.4)	100.0	41
Education											
Less than secondary	*	*	*	13	*	*	*	*	*	100.0	8
Secondary	53.1	9.2	46.6	555	5.4	18.2	11.6	60.9	4.0	100.0	295
More than secondary	48.7	4.1	51.3	50	3.1	2.2	15.1	76.6	3.0	100.0	25
Maternity status											
Pregnant Breastfeeding	(36.1)	(3.8)	(63.9)	49	*	*	*	*	*	100.0	18
(not pregnant)	45.1	11.9	53.8	109	7.7	22.7	11.6	56.0	2.0	100.0	49
Neither	56.6	8.6	43.4	460	4.8	15.8	13.4	61.8	4.3	100.0	261
Wealth quintile											
Lowest	64.9	13.6	34.1	127	10.6	18.6	8.7	57.1	5.0	100.0	83
Second	47.4	6.8	52.6	126	6.2	10.8	14.2	64.0	4.9	100.0	60
Middle	55.2	10.3	44.8	129	6.0	18.1	11.9	59.0	5.0	100.0	71
Fourth	53.5	8.5	46.5	116	2.8	18.6	9.9	66.3	2.4	100.0	62
Highest	43.3	4.5	56.7	119	1.9	16.9	19.8	60.0	1.4	100.0	52
Total	53.0	8.8	46.8	618	5.9	16.8	12.4	61.0	3.9	100.0	327

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25-49 unweighted cases.

#### Table 3.9.2: Tobacco use by men

Percentage of men aged 15–49 who smoke cigarettes or a pipe or use other tobacco products and the percentage of cigarette smokers by number of cigarettes smoked in the preceding 24 hours, according to background characteristics, Nauru 2007

					Nu	mber of ci	igarettes i	n the last 2	24 hours		Number
Background characteristic	Cigarettes	Other tobacco	Does not use tobacco	Number of men	1–2	3–5	6–9	10+	Don't know/ missing	Total	of cigarette smokers
Age	-								-		
15–19	41.4	0.0	58.6	60	(8.0)	(23.4)	(11.8)	(49.1)	(7.7)	100.0	25
20–24	74.6	3.0	25.4	57	(2.0)	(14.2)	(10.4)	(52.4)	(21.0)	100.0	43
25–29	53.5	2.7	46.5	56	(0.0)	(6.6)	(14.9)	(71.4)	(7.1)	100.0	30
30–34	42.0	5.9	53.9	48	*	*	*	*	*	100.0	20
35–39	48.7	6.2	51.3	39	*	*	*	*	*	100.0	19
40-44	55.4	12.3	44.6	27	*	*	*	*	*	100.0	15
45–49	42.4	3.5	57.6	23	*	*	*	*	*	100.0	10
Education											
Less than											
secondary	*	*	*	20	*	*	*	*	*	100.0	12
Secondary	51.6	3.8	47.7	270	3.8	10.1	9.5	64.1	12.4	100.0	139
More than secondary	*	*	*	21	*	*	*	*	*	100.0	10
Wealth											
quintile											
Lowest	75.4	2.0	24.6	45	(2.2)	(9.9)	(15.5)	(62.6)	(9.8)	100.0	34
Second	59.2	4.6	40.8	67	(3.6)	(1.8)	(8.9)	(68.3)	(17.4)	100.0	40
Middle	42.8	3.5	57.2	64	(9.9)	(10.3)	(9.9)	(53.2)	(16.7)	100.0	27
Fourth	46.6	5.0	53.4	64	(6.7)	(25.7)	(12.2)	(50.2)	(5.1)	100.0	30
Highest	43.6	4.6	53.7	72	(0.0)	(10.0)	(2.3)	(78.3)	(9.4)	100.0	31
Total 15–49	52.0	4.1	47.4	311	4.3	10.9	9.8	63.1	11.9	100.0	162
50+	31.7	13.4	68.3	43	*	*	*	*	*	100.0	14
Total men 15+	49.6	5.2	49.9	354	3.9	10.1	9.0	65.5	11.5	100.0	175

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25-49 unweighted cases.

# 3.10 KEY RESULTS

This section provides a summary of key issues regarding men and women in the reproductive age group (15–49 years), and identifies issues that enhance women's empowerment.

- 1. There is an equal proportion of women and men in most age groups. The exceptions are i) the 20–24 age group, with a higher proportion of women (due to enumerators intentionally displacing women in this age group), and ii) the 40–49 age group, which has a lower proportion of men due to their shorter life expectancy.
- 2. One in every three women and men are single, while more women (53 percent) are married as opposed to men (49 percent), and more women are also divorced and widowed.
- 3. The majority of women and men (about 90 percent) have some secondary or completed a secondary education, but less than 10 percent of both women and men have some post-secondary education. The median number of years of education completed is roughly the same for women (9.6 years) and men (9.2 years). The literacy level in Nauru is high for both women (99 percent) and men (96 percent).
- 4. More women than men reside in households in the poorest wealth quintile, while more men than women reside in households in the wealthiest quintile. More than 80 percent of

women and men claim to be Nauruans. The most common church is the Nauru Congregational Church.

- 5. Access to information is essential for the development of knowledge and awareness, which may influence perceptions and behaviour. Television is the most commonly accessed form of media (accessed at least weekly by 73 percent of women and 84 percent of men). Fewer that 50 percent of men and 30 percent of women listen to the radio or read a newspaper at least once per week.
- 6. More women (45 percent) reported not being employed in the 12 months preceding the survey than men (20 percent). These women are more likely to be in the lowest wealth quintile with limited (secondary or primary) education. Women are more likely to hold professional/ technical/managerial and clerical jobs than are men. The majority of women work for cash only in non-agricultural work, and more likely to work throughout the year.
- 7. More men (81 percent) report being more aware of TB than do women (68 percent), although Nauruan women appear to have a better understanding of the disease. The use of cigarettes is slightly higher among women (53 percent) than men (50 percent).