CHAPTER 2

BACKGROUND CHARACTERISTICS OF HOUSEHOLDS

This chapter presents a profile of the demographic and socioeconomic characteristics of NFHS-2 households and describes facilities and services that are available in villages in Kerala. The chapter also includes some comparisons of NFHS-2 results with results from NFHS-1, the Census of India, and the Sample Registration System (SRS).

2.1 Age-Sex Distribution of the Household Population

The NFHS-2 household population can be tabulated in two ways: *de facto* (the place each person stayed the night before the survey interview) or *de jure* (the place of usual residence). The *de facto* and *de jure* populations in Kerala differ because of temporary population movements. Table 2.1 shows the *de facto* population in the NFHS-2 household sample for Kerala, classified by age, residence, and sex. The total *de facto* sample population is 14,505. The sample is 23 percent urban and 77 percent rural.

The age distribution of the population in Kerala is typical of a population that has been experiencing a decline in fertility for some time (Figure 2.1). Although the share of the age group 0–4 is slightly greater than the share of the age group 5–9, the shares of both these age groups are less than the shares of the age groups 15–19 and 10–14. In fact, the age group 15–19 contains the highest proportion of the population (11 percent). Twenty-eight percent of the population is below 15 years of age and 7 percent is age 65 years or older. The proportion of population below age 15 is higher in rural areas (28 percent) than in urban areas (25 percent), consistent with higher fertility in rural areas.

The single-year age distributions by sex in the *de facto* population (see Appendix Table B.1) indicate that there is some preference for ages ending in particular digits. One of the most commonly used measures of digit preference in age reporting is Myers' Index (United Nations, 1955). This index provides an overall summary of preferences for, or avoidance of, each of the 10 digits, from 0 to 9. The index is often used as an indicator of the quality of age reporting on a survey. Values of Myers' Index computed for the age range 10–69 in the household sample population in Kerala are 12.0 for males and 11.1 for females. The relatively low values of the Myers' index are probably due to the emphasis during the interviewer training on obtaining accurate age information especially for women to correctly determine the eligibility of women for the individual interview. The values of Myers' Index from NFHS-2 are almost the same as the values from NFHS-1 (revised from the published NFHS-1 estimates, 11.4 and 9.7, respectively, for males and females). This indicates that the quality of age reporting on the Household Questionnaire in Kerala was similar in NFHS-1 and NFHS-2.

Table 2.2 compares the age distributions by sex from the NFHS-2 *de jure* sample with the age distributions by sex from the Sample Registration System for 1997. The SRS baseline survey, which is *de jure*, counts all usual residents in a sample area (Office of the Registrar General, 1999a). The NFHS-2 and SRS age distributions are very similar for broad age groups. Also, the proportion of the Kerala population in the age-group 0–6 according to the provisional population totals of the 2001 Census of India (Office of the Registrar General and Census

Table 2.1 Household population by age and sex

Percent distribution of the household population by age, according to residence and sex, Kerala, 1999

		Urban			Rural			Total	
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
< 1	1.5	1.5	1.5	1.8	1.9	1.9	1.8	1.8	1.8
1–4	6.8	5.9	6.3	7.8	6.9	7.3	7.6	6.6	7.1
5–9	9.5	6.8	8.1	9.6	7.7	8.7	9.6	7.5	8.5
10–14	9.3	9.2	9.2	10.9	10.1	10.5	10.5	9.9	10.2
15–19	9.3	9.2	9.2	11.8	10.7	11.2	11.2	10.3	10.7
20–24	9.7	9.7	9.7	9.1	9.4	9.3	9.3	9.5	9.4
25–29	8.6	10.1	9.4	7.4	9.2	8.4	7.7	9.4	8.6
30–34	7.5	8.4	8.0	5.9	7.3	6.6	6.3	7.5	6.9
35–39	7.2	7.6	7.4	7.0	7.6	7.3	7.1	7.6	7.4
40-44	6.1	7.3	6.8	5.6	5.7	5.6	5.7	6.1	5.9
45–49	6.0	5.4	5.7	5.9	5.6	5.7	5.9	5.6	5.7
50-54	4.8	5.4	5.1	4.4	4.0	4.2	4.5	4.3	4.4
55–59	3.7	2.9	3.3	3.4	3.2	3.3	3.5	3.1	3.3
60–64	4.0	3.2	3.6	2.5	3.3	2.9	2.8	3.3	3.1
65–69	2.4	2.7	2.6	2.6	2.7	2.7	2.6	2.7	2.6
70–74	1.7	2.2	2.0	1.7	1.8	1.7	1.7	1.9	1.8
75–79	1.1	1.3	1.2	1.4	1.3	1.3	1.3	1.3	1.3
80+	8.0	1.2	1.0	1.2	1.4	1.3	1.1	1.3	1.2
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of persons	1,636	1,764	3,400	5,336	5,768	11,105	6,973	7,533	14,505
Sex ratio ¹	NA	NA	1,078	NA	NA	1,081	NA	NA	1,080

Note: Table is based on the *de facto* population, i.e., persons who stayed in the household the night before the interview (including both usual residents and visitors). NA: Not applicable ¹Females per 1,000 males

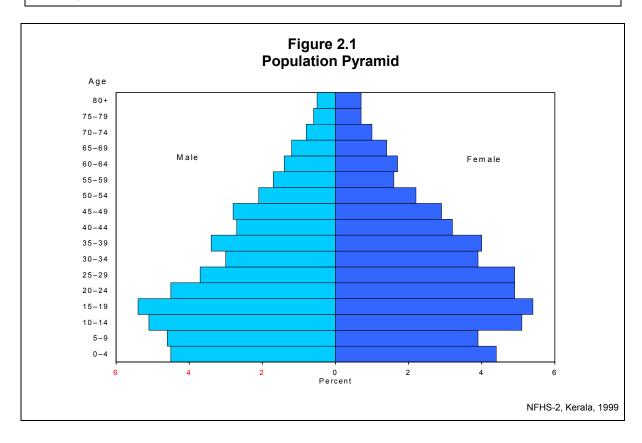


Table 2.2 Population by age and sex from the SRS and NFHS-2

Percent distribution of population by age and sex from the SRS and NFHS-2, Kerala, 1997–1999

	SRS	(1997)	١	NFHS-2 (1999)			
Age	Male	Female	Male	Female	Sex ratio ¹		
< 5	9.4	8.4	8.7	8.4	1,021		
5–14	19.8	17.6	19.9	17.2	923		
15–29	28.3	30.0	28.6	29.3	1,093		
30–49	26.3	26.8	25.2	26.9	1,139		
50-64	10.6	10.8	10.8	10.9	1,076		
65+	5.7	6.5	6.8	7.3	1,153		
Total	100.0	100.0	100.0	100.0	1,067		
Median age	U	U	25.5	27.3	NA		

Note: Table is based on the *de jure* population, i.e., usual residents.

NA: Not applicable

U: Not available

¹Females per 1,000 males

Source for SRS: Office of the Registrar General, 1999a

Commissioner, 2001), at 11 percent, is almost the same as the proportion of the *de jure* population age 0–6 in NFHS-2, at 12 percent.

Tables 2.1 and 2.2 also present sex ratios (females per 1,000 males) in Kerala from NFHS-2. The sex ratio of the *de facto* population is 1,080 for Kerala as a whole (much higher than the national sex ratio of 949), and varies little between urban and rural areas (Table 2.1). The sex ratio of the *de jure* population, at 1,067 (Table 2.2), is lower than the sex ratio of the *de facto* population. According to the 2001 Census of India provisional estimates, the *de jure* sex ratio for Kerala is 1,058, approximately two years after NFHS-2. Notably, Kerala continues to have more females than males in its population. There is also no evidence in Kerala of excess female mortality at early ages seen in many other states of India. The sex ratio of the population age 0–6 years has been estimated at 979 by NFHS-2 for the *de jure* population (not shown) and at 963 by the 2001 Census provisional estimates (Office of the Registrar General and Census Commissioner, 2001). In addition, the sex ratio at birth estimated from NFHS-2, at 929, is about normal with the number of male births slightly exceeding female births.

2.2 Marital Status

NFHS-2 includes information on the marital status of all household members age six and above. Table 2.3 shows the marital status distribution of the *de facto* household population, classified by age, residence, and sex. Among females age six and above, 53 percent are currently married and 35 percent have never been married. The proportion never married is higher for males (49 percent) than for females (35 percent), and is almost the same in urban areas (48 percent for males and 36 percent for females) and rural areas (49 percent for males and 34 percent for females). The proportion divorced, separated, or deserted is small, and widowhood is quite limited until the older ages. Forty-six percent of women age 50 or older are widowed, but only 7 percent of males in this age group are widowed.

Also of interest is the proportion of persons who marry young. At age 15–19, the proportions ever married are negligible for males and 14 percent for females (7 percent in urban

Table 2.3 Marital status of the household population

Percent distribution of the household population age 6 and above by marital status, according to age, residence, and sex, Kerala, 1999

Marital status									
Age	Never married	Currently married	Widowed	Divorced	Separated	Deserted	Total percent		
			UR	BAN					
			N	1ale					
6–12 13–14 15–19 20–24 25–29 30–49 50+	99.2 100.0 100.0 96.9 64.3 5.8 2.6	0.4 0.0 0.0 3.1 35.7 93.5 91.3	0.4 0.0 0.0 0.0 0.0 0.0 0.0 6.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.2 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.6 0.0	100.0 100.0 100.0 100.0 100.0 100.0 100.0		
Total	47.7	50.7	1.3	0.0	0.1	0.2	100.0		
			Fe	male					
6–12 13–14 15–19 20–24 25–29 30–49 50+	100.0 100.0 92.7 48.2 17.3 6.7 3.9	0.0 0.0 6.8 51.8 81.8 86.1 48.9	0.0 0.0 0.0 0.0 0.4 4.7 45.4	0.0 0.0 0.0 0.0 0.0 0.0 0.3	0.0 0.0 0.5 0.0 0.0 0.8 1.0	0.0 0.0 0.0 0.0 0.5 1.4 1.0	100.0 100.0 100.0 100.0 100.0 100.0 100.0		
Total	35.5	52.3	10.9	0.1	0.5	0.7	100.0		
			RU	JRAL					
			N	1ale					
6–12 13–14 15–19 20–24 25–29 30–49 50+	99.9 99.5 99.8 90.6 50.4 4.5 1.2	0.1 0.5 0.2 9.1 49.6 94.6 90.8	0.0 0.0 0.0 0.0 0.0 0.1 7.6	0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.3 0.1	0.0 0.0 0.0 0.2 0.0 0.5 0.2	100.0 100.0 100.0 100.0 100.0 100.0 100.0		
				male					
6–12 13–14 15–19 20–24 25–29 30–49 50+	99.8 100.0 84.1 36.7 9.0 3.1 2.7	0.2 0.0 15.9 62.1 88.0 86.7 49.4	0.0 0.0 0.0 0.4 1.0 5.2 46.0	0.0 0.0 0.0 0.0 0.4 0.7 0.6	0.0 0.0 0.0 0.4 0.6 1.7 0.6	0.0 0.0 0.0 0.4 1.0 2.5 0.6	100.0 100.0 100.0 100.0 100.0 100.0		
Total	34.4	52.7	10.8	0.4	0.7	1.0	100.0		

Table 2.3 Marital status of the household population (contd.)

Percent distribution of the household population age 6 and above by marital status, according to age, residence, and sex, Kerala, 1999

			Mari	ital status			
Age	Never married	Currently married	Widowed	Divorced	Separated	Deserted	Total percent
			тс	TAL			
			N	/lale			
6–12 13–14 15–19 20–24 25–29 30–49 50+	99.7 99.6 99.9 92.2 54.1 4.8 1.5	0.2 0.4 0.1 7.6 45.9 94.4 91.0	0.1 0.0 0.0 0.0 0.0 0.1 7.2	0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.2 0.1	0.0 0.0 0.0 0.2 0.0 0.5 0.2	100.0 100.0 100.0 100.0 100.0 100.0 100.0
			Fe	male			
6 –12 13–14 15–19 20–24 25–29 30–49 50+	99.9 100.0 85.9 39.4 11.1 4.0 3.0	0.1 0.0 14.0 59.6 86.4 86.5 49.3	0.0 0.0 0.0 0.3 0.9 5.1 45.8	0.0 0.0 0.0 0.0 0.3 0.6 0.5	0.0 0.0 0.1 0.3 0.5 1.4 0.7	0.0 0.0 0.0 0.3 0.9 2.2 0.7	100.0 100.0 100.0 100.0 100.0 100.0 100.0
Total	34.7	52.6	10.8	0.3	0.7	0.9	100.0

Note: Table is based on the *de facto* population, i.e., persons who stayed in the household the night before the interview (including both usual residents and visitors). The marital status distribution for females by age cannot be directly compared with the published distribution for NFHS-1 because the ages in the current table are based entirely on the reports of the household respondents, whereas in NFHS-1 the ages of ever-married women age 13–49 were taken from the Woman's Questionnaire.

areas and 16 percent in rural areas). By age 25–29, the large majority of females (89 percent) have been married, but less than half (46 percent) of males have been married. Overall, the table shows that women in Kerala marry at much younger ages than men, and that men and women marry at younger ages in rural areas than in urban areas.

Table 2.4 shows estimates of the singulate mean age at marriage (SMAM), which can be calculated from age-specific proportions single in a census or household survey. SMAM is calculated from the *de jure* population in NFHS-2 in order to arrive at estimates that are more comparable to those derived from the censuses, which are modified *de jure* counts. According to the SMAM measure, women in Kerala tend to marry men who are six years older than themselves. As estimated from NFHS-2, the SMAM in Kerala is 21.5 for females and 27.9 for males. Rural females marry about two years earlier than urban females and rural males marry about one year earlier than urban males. Although there has been little change in the SMAM in the six and a half years between NFHS-1 and NFHS-2, the census and NFHS-2 data together indicate that the age at marriage has risen since 1961 by about one year for males and by about two years for females.

Table 2.4 Singulate mean age at marriage								
Singulate mean age at marriage by sex from selected sources, Kerala, 1961–1999								
	Singulate mean age at marriage (SMAM)							
Source	Male	Female	Difference					
1961 Census	26.6	20.2	6.4					
1971 Census	27.0	21.3	5.7					
1981 Census	27.5	22.1	5.4					
1991 Census	27.8	22.3	5.5					
1992-93 NFHS-1								
Urban	28.7	23.2	5.5					
Rural	27.9	21.7	6.2					
Total	28.1	22.1	6.0					
1999 NFHS-2								
Urban	28.9	22.7	6.2					
Rural	27.6	21.2	6.4					
Total	27.9	21.5	6.4					
Note: Table is based on the <i>de jure</i> population.								

2.3 Household Composition

Table 2.5 shows the percent distribution of households by various characteristics of the household head (sex, age, religion, and caste/tribe), as well as by household type and the number of usual household members, according to residence. The table is based on the *de jure* population because household type and the number of usual household members pertain to the usual-resident population. The table shows that 78 percent of household heads are male, and this proportion is similar in both urban and rural areas. The proportion of households headed by females, at 22 percent, is twice as high in Kerala as in the country as a whole (10 percent).

The median age of household heads is 51 years in both urban and rural areas. Two-thirds of the household heads are age 30–59 and about one-third are age 60 and above. Only 3 percent of household heads are less than age 30. Fifty-five percent of household heads are Hindu, 26 percent are Muslim, and 19 percent are Christian. Muslims constitute only 16 percent of urban households but 29 percent of rural households. Forty-one percent of household heads belong to other backward classes (OBC¹), 9 percent belong to the scheduled castes, and 1 percent belong to the scheduled tribes. The proportion of household heads belonging to any of these disadvantaged groups is 55 percent in urban areas and 50 percent in rural areas.

Just over half of all households (51 percent) are nuclear family households (consisting of an unmarried adult living alone or a married person or couple and their unmarried children, if any). The average household size is 5.1 persons. Household structure, both in terms of the share of nuclear households among all households and household size, differs little between the rural and urban areas of Kerala.

¹Other backward classes are castes and communities that have been designated by the Government of India as socially and educationally backward and in need of special protection from social injustice.

Table 2.5 Household characteristics

Percent distribution of households by selected characteristics of the household head, household type, and household size, according to residence, Kerala, 1999

Characteristic	Urban	Rural	Total
Sex of household head			
Male	79.2	77.5	77.9
Female	20.8	22.5	22.1
Age of household head			
< 30	2.0	3.1	2.9
30–44	30.6	28.5	29.0
45–59	37.0	37.3	37.3
60+	30.4 0.0	30.9 0.1	30.8 0.1
Don't know/missing	0.0	0.1	0.1
Median age	51.1	50.8	50.9
Religion of household head			
Hindu	64.0	52.2	55.0
Muslim	16.1	28.6	25.6
Christian	19.6	19.2	19.3
Sikh	0.2	0.0	0.1
Jain	0.0	0.1	0.1
Caste/tribe of household head			
Scheduled caste	6.4	10.2	9.3
Scheduled tribe	0.7	1.2	1.1
Other backward class	47.7	38.2	40.5
Other	45.2	50.4	49.2
Household type			
Nuclear household	52.9	50.8	51.3
Non-nuclear household	47.1	49.2	48.7
Household with no usual members	0.0	0.1	0.0
Number of usual members			
0	0.0	0.1	0.0
1	1.6	2.6	2.3
2	7.0	5.5	5.9
3	15.3	13.1	13.7
4 5	28.4	24.0	25.1
5 6	20.1 9.6	22.5 12.7	21.9 11.9
7	9.6 5.7	6.3	6.2
8	3.8	4.4	4.3
9+	8.5	8.8	8.7
Moon bousehold size	F O	E 4	E 4
Mean household size	5.0	5.1	5.1
Total percent	100.0	100.0	100.0
Number of households	681	2,153	2,834
Note: Table is based on the de jure popu	ulation.		

2.4 Educational Level

The level of education of household members may affect reproductive behaviour, contraceptive use, health of children, and adoption of hygienic practices. Table 2.6 shows the percent distribution of the *de facto* household population by literacy and education level, according to age, residence, and sex. (This table and all subsequent tables and figures in this report are based on the *de facto* sample, unless otherwise specified.)

In Kerala, 15 percent of females and 7 percent of males age six and above are illiterate. Comparable figures from NFHS-1 are 18 percent for females and 10 percent for males, indicating a slight increase in literacy in the six and a half years between the two surveys. The illiteracy level in Kerala, at 11 percent, is less than one-third the illiteracy level for the country as whole (37 percent). According to NFHS-2, the only state in the country with a higher literacy rate than Kerala is Mizoram.

Table 2.6 Educational level of the household population	Table 2.6	Educational	level of th	he household	population
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Percent distribution of the household population age 6 and above by literacy and level of education, and median number of completed years of schooling, according to age, residence, and sex, Kerala, 1999

			Educati	onal level ¹					
Age	Illiterate	Literate, < primary school complete	Primary school complete	Middle school complete	High school complete	Higher secondary complete and above	Total percent	Number of persons	Median number of years of schooling
				UI	RBAN				
				1	Male				
6–9 10–14 15–19 20–29 30–39 40–49 50+	7.9 0.0 0.5 1.9 4.3 3.2 11.8	87.0 7.3 0.5 2.1 6.6 9.3 19.9	5.2 58.9 9.4 12.5 17.1 24.5 23.3	0.0 30.2 23.6 17.0 22.3 17.2 14.4	0.0 3.7 45.2 34.9 24.4 27.2 19.2	0.0 0.0 20.7 31.6 25.4 18.6 11.4	100.0 100.0 100.0 100.0 100.0 100.0	121 153 151 299 242 198 303	2.8 7.2 10.5 10.6 10.0 9.5 7.3
Total	4.7	14.9	21.0	18.0	23.8	17.6	100.0	1,467	9.2
	Female								
6–9 10–14 15–19 20–29 30–39 40–49 50+	6.3 1.0 1.5 3.2 7.6 8.5 32.1	89.8 12.3 0.0 2.7 7.0 16.9 22.1	3.9 51.7 8.3 8.9 16.3 22.3 22.2	0.0 33.6 25.1 19.6 20.5 16.6 8.8	0.0 1.5 40.5 27.8 28.5 23.9 11.5	0.0 0.0 24.7 37.8 20.1 11.8 3.4	100.0 100.0 100.0 100.0 100.0 100.0 100.0	102 161 162 349 282 225 334	2.7 7.4 10.5 10.8 9.9 8.4 4.8
				-	Γotal				
6–9 10–14 15–19 20–29 30–39 40–49 50+	7.1 0.5 1.0 2.6 6.1 6.0 22.4	88.3 9.8 0.3 2.5 6.8 13.3 21.0	4.6 55.2 8.8 10.6 16.7 23.3 22.7	0.0 32.0 24.4 18.4 21.3 16.9 11.5	0.0 2.5 42.8 31.1 26.6 25.4 15.2	0.0 0.0 22.7 34.9 22.5 15.0 7.2	100.0 100.0 100.0 100.0 100.0 100.0 100.0	222 314 313 647 524 423 637	2.8 7.3 10.5 10.7 9.9 9.0 5.6

Table 2.6 Educational level of the household population (contd.)

Percent distribution of the household population age 6 and above by literacy and level of education, and median number of completed years of schooling, according to age, residence, and sex, Kerala, 1999

			Educat	ional level ¹					
Age	Illiterate	Literate, < primary school complete	Primary school complete	Middle school complete	High school complete	Higher secondary complete and above	Total percent	Number of persons	Median number of years of schooling
RURAL									
Male									
6–9 10–14 15–19 20–29 30–39 40–49 50+	14.0 1.7 1.0 2.3 6.3 10.7 19.0	83.6 18.6 1.7 3.2 12.5 17.7 25.9	2.4 55.9 11.6 15.8 24.4 26.3 28.7	0.0 22.9 27.4 20.9 19.1 15.7 10.2	0.0 0.9 45.7 34.6 22.6 18.7	0.0 0.0 12.6 23.1 15.2 10.9 6.0	100.0 100.0 100.0 100.0 100.0 100.0	412 580 630 884 689 610 914	2.6 6.6 10.2 10.3 8.9 7.5 5.3
Total	8.0	19.5	24.1	17.2	20.4	10.8	100.0	4,720	7.8
Female									
6–9 10–14 15–19 20–29 30–39 40–49 50+	10.6 0.2 1.6 3.9 15.4 22.8 46.0	86.3 14.7 1.6 4.9 11.1 16.3 23.0	3.1 54.1 9.3 18.2 23.8 26.3 18.5	0.0 27.8 26.6 18.8 16.3 12.6 4.8	0.0 3.2 42.1 29.3 20.6 14.8 4.8	0.0 0.0 18.7 25.0 12.8 7.1 3.0	100.0 100.0 100.0 100.0 100.0 100.0	358 584 616 1,076 860 654 1,022	2.6 7.0 10.3 10.2 8.0 6.0 3.6
Total	16.3	17.3	22.2	15.5	17.7	11.0	100.0	5,171	7.4
				ר	Total				
6-9 10-14 15-19 20-29 30-39 40-49 50+	12.4 0.9 1.3 3.2 11.4 17.0 33.2	84.9 16.6 1.7 4.1 11.7 17.0 24.3	2.7 55.0 10.5 17.1 24.0 26.3 23.3	0.0 25.3 27.0 19.8 17.5 14.1 7.4	0.0 2.1 43.9 31.7 21.5 16.7 7.4	0.0 0.0 15.6 24.1 13.8 9.0 4.4	100.0 100.0 100.0 100.0 100.0 100.0 100.0	770 1,164 1,246 1,959 1,549 1,263 1,936	2.6 6.8 10.3 10.2 8.4 6.9 4.5
Total	12.3	18.4	23.1	16.3	19.0	10.9	100.0	9,891	7.6

The increase in educational attainment over time in Kerala can also be seen by examining the differences in educational levels by age.² For example, the proportion of males completing at least high school rises from 20 percent at ages 50 and above to 60 percent at ages 15–29. For females, the increase in educational attainment is even more dramatic. The proportion of females completing at least high school rises from 10 percent for the age group 50 and above to 62 percent for the age group 15–19. Notably, the same proportion of males and females have completed at least higher secondary school. At lower levels of schooling, however, a slightly

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²Although the number of years of education at each level (primary school, middle school, secondary school, and higher secondary school) is different in different states, to facilitate comparisons of educational attainment among states, the NFHS-2 tabulations use the same levels in all states (five years of primary school, three years of middle school, two years of secondary school, and two years of higher secondary school). In NFHS-1, tabulations followed the actual educational system in Kerala (four years of primary school, three years of middle school, three years of secondary school, and two years of higher secondary school), so that the educational levels in the NFHS-1 and NFHS-2 published tables are not strictly comparable.

Table 2.6 Educational level of the household population (contd.)

Percent distribution of the household population age 6 and above by literacy and level of education, and median number of completed years of schooling, according to age, residence, and sex, Kerala, 1999

			Educa	tional level ¹					
Age	Illiterate	Literate, < primary school complete	Primary school complete	Middle school complete	High school complete	Higher secondary complete and above	Total percent	Number of persons	Median number of years of schooling
				T	OTAL				
Male									
6–9 10–14 15–19 20–29 30–39 40–49 50+	12.6 1.4 0.9 2.2 5.8 8.9 17.2	84.4 16.2 1.5 2.9 10.9 15.6 24.4	3.0 56.5 11.2 15.0 22.5 25.9 27.4	0.0 24.4 26.7 19.9 19.9 16.1 11.3	0.0 1.5 45.6 34.7 23.0 20.8 12.5	0.0 0.0 14.1 25.3 17.8 12.8 7.3	100.0 100.0 100.0 100.0 100.0 100.0	533 733 782 1,182 931 808 1,217	2.6 6.7 10.3 10.3 9.3 8.0 5.6
Total	7.2	18.4	23.4	17.4	21.2	12.4	100.0	6,187	8.1
Female									
6–9 10–14 15–19 20–29 30–39 40–49 50+	9.6 0.4 1.6 3.8 13.5 19.1 42.5	87.1 14.2 1.3 4.3 10.1 16.5 22.7	3.3 53.6 9.1 15.9 21.9 25.3 19.4	0.0 29.1 26.3 19.0 17.3 13.7 5.8	0.0 2.8 41.8 28.9 22.6 17.1 6.4	0.0 0.0 19.9 28.1 14.6 8.3 3.1	100.0 100.0 100.0 100.0 100.0 100.0	459 745 778 1,425 1,142 879 1,356	2.6 7.1 10.4 10.3 8.7 6.8 4.1
Total	14.9	16.9	21.4	16.0	18.5	12.3	100.0	6,785	7.6
				-	Total				
6-9 10-14 15-19 20-29 30-39 40-49 50+	11.2 0.8 1.3 3.1 10.0 14.2 30.6	85.6 15.2 1.4 3.7 10.5 16.1 23.5	3.1 55.1 10.1 15.5 22.2 25.6 23.2	0.0 26.8 26.5 19.4 18.5 14.8 8.4	0.0 2.2 43.7 31.5 22.8 18.9 9.3	0.0 0.0 17.0 26.8 16.0 10.5 5.1	100.0 100.0 100.0 100.0 100.0 100.0 100.0	992 1,478 1,559 2,607 2,073 1,687 2,573	2.6 6.9 10.3 10.3 9.0 7.4 4.8
Total	11.2	17.6	22.3	16.7	19.8	12.4	100.0	12,972	7.9

Note: This table and all subsequent tables (unless otherwise indicated) are based on the *de facto* population. Illiterate persons may have been to school, but they cannot read and write. Total includes 1 male and 2 females from rural areas with missing information on age, who are not shown separately.

¹In this report, 'primary school complete' means 5–7 completed years of education, 'middle school complete' means 8–9 completed years of education, 'high school complete' means 10–11 completed years of education, and 'higher secondary complete and above' means 12 or more completed years of education.

higher percentage of males than of females have completed each level. The median number of years of schooling is 8.1 for males and 7.6 for females.

Education levels are higher in urban areas than in rural areas for both males and females. The proportion illiterate among females is 16 percent in rural areas and 11 percent in urban areas, and the proportion illiterate among males is 8 percent in rural areas and 5 percent in urban areas. Thirty-seven percent of urban women have completed at least high school, compared with 29 percent of rural women. By comparison, however, it may be noted that only 6 percent of rural women in India as a whole have completed at least high school.

Table 2.7 School attendance											
Percentage of the household population age 6–17 years attending school by age, sex, and residence, Kerala, 1999											
		Male		Female			Total				
Age	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total		
6–10	98.3	96.7	97.0	98.8	97.7	98.0	98.5	97.2	97.5		
11–14 15–17	99.4 85.1	96.2 71.0	96.9 73.7	98.8 82.4	96.3 71.1	96.8 73.5	99.1 83.7	96.2 71.1	96.9 73.6		
6–14	98.8	96.5	97.0	98.8	97.0	97.4	98.8	96.7	97.2 90.9		
6–14 6–17	98.8 95.6	96.5 89.7	97.0 91.0	98.8 94.5	97.0 89.8	97.4 90.8	98.8 95.0	96.7 89.8			

Table 2.7 shows school attendance rates for the school-age household population by age, sex, and residence. In Kerala as a whole, 97 percent of children age 6–14 are attending school, marginally up from 95 percent in NFHS-1. The attendance rate drops off sharply to 74 percent for children age 15–17. For the age group 6–17, the attendance rate is 91 percent for both males and females, but is somewhat lower in rural areas (90 percent) than in urban areas (95 percent). In both rural and urban areas, attendance rates at ages below 15 are almost identical for males and females. In rural areas there is also no gender differential in school attendance rates among children age 15–17, but in urban areas boys are slightly more likely to be in school than girls at age 15–17. These data suggest that despite high rates of school attendance at younger ages, one out of four children in Kerala drops out of school before reaching age 18.

Table 2.8 shows reasons for children not currently attending school (for those who have dropped out of school) as reported by the respondent to the Household Questionnaire. The table shows that the reason most often given for both boys and girls for not currently attending school is that the child is not interested in studies (43 percent and 35 percent, respectively). High costs of education and further education not being considered necessary are reasons that are each mentioned in about one-tenth of the cases for both girls and boys. Other frequently given reasons for boys include repeated failures (17 percent) and the need for the child to work outside the

Table 2.8 Reasons for children not currently attending school									
Percent distribution of children age 6–17 years who have dropped out of school by the main reason for not currently attending school, according to sex, Kerala, 1999									
Reason	Male	Female							
School too far away Further education not considered necessary	0.0 10.0	1.6 11.5							
Required for household work Required for work on farm/family business Required for outside work for payment in	1.7 2.3	4.2 0.8							
cash or kind Costs too much	14.0 10.6	4.8 11.3							
Required for care of siblings Not interested in studies	0.6 43.3 16.7	0.8 35.1 9.9							
Repeated failures Got married Other	0.0 0.9	9.9 11.4 8.6							
Total percent	100.0	100.0							
Number of children	128	132							

home for payment in cash or kind (14 percent). For girls they include marriage (11 percent), repeated failures (10 percent), and household work or work outside the home for cash or kind (9 percent).

2.5 Housing Characteristics

Table 2.9 provides information on housing characteristics by urban-rural residence. Seventy-two percent of households in Kerala have electricity (up from 60 percent in NFHS-1). The proportion of households with electricity is 88 percent in urban areas and 67 percent in rural areas.

Water sources and sanitation facilities have an important influence on the health of household members, especially children. NFHS-1 and NFHS-2 included questions on sources of drinking water and types of sanitation facilities. Eighteen percent of households have piped drinking water in Kerala, and 78 percent drink water from wells. Households that use well water for drinking has risen dramatically since NFHS-1, when the proportion was 62 percent, while the proportion that drink piped water has declined slightly from 20 percent in NFHS-1 to 18 percent in NFHS-2. As in the case of electricity, there are large urban-rural differences in sources of drinking water. The proportion of households with piped drinking water is 38 percent in urban areas, but only 11 percent in rural areas. Most households have fairly easy access to drinking water, however. Ninety percent of households either have a source of drinking water in their residence/yard or take less than 15 minutes to get drinking water, including the time to go to the source, get water, and come back. A significant proportion of households purify their drinking water by some method (71 percent in urban areas and 58 percent in rural areas). The most common method used is to boil the water.

Regarding sanitation facilities, only 18 percent of households have a flush toilet (using either piped water or water from a bucket for flushing), 67 percent have a pit toilet or latrine, and 15 percent have no facility. Again there are notable urban-rural differences: 26 percent of urban households have a flush toilet, compared with 15 percent of rural households, and 17 percent of rural households have no toilet facility, compared with 7 percent of urban households. The proportion with no toilet facilities has decreased sharply from 29 percent in NFHS-1 to half this proportion six and a half years later in NFHS-2. Variation in the definitions of what constitutes a flush toilet in NFHS-1 and NFHS-2 makes the proportion with a flush toilet not comparable between the two surveys.

The most common fuel used for cooking in Kerala is wood. In the state as a whole, 81 percent of households rely mainly on wood, 15 percent use liquid petroleum gas, and 3 percent use kerosene. The proportion using wood is much higher in rural areas (86 percent) than in urban areas (64 percent), whereas the proportion using liquid petroleum gas is much higher in urban areas (30 percent) than in rural areas (11 percent). The use of liquid petroleum gas for cooking has doubled since NFHS-1, when it was 7 percent.

Regarding the type of house construction, 7 percent of households live in houses that are *kachha* (made with mud, thatch, or other low-quality materials), 13 percent live in semi-*pucca* houses (using partly low-quality and partly high-quality materials), and 80 percent live in *pucca* houses (made with high-quality materials throughout, including the roof, walls, and floor). Eighty-nine percent of households in urban areas live in *pucca* houses, compared with 77 percent of households in rural areas

Table 2.9 Housing characteristics

Percent distribution of households by housing characteristics, according to residence, Kerala, 1999

Yes 87,9 66.7 71.8 No 12.1 33.3 28.2 Total percent 100.0 100.0 100.0 Source of drinking water 2 11.4 17.7 Piped 37.6 11.4 17.7 Hand pump 2.2 2.2 2.2 2.2 Well water 60.0 83.6 77.9 8 Other 0.2 1.7 1.4 17.7 Total percent 100.0 100.0 100.0 100.0 Ifme to get drinking water 100.0	Housing characteristic	Urban	Rural	Total	
Yes 87,9 66.7 71.8 No 12.1 33.3 28.2 Total percent 100.0 100.0 100.0 Source of drinking water 2 11.4 17.7 Piped 37.6 11.4 17.7 Hand pump 2.2 2.2 2.2 2.2 Well water 60.0 83.6 77.9 8 Other 0.2 1.7 1.4 17.7 Total percent 100.0 100.0 100.0 100.0 Ifme to get drinking water 100.0	Electricity				
Total percent 100.0 100.0 100.0 100.0 Source of drinking water Piped 37.6 11.4 17.7 Hand pump 2.2 2.2 2.2 2.2 Well water 60.0 83.6 77.9 Surface water 0.0 1.1 0.8 Other 0.2 1.7 1.4 Total percent 100.0 100		87.9	66.7	71.8	
Source of drinking water Piped 37.6 11.4 17.7 Hand pump 2.2 2.	No	12.1	33.3	28.2	
Piped 37.6 11.4 17.7 14.8 17.7 14.8 17.7 14.8 17.7 14.8 17.7 14.8 17.7 14.8 17.7 14.8 17.8	Total percent	100.0	100.0	100.0	
Hand pump	Source of drinking water				
Well water		37.6	11.4	17.7	
Surface water 0.0 1.1 0.8 Other 0.2 1.7 1.4 0.8 Other 0.2 1.7 1.4 1.4 Total percent 100.0	Hand pump	2.2	2.2		
Other 0.2 1.7 1.4 Total percent 100.0 100.0 100.0 Time to get drinking water Percentage < 15 minutes	<td>Well water</td> <td>60.0</td> <td>83.6</td> <td>77.9</td>	Well water	60.0	83.6	77.9
Total percent 100.0 100	Surface water	0.0	1.1	0.8	
Percentage < 15 minutes 88.7 90.6 90.1	Other	0.2	1.7	1.4	
Percentage < 15 minutes 88.7 90.6 90.1	Total percent	100.0	100.0	100.0	
Median time (minutes) 0.0 0.0 0.0 Wethod of drinking water purification¹ Strains water by cloth 0.7 0.8 0.7 Uses alum 8.0 12.7 11.6 12.7 11.6 Uses water filter 10.5 6.4 7.4 2.4 3.4 4.7 4.4 3.4 4.7 4.4 3.4 4.7 4.4 3.3 4.7 4.4 3.3 4.7 4.4 3.4 4.7 4.4 3.4 4.7 4.4 3.4 4.7 4.4 3.8 8.9 9.2 8.3 9.3 9.8 9.3	Time to get drinking water				
Median time (minutes) 0.0 0.0 0.0 Wethod of drinking water purification¹ Strains water by cloth 0.7 0.8 0.7 Uses alum 8.0 12.7 11.6 12.7 11.6 Uses water filter 10.5 6.4 7.4 2.4 3.4 4.7 4.4 3.4 4.7 4.4 3.4 4.7 4.4 3.3 4.7 4.4 3.3 4.7 4.4 3.4 4.7 4.4 3.4 4.7 4.4 3.4 4.7 4.4 3.8 8.9 9.2 8.3 9.3 9.8 9.3	Percentage < 15 minutes	88.7	90.6	90.1	
Strains water by cloth 0.7 0.8 0.7 Uses alum 8.0 12.7 11.6 Uses water filter 10.5 6.4 7.4 Boils water 57.2 44.3 47.4 Uses electronic purifier 0.6 0.3 0.4 Uses other method 0.0 0.5 0.3 Does not purify water 28.5 42.1 38.8 Sanitation facility Flush toilet 25.8 15.4 17.9 Pit toilet/latrine 67.4 67.3 67.3 No facility 6.8 17.3 14.8 Total percent 100.0 100.0 100.0 Wood 64.4 86.0 80.8 Crop residues 0.0 1.2 0.9 Coal/coke/lignite/charcoal 0.1 0.0 0.0 Kerosene 5.4 1.7 2.6 Liquid petroleum gas 29.5 10.7 15.3 Biogas 0.5 0.4 0.4 <	Median time (minutes)	0.0	0.0	0.0	
Strains water by cloth 0.7 0.8 0.7 Uses alum 8.0 12.7 11.6 Uses water filter 10.5 6.4 7.4 Boils water 57.2 44.3 47.4 Uses electronic purifier 0.6 0.3 0.4 Uses other method 0.0 0.5 0.3 Does not purify water 28.5 42.1 38.8 Sanitation facility Flush toilet 25.8 15.4 17.9 Pit toilet/latrine 67.4 67.3 67.3 No facility 6.8 17.3 14.8 Total percent 100.0 100.0 100.0 Wood 64.4 86.0 80.8 Crop residues 0.0 1.2 0.9 Coal/coke/lignite/charcoal 0.1 0.0 0.0 Kerosene 5.4 1.7 2.6 Liquid petroleum gas 29.5 10.7 15.3 Biogas 0.5 0.4 0.4 <	Method of drinking water purification ¹				
Uses alum 8.0 12.7 11.6 Uses water filter 10.5 6.4 7.4 Boils water 57.2 44.3 47.4 Uses electronic purifier 0.6 0.3 0.4 Uses other method 0.0 0.5 0.3 Does not purify water 28.5 42.1 38.8 Sanitation facility Flush foiled 25.8 15.4 17.9 Pit toilet/latrine 67.4 67.3 67.3 No facility 6.8 17.3 14.8 Total percent 100.0 100.0 100.0 Modal fix percent Wood 64.4 86.0 80.8 Crop residues 0.0 1.2 0.9 Coal/coke/lignite/charcoal 0.1 0.0 0.0 Kerosene 5.4 1.7 2.6 Liquid petroleum gas 29.5 10.7 15.3 Biogas 0.5 0.4 0.4 Other 0.1 0.0 0.1 Total percent 100.0 100.0 100.0 Total percent 100.0 100.0 100.0 Persons per room <3	Strains water by cloth	0.7	0.8	0.7	
Boils water				11.6	
Uses electronic purifier 0.6 0.3 0.4 Uses other method 0.0 0.5 0.3 Does not purify water 28.5 42.1 38.8 Sanitation facility Flush toilet 25.8 15.4 17.9 Pit toilet/latrine 67.4 67.3 67.3 No facility 6.8 17.3 14.8 Total percent 100.0 100.0 100.0 Main type of fuel used for cooking Wood 64.4 86.0 80.8 Crop residues 0.0 1.2 0.9 Coal/coke/lignite/charcoal 0.1 0.0 0.0 Kerosene 5.4 1.7 2.6 Liquid petroleum gas 29.5 10.7 15.3 Biogas 0.5 0.4 0.4 Other 0.1 0.0 0.1 Total percent 100.0 100.0 Type of house Kachha 4.0 7.8 6.9 Semi-puca 6.6 15.5 13.3 Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 Persons per room < 3 3.9 Call continuous 2.7 4.3 3.9 Call continuous 3.8 Crop residues 3.8 Crop residu	Uses water filter	10.5	6.4	7.4	
Uses other method 0.0 0.5 0.3 28.5 28.5 24.1 38.8 28.5 28.5 24.1 38.8 28.5 28.5 24.1 38.8 28.5 28.5 24.1 38.8 28.5 28.5 28.5 24.1 38.8 28.5					
Uses other method 0.0 0.5 0.3 28.5 28.5 24.1 38.8 28.5 28.5 24.1 38.8 28.5 28.5 24.1 38.8 28.5 28.5 24.1 38.8 28.5 28.5 28.5 24.1 38.8 28.5		0.6	0.3	0.4	
Flush toilet 25.8 15.4 17.9 Pit toilet/latrine 67.4 67.3 67.3 No facility 6.8 17.3 14.8 Total percent 100.0 100.0 100.0 Main type of fuel used for cooking Wood 64.4 86.0 80.8 Crop residues 0.0 1.2 0.9 Coal/coke/lignite/charcoal 0.1 0.0 0.0 Kerosene 5.4 1.7 2.6 Liquid petroleum gas 29.5 10.7 15.3 Biogas 0.5 0.4 0.4 Other 0.1 0.0 0.1 Total percent 100.0 100.0 100.0 Type of house Kachha 4.0 7.8 6.9 Semi-pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room < 3 97.0 94.7 95.2 3-4 2.7 4.3 3.9 5-6 0.4 0.9 0.7 7+ 0.0 0.1 0.1 Total percent 100.0 100.0 100.0 Mean number of persons per room 1.2 1.3 1.3		0.0	0.5	0.3	
Flush toilet 25.8 15.4 17.9 Pit toilet/latrine 67.4 67.3 67.3 No facility 6.8 17.3 14.8 Total percent 100.0 100.0 100.0 Main type of fuel used for cooking Wood 64.4 86.0 80.8 Crop residues 0.0 1.2 0.9 Coal/coke/lignite/charcoal 0.1 0.0 0.0 Kerosene 5.4 1.7 2.6 Liquid petroleum gas 29.5 10.7 15.3 Biogas 0.5 0.4 0.4 Other 0.1 0.0 0.0 Total percent 100.0 100.0 100.0 Type of house Kachha 4.0 7.8 6.9 Semi-pucca 6.6 15.5 13.3 Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room 2.7 4.3	Does not purify water	28.5	42.1	38.8	
Flush toilet 25.8 15.4 17.9 Pit toilet/latrine 67.4 67.3 67.3 No facility 6.8 17.3 14.8 Total percent 100.0 100.0 100.0 Main type of fuel used for cooking Wood 64.4 86.0 80.8 Crop residues 0.0 1.2 0.9 Coal/coke/lignite/charcoal 0.1 0.0 0.0 Kerosene 5.4 1.7 2.6 Liquid petroleum gas 29.5 10.7 15.3 Biogas 0.5 0.4 0.4 Other 0.1 0.0 0.0 Total percent 100.0 100.0 100.0 Type of house Kachha 4.0 7.8 6.9 Semi-pucca 6.6 15.5 13.3 Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room 2.7 4.3	Sanitation facility				
No facility		25.8	15.4	17.9	
Main type of fuel used for cooking 464.4 86.0 80.8 Crop residues 0.0 1.2 0.9 Coal/coke/lignite/charcoal 0.1 0.0 0.0 Kerosene 5.4 1.7 2.6 Liquid petroleum gas 29.5 10.7 15.3 Biogas 0.5 0.4 0.4 Other 0.1 0.0 0.1 Total percent 100.0 100.0 100.0 Type of house Kachha 4.0 7.8 6.9 Semi-pucca 6.6 15.5 13.3 Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room <3	Pit toilet/latrine	67.4	67.3	67.3	
Wain type of fuel used for cooking Wood 64.4 86.0 80.8 Crop residues 0.0 1.2 0.9 Coal/coke/lignite/charcoal 0.1 0.0 0.0 Kerosene 5.4 1.7 2.6 Liquid petroleum gas 29.5 10.7 15.3 Biogas 0.5 0.4 0.4 Other 0.1 0.0 0.1 Total percent 100.0 100.0 100.0 Type of house Kachha 4.0 7.8 6.9 Semi-pucca 6.6 15.5 13.3 Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room < 3	No facility	6.8	17.3	14.8	
Wood 64.4 86.0 80.8 Crop residues 0.0 1.2 0.9 Coal/coke/lignite/charcoal 0.1 0.0 0.0 Kerosene 5.4 1.7 2.6 Liquid petroleum gas 29.5 10.7 15.3 Biogas 0.5 0.4 0.4 Other 0.1 0.0 0.1 Total percent 100.0 100.0 100.0 Type of house Kachha 4.0 7.8 6.9 Semi-pucca 6.6 15.5 13.3 Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room < 3	Total percent	100.0	100.0	100.0	
Crop residues 0.0 1.2 0.9 Coal/coke/lignite/charcoal 0.1 0.0 0.0 Kerosene 5.4 1.7 2.6 Liquid petroleum gas 29.5 10.7 15.3 Biogas 0.5 0.4 0.4 Other 0.1 0.0 0.1 Total percent 100.0 100.0 100.0 Type of house Kachha 4.0 7.8 6.9 Semi-pucca 6.6 15.5 13.3 Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room < 3	Main type of fuel used for cooking				
Coal/coke/lignite/charcoal 0.1 0.0 0.0 Kerosene 5.4 1.7 2.6 Liquid petroleum gas 29.5 10.7 15.3 Biogas 0.5 0.4 0.4 Other 0.1 0.0 0.1 Total percent 100.0 100.0 100.0 Type of house Kachha 4.0 7.8 6.9 Semi-pucca 6.6 15.5 13.3 Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room < 3					
Kerosene 5.4 1.7 2.6 Liquid petroleum gas 29.5 10.7 15.3 Biogas 0.5 0.4 0.4 Other 0.1 0.0 0.1 Total percent 100.0 100.0 100.0 Type of house Kachha 4.0 7.8 6.9 Semi-pucca 6.6 15.5 13.3 Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room 2.7 4.3 3.9 5-6 0.4 0.9 0.7 7+ 0.0 0.1 0.1 Total percent 100.0 100.0 100.0 Mean number of persons per room 1.2 1.3 1.3			1.2		
Liquid petroleum gas 29.5 10.7 15.3 Biogas 0.5 0.4 0.4 Other 0.1 0.0 0.1 Total percent 100.0 100.0 100.0 Type of house Kachha 4.0 7.8 6.9 Semi-pucca 6.6 15.5 13.3 Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room < 3					
Biogas 0.5 0.4 0.4 Other 0.1 0.0 0.1 Total percent 100.0 100.0 100.0 Type of house Kachha 4.0 7.8 6.9 Semi-pucca 6.6 15.5 13.3 Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room 2.7 4.3 3.9 5-6 0.4 0.9 0.7 7+ 0.0 0.1 0.1 Total percent 100.0 100.0 100.0 Mean number of persons per room 1.2 1.3 1.3					
Other Total percent 0.1 100.0 0.0 100.0 0.1 100.0 Type of house 4.0 7.8 6.9 6.9 7.8 6.9 6.9 7.8 6.9 6.9 7.8 6.9 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.8 6.9 7.9 8.2 7.9 8.2 7.9 8.2 7.9 8.2 7.9 8.2 7.9 8.2 7.9 9.2 7.9 9.2 7.2 4.3 3.9 7.2 3.9 7.2 4.3 3.9 7.2 5.2 7.2 4.3 3.9 7.2 6.0 7.2 6					
Total percent 100.0 100.0 100.0 Type of house Kachha 4.0 7.8 6.9 Semi-pucca 6.6 15.5 13.3 Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room 2 97.0 94.7 95.2 3-4 2.7 4.3 3.9 5-6 0.4 0.9 0.7 7+ 0.0 0.1 0.1 Total percent 100.0 100.0 100.0 Mean number of persons per room 1.2 1.3 1.3					
Type of house Kachha 4.0 7.8 6.9 Semi-pucca 6.6 15.5 13.3 Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room < 3					
Kachha 4.0 7.8 6.9 Semi-pucca 6.6 15.5 13.3 Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room < 3	Total percent	100.0	100.0	100.0	
Semi-pucca 6.6 15.5 13.3 Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room 2 97.0 94.7 95.2 3-4 2.7 4.3 3.9 5-6 0.4 0.9 0.7 7+ 0.0 0.1 0.1 Total percent 100.0 100.0 100.0 Mean number of persons per room 1.2 1.3 1.3	Type of house				
Pucca 89.4 76.7 79.8 Total percent 100.0 100.0 100.0 Persons per room < 3					
Persons per room 97.0 94.7 95.2 3-4 2.7 4.3 3.9 5-6 0.4 0.9 0.7 7+ 0.0 0.1 0.1 Total percent 100.0 100.0 100.0 Mean number of persons per room 1.2 1.3 1.3					
Persons per room < 3 97.0 94.7 95.2 3-4 2.7 4.3 3.9 5-6 0.4 0.9 0.7 7+ 0.0 0.1 0.1 Total percent 100.0 100.0 100.0 Mean number of persons per room 1.2 1.3 1.3					
< 3	Total percent	100.0	100.0	100.0	
3-4 2.7 4.3 3.9 5-6 0.4 0.9 0.7 7+ 0.0 0.1 0.1 Total percent 100.0 100.0 100.0 Mean number of persons per room 1.2 1.3 1.3	•				
5-6 0.4 0.9 0.7 7+ 0.0 0.1 0.1 Total percent 100.0 100.0 100.0 Mean number of persons per room 1.2 1.3 1.3					
7+ 0.0 0.1 0.1 Total percent 100.0 100.0 100.0 Mean number of persons per room 1.2 1.3 1.3					
Total percent 100.0 100.0 100.0 Mean number of persons per room 1.2 1.3 1.3					
Mean number of persons per room 1.2 1.3 1.3					
Jumber of households 681 2.153 2.834					
	Number of households	681	2,153	2,834	

²⁵

Crowded housing conditions may affect health as well as the quality of life. Less than five percent of households in Kerala live in houses with three or more persons per room. The mean number of persons per room is 1.3 (almost the same as in NFHS-1, when it was 1.4). The mean number of persons per room does not vary by rural-urban residence.

Table 2.10 shows a number of measures related to the socioeconomic status of the household (ownership of land, house, and livestock). Overall, 64 percent of households do not own any agricultural land, slightly lower than the 69 percent in NFHS-1. Sixty-one percent of households in rural areas do not own agricultural land, compared with 73 percent in urban areas. Among those who own agricultural land, only 39 percent have at least some irrigated land. The proportion of households owning a house is 90 percent in urban areas, 94 percent in rural areas, and 93 percent overall. The proportion of households owning livestock is 13 percent in urban areas, 27 percent in rural areas, and 23 percent overall.

The possession of durable goods is another indicator of a household's socioeconomic level, although these goods may also have other benefits. For example, having access to a radio or television may expose household members to innovative ideas or important information about health and family welfare; a refrigerator prolongs the wholesomeness of food; and a means of transportation allows greater access to many services outside the local area. Table 2.11 shows that the majority of households in Kerala have a chair (88 percent), a cot/bed (87 percent), a clock/watch (87 percent), a table (77 percent), a mattress (68 percent), a radio/transistor (66 percent), and an electric fan (57 percent). Other durable goods often found in households are: a pressure cooker (30 percent), a colour television (26 percent), a bicycle (26 percent), a water pump (23 percent), a refrigerator (20 percent), a sewing machine (19 percent), a telephone (18

Table 2.10 Household ownership of agricultural land, house, and livestock							
Percent distribution of households owning agricultural land and percentage owning a house and livestock by residence, Kerala, 1999							
Asset	Urban	Rural	Total				
No agricultural land	72.9	60.9	63.8				
Irrigated land only							
< 1 acre	7.2	8.7	8.3				
1–5 acres	1.6	3.2	2.8				
6+ acres	0.1	0.5	0.4				
Nonirrigated land only							
< 1 acre	14.0	16.4	15.8				
1–5 acres	3.7	6.5	5.8				
6+ acres	0.1	0.5	0.4				
Both irrigated and nonirrigated land							
< 1 acre	0.2	0.9	0.7				
1–5 acres	0.1	2.0	1.6				
6+ acres	0.0	0.5	0.3				
Missing	0.0	0.1	0.0				
Total percent	100.0	100.0	100.0				
Percentage owning a house	89.6	93.9	92.9				
Percentage owning livestock	13.3	26.5	23.3				
Number of households	681	2,153	2,834				

percent), a black and white television (13 percent), and a moped/scootor/motor cycle (11 percent). Only 3 percent of households own a car (3 percent). A much higher proportion of urban households own each of these durable goods than rural households. In Kerala, only negligible proportions of households own bullock carts, threshers, or tractors. Sixty-two percent of households use mainly aluminium kitchenware, and almost all of the rest use stainless steel kitchenware. Although the majority of both urban and rural households use aluminium kitchenware, steel kitchenware is used more widely in urban areas (42 percent) than in rural areas (31 percent).

Table 2.11 shows a summary household measure called the standard of living index (SLI), which is calculated by adding the following scores:

House type: 4 for *pucca*, 2 for semi-*pucca*, 0 for *kachha*;

Toilet facility: 4 for own flush toilet, 2 for public or shared flush toilet or own pit toilet, 1 for shared or public pit toilet, 0 for no facility;

Source of lighting: 2 for electricity, 1 for kerosene, gas, or oil, 0 for other source of lighting;

Main fuel for cooking: 2 for electricity, liquid petroleum gas, or biogas, 1 for coal, charcoal, or kerosene, 0 for other fuel;

Source of drinking water: 2 for pipe, hand pump, or well in residence/yard/plot, 1 for public tap, hand pump, or well, 0 for other water source;

Separate room for cooking: 1 for yes, 0 for no;

Ownership of house: 2 for yes, 0 for no;

Ownership of agricultural land: 4 for 5 acres or more, 3 for 2.0–4.9 acres, 2 for less than 2 acres or acreage not known, 0 for no agricultural land;

Ownership of irrigated land: 2 if owns at least some irrigated land, 0 for no irrigated land;

Ownership of livestock: 2 if owns livestock, 0 if does not own livestock;

Ownership of durable goods: 4 each for a car or tractor, 3 each for a moped/scooter/motorcycle, telephone, refrigerator, or colour television, 2 each for a bicycle, electric fan, radio/transistor, sewing machine, black and white television, water pump, bullock cart, or thresher, 1 each for a mattress, pressure cooker, chair, cot/bed, table, or clock/watch.

Index scores range from 0–14 for a low SLI to 15–24 for a medium SLI to 25–67 for a high SLI. By this measure, 18 percent of households in Kerala have a low standard of living, 54 percent have a medium standard of living, and 28 percent have a high standard of living. The proportion with a low standard of living is much lower in urban areas (8 percent) than in rural areas (22 percent), and the proportion with a high standard of living is much higher in urban areas (41 percent) than in rural areas (24 percent).

Table 2.11 Household ownership of durable goods and standard of living

Percentage of households owning selected durable goods and percent distribution of households by type of kitchenware and the standard of living index, according to residence, Kerala, 1999

Asset	Urban	Rural	Total
Durable goods			
Mattress	79.2	64.5	68.0
Pressure cooker	49.5	23.3	29.6
Chair	94.0	85.8	87.8
Cot/bed	95.2	84.5	87.1
Table	85.0	74.5	77.0
Clock/watch	94.0	85.3	87.4
Electric fan	79.2	50.5	57.4
Bicycle	39.5	21.1	25.5
Radio/transistor	72.2	64.2	66.2
Sewing machine	27.4	16.3	18.9
Telephone	25.0	15.3	17.6
Refrigerator	31.1	17.0	20.4
Television (black and white)	21.5	10.2	12.9
Television (colour)	39.8	20.9	25.5
Moped/scooter/motorcycle	20.2	7.5	10.6
Car	5.9	2.7	3.4
Water pump	26.7	22.3	23.3
Bullock cart	0.1	0.2	0.1
Thresher	0.0	0.1	0.1
Tractor	0.0	0.2	0.2
None of the above	0.6	3.1	2.5
Main type of kitchenware used			
Clay	3.4	4.1	3.9
Aluminium	53.5	64.3	61.7
Cast iron	0.1	0.0	0.0
Brass/copper	0.5	0.3	0.3
Stainless steel	42.4	31.3	33.9
Other	0.1	0.1	0.1
Total percent	100.0	100.0	100.0
Standard of living index			
Low	8.0	21.6	18.3
Medium	51.1	54.4	53.6
High	40.8	24.1	28.1
Total percent	100.0	100.0	100.0
Number of households	681	2,153	2,834

2.6 Lifestyle Indicators

The NFHS-2 Household Questionnaire asked about certain aspects of the lifestyle of household members. Table 2.12 shows the percentages of men and women age 15 and above who chew *paan masala* or tobacco, drink alcohol, or smoke. These lifestyle indicators are of considerable interest because the use of *paan masala*, tobacco, and alcohol may have detrimental effects on health.

The respondent to the Household Questionnaire reported on these lifestyle indicators for all persons in the household and, therefore, the results should be interpreted with caution because the household respondent may not be aware of use that takes place outside the household environs. In addition, to the extent that social stigma may be attached to the use of some of the substances, underreporting is likely.

Ten percent of persons age 15 and above (10 percent of men and 11 percent of women) are reported to chew *paan masala* or tobacco. This proportion rises with age from less than 4

Table 2.12 Lifestyle indicators

Percentage of usual household members age 15 and above who chew *paan masala* or tobacco, drink alcohol, currently smoke, or have ever smoked by selected background characteristics and sex, Kerala, 1999

Background characteristic	Chew paan masala or tobacco	Drink alcohol	Currently smoke	Ever smoked ¹	Number of household members
		MALE			
Age					
15–19	0.5	0.6	1.9	2.0	779
20–24	0.3	2.0	6.8	7.0	663
25–29	3.6	8.1	17.6	19.7	555
				42.1	
30–39	6.4	19.7	37.8		943
40–49	12.3	27.2	50.5	58.9	820
50–59	19.0	25.8	47.0	60.9	561
60+	26.9	16.1	32.9	53.0	670
Residence					
Urban	5.8	15.5	26.7	33.0	1,217
Rural	10.7	14.2	28.8	35.7	3,774
Education					
Illiterate	31.8	28.2	43.6	58.2	374
Literate, < middle school complete	14.4	20.2	44.5	54.0	1,609
Middle school complete	5.8	15.5	26.2	31.4	912
High school complete and above	3.4	7.2	14.0	17.9	2,096
Standard of living index					
Low	16.1	23.0	43.5	48.4	728
Medium	9.3	14.5	29.7	35.8	2,806
High	6.6	10.3	18.0	26.9	1,458
Total	9.5	14.5	28.3	35.0	4,992
		FEMALE			
Age					
15–19	0.0	0.0	0.1	0.1	768
20–24	0.6	0.0	0.0	0.0	716
25–29	0.9	0.0	0.0	0.0	699
30–39	5.0	0.2	0.3	0.3	1,122
40–49	9.9	0.4	0.2	0.4	885
50–59	23.7	0.2	0.5	0.7	564
60+	36.7	0.8	2.0	2.6	798
Residence					
Urban	6.4	0.1	0.2	0.4	1,345
Rural	11.8	0.3	0.2	0.4	4,206
					•
Education	22 5	0.0	4.0	1.0	070
Illiterate	33.5	0.8	1.0	1.2	970
Literate, < middle school complete	14.2	0.1	0.6	0.8	1,652
Middle school complete	1.6	0.2	0.4	0.4	881
High school complete and above	0.4	0.1	0.1	0.2	2,048
Standard of living index					
Low	20.4	0.6	8.0	0.9	866
Medium	10.4	0.2	0.5	0.6	3,036
High	5.3	0.1	0.3	0.4	1,649
Total	10.5	0.2	0.4	0.6	5,552
Total male and female	10.0	7.0	13.6	16.9	10,543

percent in the age groups 15–19 to 25–29 for both men and women, to 27 percent for men and 37 percent for women age 60 and above. For both men and women, the chewing of *paan masala* or tobacco is about twice as common in rural areas as in urban areas, and is inversely related to both education and the standard of living.

Fifteen percent of men age 15 and above drink alcohol, but only a negligible proportion of women drink alcohol. The proportion of men who drink alcohol rises with age, peaking at 27 percent among men age 40–49. Alcohol consumption does not vary much by residence, but declines sharply with education and standard of living. The consumption of alcohol is four times as common among illiterate men (28 percent) as among men who have completed at least high school (7 percent). Similarly, men in households with a low standard of living are more than twice as likely to drink alcohol as men in households with a high standard of living.

Among men age 15 and above, 28 percent currently smoke. This proportion rises from 2 percent at age 15–19 to 51 percent at age 40–49, and then falls to 33 percent at age 60 and above. Smoking among men is almost equally common in rural areas (29 percent) as in urban areas (27 percent). Smoking is three times as common among illiterate men and men who have not completed middle school as among men who have completed at least high school, and is more than twice as common among men with a low standard of living as among men with a high standard of living. Eighty-one percent of men who ever smoked were still smokers at the time of the survey. The pattern of differentials for ever-smokers closely resembles the pattern for current smokers. One percent of women are reported as having ever smoked, and less than 1 percent of women are reported to currently smoke.

2.7 Availability of Facilities and Services to the Rural Population

The NFHS-2 Village Questionnaire collected information from the *sarpanch*, other village officials, or other knowledgeable persons in the village on facilities and services in the village. One important set of questions was on the distance of the village from various types of health facilities, including Primary Health Centres (PHCs), sub-centres, hospitals, and dispensaries or clinics. Table 2.13 summarizes findings on distance from a health facility. The unit of analysis is

Table 2.13 Distance from Percent distribution of ev facility, Kerala, 1999				oy distance fi	rom the nearest	health
			Health fac	ility		
Distance	Primary Health Centre	Sub- centre	Either PHC or sub-centre	Hospital ¹	Dispensary/ clinic	Any health facility
Within village < 5 km 5–9 km 10+ km	73.8 15.4 8.6 2.2	78.9 14.4 1.5 5.1	86.5 10.0 2.2 1.3	52.7 22.9 16.1 8.2	75.6 16.2 6.4 1.8	91.5 8.5 0.0 0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0

Note: The category '< 5 km' excludes cases where the facility is within the village.

PHC: Primary Health Centre

¹Includes community health centre, rural hospital, government hospital, and private hospital

Table 2.14	Availability	of facilitie	s and	services

Percentage of rural residents living in villages that have selected facilities and services, Kerala, 1999

Facility/service	Percentage of residents	Facility/service	Percentage of residents
Primary school	90.1	At least one village household has a telephone	61.3
Middle school	87.1	Mill/small-scale industry	78.7
Secondary school	74.1	Credit cooperative society	81.4
Higher secondary school	46.0	Agricultural cooperative society	50.8
College	5.7	Fishermen's cooperative society	11.6
		Milk cooperative society	67.2
Anganwadi	95.8	Kirana/general market shop	66.5
Adult education centre	57.8	Weekly market	37.0
		Fair price shop	91.3
Primary Health Centre	74.2	Paan shop	97.4
Sub-centre	78.6	Pharmacy/medical shop	81.7
Hospital ¹	53.0	Mahila mandal	83.9
Dispensary/clinic	76.5	Youth club	91.4
		Community centre	39.5
Private doctor	87.6	Community television set	61.7
Visiting doctor	44.9	Cable connection	78.5
Village health guide	38.2		
Traditional birth attendant	48.8	Integrated Rural Development Programme (IRDP)	56.7
Mobile health unit	9.8	National Rural Employment Programme (NREP)	51.5
		Training Rural Youth for Self-Employment (TRYSEM)	63.5
Electricity	100.0	Employment Guarantee Scheme (EGS)	24.0
Bank	89.4	Development of Women and Children of Rural Areas (DWACRA)	50.5
Post office	89.4	Indira Awas Yojana (IAY)	55.1
Telegraph office	51.7	Sanjay Gandhi Niradhar Yojana (SGNY)	13.4
STD (Subscriber Trunk			
Dialling) phone booth	85.7	Total population	11,052

Note: Table is based on the *de jure* population.

¹Includes community health centre, rural hospital, government hospital, and private hospital

ever-married women age 15–49 who reside in rural areas. Seventy-four percent of rural women live in a village with a Primary Health Centre, 79 percent live in a village with a sub-centre, and 87 percent live in a village with either a PHC or a sub-centre. The proportions who live in a village with other health facilities are 53 percent for hospitals and 76 percent for dispensaries or clinics. Ninety-two percent of women live in a village that has some kind of health facility.

Table 2.14 shows the proportion of residents of rural areas of Kerala who live in villages that have various facilities and services. Ninety percent of rural residents live in villages with a primary school, 87 percent live in villages with a middle school, 74 percent live in villages with a secondary school, and 46 percent live in villages with a higher secondary school. Six percent live in villages that have a college. Ninety-six percent of rural residents live in villages that have an *anganwadi*³ (a nursery school for children age 3–6) and 58 percent live in villages with an adult education centre. Eighty-eight percent of rural residents live in villages that have a private doctor and 45 percent live in villages with a visiting doctor. Facilities such as pharmacies or medical shops, banks, post-offices, and credit cooperatives are common in villages where the large majority of the rural population lives. All the rural residents are living in villages that are at least partly electrified.

Although 86 percent live in villages with an STD booth (for long distance telephoning within India), only 61 percent live in villages that have at least one household with a private

³Anganwadi workers provide integrated child development services and may also engage in the promotion of family planning.

telephone. Seventy-nine percent of rural residents live in villages that have cable television service (compared with 28 percent nationwide) and 62 percent live in villages that have a community television set, providing further evidence that exposure to electronic mass media is rather high in Kerala. Eighty-four percent of rural residents live in villages with a *mahila mandal*, a women's community group. Some facilities that are available in villages where less than half of rural residents live are community centres (40 percent), weekly markets (37 percent), and fishermen's cooperative societies (12 percent). The most widely available rural development programme as reported by the respondents to the Village Questionnaire is the Training Rural Youth for Self-Employment (TRYSEM) which is available in villages where 64 percent of the rural population lives. Other programmes listed in Table 2.14, with the exception of the Employment Guarantee Scheme and Sanjay Gandhi Niradhar Yojana, are all available in villages where 50–57 percent of the rural population lives.