

CHAPTER 1 INTRODUCTION

The creation of the independent and sovereign nation of the Federated States of Micronesia (FSM) under the Compact of Free Association with the United States caused a growing need for social and economic development planning. Consequently, as in many developing countries, administrators and planners in the FSM, in their quest for social and economic development often contend with incomplete or unavailable information when it is needed. The 1994 and 2000 FSM Censuses were thus conducted as part of the overall effort to provide current and updated information required for planning and administrative purposes. This report presents basic analysis of the 2000 FSM Census data, including comparison against the 1994 FSM Census.

This chapter locates FSM geographically and presents a brief history and the population distribution of the FSM in selected Census years, along with some background on the 2000 FSM Census. Chapter 2 presents population change and structure. Chapter 3 presents the household and marital status. Chapters 4 to 6 discuss the population dynamics (fertility, mortality, and migration) of the FSM. Chapters 7 to 11 provide the basic analysis of social and economic characteristics. Chapter 12 discusses the housing characteristics. A separate publication presenting detailed tabulations of the 2000 FSM Census results has also been compiled and disseminated by the Division of Statistics. Census reports for each state present detailed analysis by state. Supplemental information and data from previous selected Censuses (1973, 1980, the mid 1980 State Censuses, and 1994) are used to present change over time.

Geographical location and a brief history of the FSM

Geographical location, climate, and size

The FSM consists of 607 islands spread through approximately a million square miles in the western Pacific Ocean lying between 1 degree south and 14 degrees north latitude, and between 135 and 166 degrees east longitude. Although the area encompassing the FSM, including its Economic Exclusive Zone (EEZ) is very large, the total land area is only 271 square miles with an additional 2,776 square miles of lagoon area. The 607 islands vary from large, high mountainous islands of volcanic origin to small atolls.

The FSM consists of four states: Yap, Chuuk, Pohnpei, and Kosrae. Yap is the westernmost state and has a total land area of 46 square miles including 12 inhabited island units. In addition to Yap's land area, the lagoon makes up 405 square miles. Chuuk consists of 7 major island groups. The largest is Chuuk Lagoon, which is a complex group of islands. It includes 98 islands, of which 14 are mountainous islands of volcanic origin, surrounded by a coral ring forming a lagoon of over 800 square miles. The total land area in Chuuk is 49 square miles with a lagoon area of 823 square miles. Pohnpei consists of 6 major island groups, and the largest is Pohnpei Island. The land area of Pohnpei is 132.2 square miles and lagoon areas make up 297 square miles. Kosrae has 43 square miles of land and no lagoon. The average temperature in the FSM is about 80 degrees Fahrenheit with little yearly variation. The FSM has some of the wettest places in the Pacific.

A Brief History

Spanish and Portuguese explorers came upon the Caroline Islands during the early sixteenth century, the former claiming the area as part of Spain's growing Pacific empire (Shinn, 1984, pp. 325-326). However, it was not until during the second half of the nineteenth century that Spain established small settlements mainly as a response to growing economic competition in the area from other nations. The Spanish administration lasted 13 years, from 1886 to 1899 (Hezel and Berg, 1979). But the first serious attempt to colonize the islands that currently compose the FSM was made by Germany, which purchased the Carolines from Spain in 1899 following the Spanish American War (Brown, 1977). The Germans ruled the islands from 1899 to 1914. Japan seized Germany's possessions in Micronesia in 1914 at the outbreak of World War I. The Japanese administration lasted from 1914 to 1945. The Japanese rulers had an enormous impact. Programs established in the islands mainly dealt with establishment of infrastructure (docks, roads, hospitals, school, etc.). Although the expatriate population mainly supervised these institutions, they provided services for the island people as well. The Japanese intention to "place a permanent Japanese imprint" in the islands was achieved.

These three nations were active in the FSM, though fundamentally different interests in the area led each to establish a markedly different presence. Following the Japanese administration, Micronesia was passed into the hands of the United States, and was a part of the United States Trust Territory of the Pacific Islands (TTPI) from 1947 until 1986. Like the Japanese, the Americans intended to develop the islands economically. Unlike the Japanese, any economic development that occurred was to benefit the local people and be subject to their control. The US administration undertook a massive buildup of education and health services. In May 1979 four island groups (Yap, Chuuk, Pohnpei, Kosrae) under the Trust Territory united to form the FSM, which became a sovereign independent nation under the Compact of Free Association between the FSM and the United States established in 1986. Despite this "independence", a major US presence remains in the area, mainly because of the funding and other interrelationships prescribed by the Compact (Compact of Hawai'i, 1989, p. 7; Compact of Free Association, 1982; Firth, 1982, p. 78).

History of Census Taking in the FSM

The population was counted during the periods before the American Administration. The Japanese collected the first systematic census data in 1920 for the areas which became TTPI, and continued to collect these data in 1925, 1930, and 1935. The TTPI High Commissioner's Office took a TTPI-wide census in 1958. The 1967 Census was the first census conducted during the American trusteeship to enumerate the population as of a specific date (March 26, 1967). In 1973, the TTPI administration collected another census after finding serious deficiencies in the 1970 Decennial Census. The 1980 Census was the second decennial Census. The reliability of the data of the 1980 Census was questioned particularly in the coverage of the population. However, these problems were mainly due to definition. As a consequence another census was commissioned under the law enacted by the Congress of Micronesia, and was conducted with the assistance of the South Pacific Commission. This Census however turned into four individual censuses, conducted in each state at different points in time, from 1985 to 1989. These censuses are often referred to as the mid-decade censuses. Although the results of these censuses were very accurate, the fact that they were conducted at different points in time and asked differing questions presented a problem in comparing and aggregating the figures to a national count. Hence the 1994 Census was initiated, and then followed by the 2000 Census.

The 2000 FSM Census

The 2000 FSM Census covered all persons usually residing in the FSM as of April 1, 2000. A census of the usual residents is a *de jure* count of the population. Only people who had resided or intended to reside in the FSM for six months or more prior to the Census were counted. Thus short-term visitors, staying for less than six months, were excluded. Usual residents who were overseas at the time of the census were included if they intended to return to the FSM within six months. FSM citizens who were away for more than six months were not considered to be usual residents of FSM and were excluded from the census.

The census also covered housing units (living quarters), both occupied and intended for occupancy (vacant) at the time of the census. Excluded were buildings for businesses, offices, institutions, and other structures not used as living quarters.

The 1994 and 2000 Censuses implementation phases are briefly summarized below:

Planning and Preparation

For 1994 due to limited experience in nationwide census planning in the country, staff members were sent to the US Bureau of the Census (USBC), International Programs Center for training in census/survey methods and organization, and census data processing. Additional training was also given to the Branch Statistics Offices on the fieldwork and interviewing techniques.

A series of workshops were conducted to establish the administrative setup for the census. Participants in the workshops were representatives from the national and state governments and officials from the U.S. Department of Interior and U.S. Bureau of the Census.

Enumeration

Field workers (crew leaders and enumerators) were hired and trained to carry out the actual enumeration. Each crew leader was responsible for supervising about 5 enumerators on the average. Each enumerator was assigned to conduct interviews for every housing unit and household (about 50 housing units on the average) in his or her enumeration district (ED), and fill out a questionnaire for every person in each household. The fieldwork lasted from April 4 through the early part of June.

Editing, Coding, and Data Processing

The census questionnaires were edited and coded. The Preliminary data editing and coding operation were initiated and completed at the state Branch Statistics Offices. Preliminary tables were compiled and disseminated from this operation. The questionnaires were then reviewed (for processability), coded, keyed, and verified for further analysis. Following the verification of the keyed data, specifications and programs were developed for data cleaning. The US Bureau of the Census (USBC) assisted the national and state staff in carrying out the data cleaning and programming activities in Washington D.C. The software used in data cleaning, processing, and table production was the Integrated Micro-computers Processing System (IMPS).

Data Analysis and Report Writing

A data analysis workshop was held to review the progress of the report writing and consistency of the data presented in the report. The national and state staffs were assisted by Dr. Michael Levin of the USBC and Mrs. Vilimaina Rakaseta, a demographer from the UNFPA/Country Support Team (CST).

Geographical Distribution

One of the important uses of a census is to provide a geographical population distribution. This information is very useful in the decision making processes of a nation such as allocation of funds, development planning, policy making, and apportioning seats in the decision making body.

Population Distribution

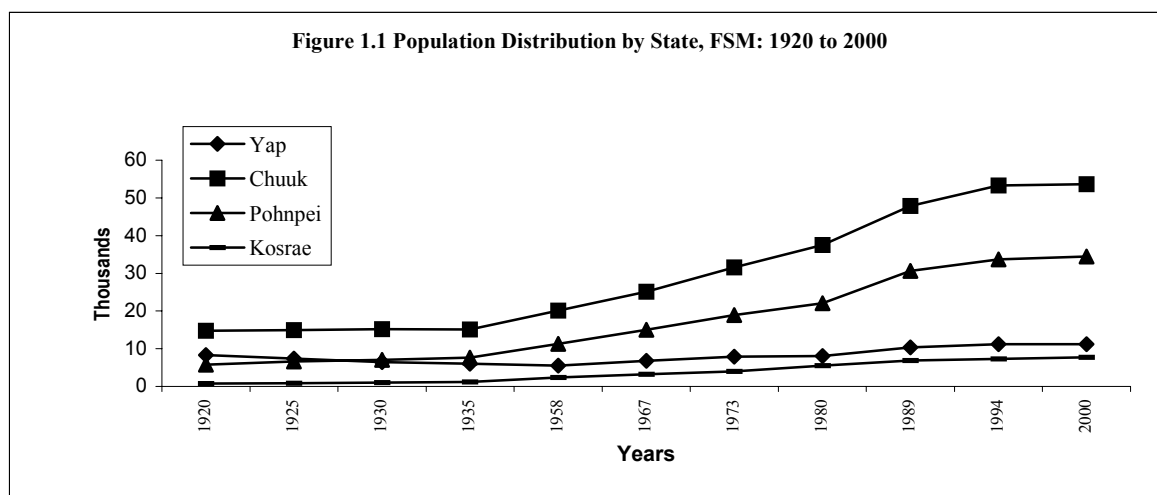
Table 1.1 and Figure 1.1 (page 4) present the population distribution of the FSM from 1920 through to 2000. The population increased steadily over the years and then gained momentum in the last 20 years. For instance, from 1980 to 2000, the population increased by more than 33,000 persons; whereas for over 50 years between 1920 and 1973 the population increased by a little over 32,000 persons.

Table 1.1. Population Distribution by State: Selected Census years

Census Year	Numbers					Percent				
	Total	Yap	Chuuk	Pohnpei	Kosrae	Total	Yap	Chuuk	Pohnpei	Kosrae
1920	29,660	8,338	14,788	5,748	786	100.0	28.1	49.9	19.4	2.7
1925	29,810	7,366	14,961	6,597	886	100.0	24.7	50.2	22.1	3.0
1930	29,727	6,486	15,200	7,051	990	100.0	21.8	51.1	23.7	3.3
1935	29,920	6,006	15,129	7,596	1,189	100.0	20.1	50.6	25.4	4.0
1958	39,289	5,540	20,124	11,258	2,367	100.0	14.1	51.2	28.7	6.0
1967	50,172	6,761	25,107	15,044	3,260	100.0	13.5	50.0	30.0	6.5
1973	62,357	7,870	31,609	18,926	3,952	100.0	12.7	51.0	31.1	5.3
1980	73,159	8,100	37,488	22,080	5,491	100.0	11.1	51.2	30.2	7.5
1989	95,740	10,365	47,871	30,669	6,835	100.0	10.8	50.0	32.0	7.1
1994	105,506	11,178	53,319	33,692	7,317	100.0	10.6	50.5	31.9	6.9
2000	107,008	11,241	53,595	34,486	7,686	100.0	10.5	50.1	32.2	7.2

Source: Nan'yo-cho (1927,1931,1937); Office of the Census Coordinator (1975); Office of the High Commissioner (1959); School of Public Health (n.d.); US Bureau of the Census (1972, 1983a); Yap Office of Planning and Budget (1992a, 1988, 1989); 1994 FSM Census Table P13; 2000 FSM Census Table P2-1.

Notes : The 1989 population was an interpolation from the mid 1980 Censuses, except for Chuuk. Population data for 1920-1935 are for Pacific Islanders only.



Source: Table 1.1

The percentage distribution of the population across the states also changed over the years. Pohnpei's share in the composition of the FSM population increased from 19 percent to 32 percent, Kosrae's share increased from 3 percent to 7 percent, while Yap's share decreased from 28 percent to 11 percent since the 1920 Census. Chuuk's share remained at about 50 percent throughout the years.

Table 1.2 presents the 1994 and 2000 distribution of the FSM population by state and sex. Of the 107,008 persons living in the FSM in 2000, 54,191 (51 percent) were males and 52,817 (49 percent) were females. The population was distributed unevenly among the states (see Figure 1.2). Chuuk was the most populated state, with a total of 53,595 persons, a little more than half the population of the FSM, followed by Pohnpei at 32 percent, Yap with 11 percent, and Kosrae with 7 percent. These population distributions were very similar to the 1994 Census.

Table 1.2. Population Distribution by State, FSM: 1994 and 2000

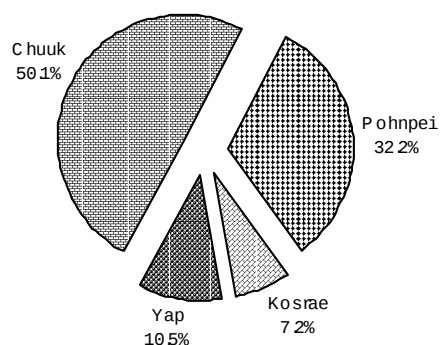
State	1994						2000					
	Numbers			Percent			Numbers			Percent		
	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
Total	105,506	53,923	51,583	100.0	100.0	100.0	107,008	54,191	52,817	100.0	100.0	100.0
Yap	11,178	5,565	5,613	10.6	10.3	10.9	11,241	5,508	5,733	10.5	10.2	10.9
Chuuk	53,319	27,299	26,020	50.5	50.6	50.4	53,595	27,158	26,437	50.1	50.1	50.1
Pohnpei	33,692	17,253	16,439	31.9	32.0	31.9	34,486	17,666	16,820	32.2	32.6	31.8
Kosrae	7,317	3,806	3,511	6.9	7.1	6.8	7,686	3,859	3,827	7.2	7.1	7.2

Source: 1994 FSM Census, Table P-13; 2000 FSM Census, P2-1

Population Density

The population density (number of persons per square mile) slightly increased between 1994 and 2000, from 389 persons to 395. (Table 1.3). This increasing trend occurred in all the states. Chuuk not only had the largest population, but also the highest population density in both years observed. The 2000 Census showed that the average density for Chuuk was 1,094 persons for every square mile of land, nearly three times the national average. In contrast, the population densities in the other states were lower than the national average of 395 persons per square mile. Pohnpei, the largest and second most crowded state, had a population density of 261, closely followed by Yap with a density of 244 and trailing behind is Kosrae at 179.

Given the population distribution for 1973 presented in Table 1.1, the density for FSM increased by more than 70 percent in the 27 years before the 2000 Census.

Figure 1.2 Population Distribution, FSM: 2000

Source: Table 1.2

Table 1.3. Population Density for FSM: FSM 1994 and 2000.

Characteristics	1994					2000				
	Total	Yap	Chuuk	Pohnpei	Kosrae	Total	Yap	Chuuk	Pohnpei	Kosrae
Population	105,506	11,178	53,319	33,692	7,317	107,008	11,241	53,595	34,486	7,686
Land Area (in square miles)	271	46	49	132	43	271	46	49	132	43
Density (per square mile)	389	243	1,088	255	170	395	244	1,094	261	179

Source: 1994 FSM Censuses, Table P13; 2000 FSM Censuses, Table P2-1; FSM Information Handbook, No. 1, Vol. 1, 1992.

Conclusion

Census taking improved in the 50 years prior to the 2000 Census. Over the census years observed, the population of the FSM continued to increase, at a more swifter rate at present than before. The geographical distribution of the population also shifted in the 50 year period observed. Pohnpei and Kosrae's shares increased, Yap's decreased, and Chuuk's remained relatively the same. The population density increased, reflecting the growth of the population. The FSM's limited land area of 271 square miles formulates population density a potential problem.