

## 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 Madhya Pradesh. 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 Madhya Pradesh may differ because of temporary population movements. Table 2.1 shows the *de facto* population in the NFHS-2 household sample for Madhya Pradesh, classified by age, residence, and sex. The total *de facto* sample population is 36,788. The sample is 26 percent urban and 74 percent rural.

The age distribution of the population in Madhya Pradesh is typical of populations in which fertility has fallen recently, with relatively low proportions of the population in the younger and older age groups (Figure 2.1). Thirty-nine percent are below 15 years of age, and 5 percent are age 65 or older. The proportion below age 15 is higher in rural areas (40 percent) than in urban areas (35 percent), primarily because fertility is higher 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 misreporting of ages, including considerable preference for ages ending in particular digits, especially the digits 0, 2, 5 and 8. 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 and is often used as an indicator of survey quality. Values of the Myers' Index computed for the age range 10–69 in the NFHS-2 household sample population in Madhya Pradesh are 32.6 for males and 30.9 for females. The somewhat lower estimate for females than for males is probably due to the emphasis during interviewer training on obtaining accurate age information for women to correctly determine the eligibility of women for the individual interview. The NFHS-2 Myers' Index values, however, are both higher than the NFHS-1 values (revised from the published NFHS-1 estimates) of 31.0 for males and 24.4 for females, but the difference is greater for females than for males. This suggests that the quality of age reporting may be slightly poorer in NFHS-2 than in NFHS-1 for Madhya Pradesh, especially for females.

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 similar for broad age groups, despite the misreporting of age evident in the NFHS-2 single-year age data.

**Table 2.1 Household population by age and sex**

Percent distribution of the household population by age, according to residence and sex, Madhya Pradesh, 1998–99

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
< 1	2.1	2.2	2.1	2.7	2.6	2.6	2.5	2.5	2.5
1–4	8.3	9.2	8.7	10.2	10.2	10.2	9.7	9.9	9.8
5–9	11.9	12.3	12.1	15.0	14.6	14.8	14.2	14.0	14.1
10–14	12.9	12.0	12.4	12.4	12.9	12.6	12.5	12.6	12.6
15–19	12.0	10.2	11.1	9.8	8.9	9.4	10.3	9.2	9.8
20–24	9.3	9.9	9.6	7.3	8.4	7.8	7.8	8.8	8.3
25–29	8.0	9.0	8.5	7.2	8.2	7.7	7.4	8.4	7.9
30–34	7.3	8.0	7.6	6.7	7.4	7.0	6.9	7.5	7.2
35–39	7.4	6.2	6.8	6.8	5.6	6.2	6.9	5.8	6.4
40–44	5.1	4.4	4.8	4.6	4.0	4.3	4.7	4.1	4.4
45–49	3.7	4.0	3.8	3.5	3.2	3.4	3.5	3.4	3.5
50–54	3.3	3.2	3.2	2.9	2.8	2.8	3.0	2.9	3.0
55–59	2.5	2.5	2.5	2.0	2.9	2.4	2.1	2.8	2.4
60–64	2.2	2.4	2.3	3.2	3.0	3.1	2.9	2.9	2.9
65–69	1.6	1.5	1.6	1.8	2.2	2.0	1.7	2.0	1.9
70–74	1.4	1.6	1.5	2.2	1.7	2.0	2.0	1.7	1.8
75–79	0.6	0.5	0.6	0.7	0.7	0.7	0.7	0.6	0.7
80+	0.6	0.9	0.7	1.0	0.8	0.9	0.9	0.8	0.8
Don't know/missing	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of persons	4,941	4,510	9,451	14,010	13,328	27,338	18,950	17,838	36,788
Sex ratio <sup>1</sup>	NA	NA	913	NA	NA	951	NA	NA	941

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

<sup>1</sup>Females per 1,000 males

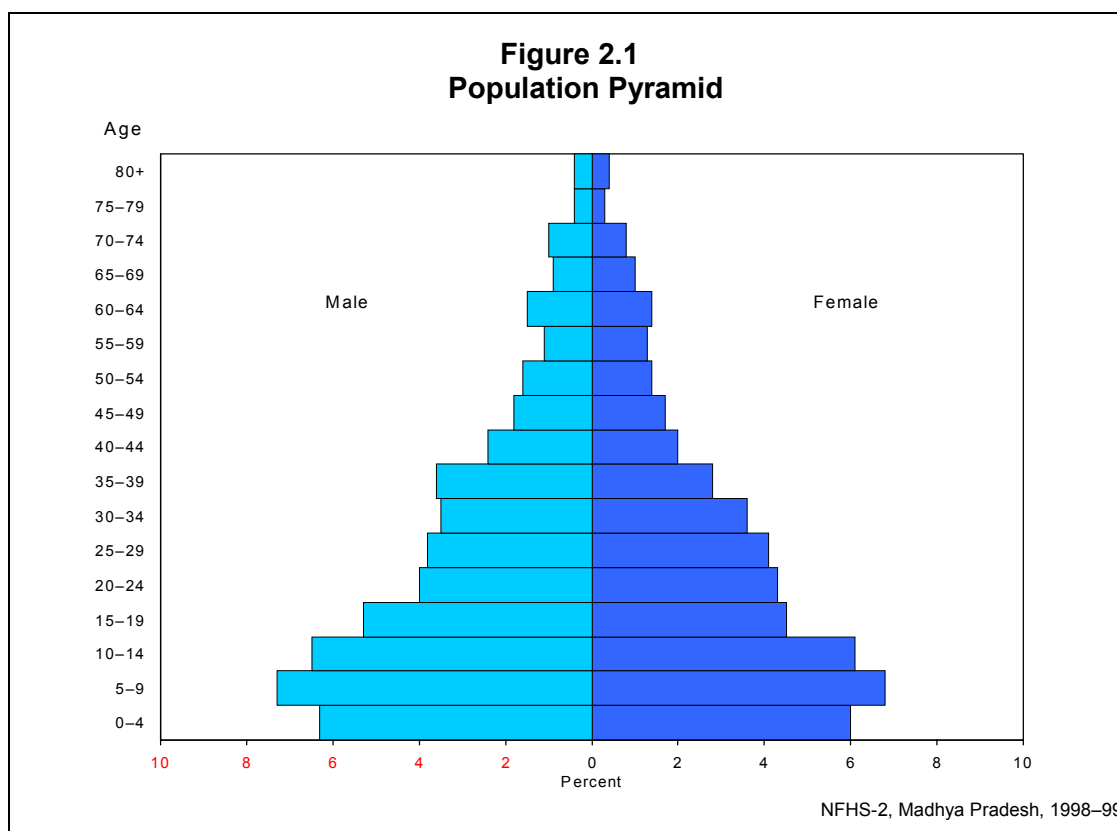


Table 2.2 Population by age and sex from the SRS and NFHS-2					
Percent distribution of population by age and sex from the SRS and NFHS-2, Madhya Pradesh, 1997–99					
Age	SRS (1997)		NFHS-2 (1998–99)		
	Male	Female	Male	Female	Sex ratio <sup>1</sup>
< 5	12.7	12.7	12.2	12.2	936
5–14	26.3	25.7	26.3	26.7	946
15–29	27.1	26.1	25.8	26.5	961
30–49	22.2	22.4	22.2	20.9	880
50–64	8.4	9.1	8.2	8.6	983
65+	3.2	3.8	5.3	5.1	896
Total	100.0	100.0	100.0	100.0	934
Median age	U	U	20.4	20.6	NA

Note: Table is based on the *de jure* population, i.e., usual residents.  
NA: Not applicable  
U: Not available  
<sup>1</sup>Females per 1,000 males  
Source for SRS: Office of the Registrar General, 1999a

Tables 2.1 and 2.2 also present sex ratios (females per 1,000 males) in Madhya Pradesh from NFHS-2. The sex ratio for the *de facto* population (941) in Table 2.1 is higher than the sex ratio for the *de jure* population (934) in Table 2.2. The sex ratio for the *de facto* sample is 913 in urban areas and 951 in rural areas, suggesting that rural-urban migration in Madhya Pradesh has been dominated by males.

## 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 years and above, 54 percent are currently married and 36 percent have never been married. Comparable percentages from NFHS-1 are 59 percent and 32 percent, respectively. The slight increase in the proportion never married over the six and one-half years between the two surveys is largely due to an increase in the age at first marriage. The proportion never married is higher for males (46 percent) than for females (36 percent) and higher in urban areas (51 percent for males and 39 percent for females) than in rural areas (44 percent for males and 35 percent for females). The proportion divorced, separated, or deserted is small, and widowhood is quite limited until the older ages. Notably, 40 percent of women age 50 or older are widowed, but only 14 percent of men in that age group are widowed.

Also of interest is the proportion of persons who marry young. At age 15–19, the proportions ever married are 3 percent for males and 23 percent for females in urban areas, 10 percent for males and 43 percent for females in rural areas, and 8 percent for males and 38 percent for females in the state as a whole. In addition, 4 percent each of males and females in the age group 15–19 in the state are married but *gauna* has not yet been performed. By age 25–29, almost all women (96 percent), and 81 percent of men (64 percent in urban areas and 88 percent in rural areas) have been married. Overall, the table shows that women in Madhya Pradesh marry at much younger ages than men, and that both men and women marry at younger ages in rural areas than in urban areas.

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, Madhya Pradesh, 1998–99

Age	Marital status							Total percent
	Never married	Currently married	Married, <i>gauna</i> not performed	Widowed	Divorced	Separated	Deserted	
<b>URBAN</b>								
Male								
6–12	99.8	0.2	0.0	0.0	0.0	0.0	0.0	100.0
13–14	99.5	0.5	0.0	0.0	0.0	0.0	0.0	100.0
15–19	96.5	2.7	0.8	0.0	0.0	0.0	0.0	100.0
20–24	73.8	25.5	0.4	0.0	0.0	0.0	0.3	100.0
25–29	35.5	62.5	0.5	0.5	0.5	0.5	0.0	100.0
30–49	4.2	93.3	0.2	1.1	0.3	0.2	0.7	100.0
50+	0.4	88.4	0.0	10.7	0.0	0.0	0.5	100.0
Total	51.3	46.2	0.3	1.8	0.1	0.1	0.3	100.0
Female								
6–12	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
13–14	98.3	1.2	0.5	0.0	0.0	0.0	0.0	100.0
15–19	76.6	21.8	0.9	0.0	0.4	0.4	0.0	100.0
20–24	32.3	65.2	0.2	0.4	0.8	0.6	0.4	100.0
25–29	7.7	89.2	0.0	0.5	0.7	0.2	1.7	100.0
30–49	1.3	91.1	0.1	5.3	1.2	0.5	0.4	100.0
50+	0.0	53.6	0.0	45.1	0.8	0.2	0.3	100.0
Total	39.3	51.1	0.2	8.1	0.7	0.3	0.4	100.0
<b>RURAL</b>								
Male								
6–12	99.7	0.1	0.3	0.0	0.0	0.0	0.0	100.0
13–14	98.2	0.0	1.8	0.0	0.0	0.0	0.0	100.0
15–19	85.4	9.3	4.7	0.2	0.1	0.0	0.3	100.0
20–24	41.4	54.2	3.1	0.5	0.6	0.1	0.1	100.0
25–29	12.0	85.0	0.4	1.2	0.5	0.5	0.4	100.0
30–49	2.0	94.7	0.0	2.4	0.5	0.1	0.2	100.0
50+	0.9	83.7	0.0	14.7	0.4	0.0	0.2	100.0
Total	43.6	51.6	1.0	3.2	0.3	0.1	0.2	100.0
Female								
6–12	98.7	0.3	1.0	0.0	0.0	0.0	0.0	100.0
13–14	90.6	4.1	5.3	0.0	0.0	0.0	0.0	100.0
15–19	50.8	42.3	5.8	0.0	0.6	0.3	0.2	100.0
20–24	8.6	87.8	0.9	0.8	1.4	0.3	0.3	100.0
25–29	2.7	93.6	0.0	1.9	1.5	0.1	0.2	100.0
30–49	0.9	92.3	0.1	5.0	1.1	0.1	0.5	100.0
50+	0.0	60.7	0.0	38.5	0.5	0.2	0.1	100.0
Total	34.8	55.1	1.2	7.9	0.7	0.1	0.2	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, Madhya Pradesh, 1998–99								
Age	Marital status							Total percent
	Never married	Currently married	Married, <i>gauna</i> not performed	Widowed	Divorced	Separated	Deserted	
<b>TOTAL</b>								
Male								
6–12	99.7	0.1	0.2	0.0	0.0	0.0	0.0	100.0
13–14	98.6	0.2	1.3	0.0	0.0	0.0	0.0	100.0
15–19	88.8	7.3	3.5	0.1	0.1	0.0	0.2	100.0
20–24	51.5	45.3	2.2	0.3	0.4	0.1	0.2	100.0
25–29	18.7	78.6	0.4	1.0	0.5	0.5	0.3	100.0
30–49	2.6	94.3	0.0	2.1	0.5	0.1	0.4	100.0
50+	0.8	84.8	0.0	13.7	0.3	0.0	0.3	100.0
Total	45.7	50.1	0.8	2.9	0.3	0.1	0.2	100.0
Female								
6–12	99.0	0.3	0.7	0.0	0.0	0.0	0.0	100.0
13–14	92.8	3.3	4.0	0.0	0.0	0.0	0.0	100.0
15–19	58.0	36.6	4.4	0.0	0.6	0.3	0.2	100.0
20–24	15.3	81.4	0.7	0.7	1.3	0.4	0.3	100.0
25–29	4.1	92.4	0.0	1.5	1.3	0.1	0.6	100.0
30–49	1.0	92.0	0.1	5.1	1.1	0.2	0.5	100.0
50+	0.0	59.1	0.0	40.0	0.6	0.2	0.1	100.0
Total	36.0	54.1	0.9	7.9	0.7	0.2	0.2	100.0
Note: Table is based on the <i>de facto</i> 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.								

Table 2.4 shows estimates of the singulate mean age at marriage (SMAM) for men and women, 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, men in Madhya Pradesh are married to women who are, on average, five years younger than them. The census and NFHS-2 data indicate that the age at marriage has risen for both men and women at approximately the same rate (by a total of about 5 years between 1961 and 1998–99). The SMAM in Madhya Pradesh as estimated by NFHS-2 is 18.9 for females and 23.5 for males. Marriage ages are higher in urban areas than in rural areas, with urban men marrying more than three and one-half years later, and urban women marrying more than two and one-half years later, than their rural counterparts.

### 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 number of usual household members. The table is based on the *de jure* population because household type and number of usual household members pertain to the usual-resident population. The table

Table 2.4 Singulate mean age at marriage			
Singulate mean age at marriage by sex from selected sources, Madhya Pradesh, 1961–1998/99			
Source	Singulate mean age at marriage (SMAM)		
	Male	Female	Difference
1961 Census	18.7	13.9	4.8
1971 Census	19.5	15.0	4.5
1981 Census	20.8	16.6	4.2
1991 Census	21.7	17.8	3.9
<b>1992 NFHS-1</b>			
Urban	24.9	19.7	5.2
Rural	21.0	16.7	4.3
Total	22.0	17.4	4.6
<b>1998–99 NFHS-2</b>			
Urban	26.0	20.9	5.1
Rural	22.4	18.2	4.3
Total	23.5	18.9	4.6

Note: Table is based on the *de jure* population. The male SMAM minus the female SMAM may not correspond exactly to the difference in SMAM due to rounding.

shows that 90–95 percent of household heads are male regardless of area or region of residence. Nonetheless, it is notable that 1 in 10 urban households are headed by women. Two-thirds of household heads are age 30–59, and the median age of household heads is slightly higher in urban areas (45 years) than in rural areas (41 years). By region too, the median ages of household heads vary in a narrow range from 41 years to 44 years. Ninety-two percent of household heads are Hindu, 5 percent are Muslim, 1 percent each are Christian and Jain, and less than 1 percent belong to other religions or have no religion. Muslims are concentrated in urban areas; they constitute 14 percent of urban households, but only 2 percent of rural households. By region, households headed by Muslims are most common in the South Western Region, followed by the Northern and Central Regions. Households headed by Christians are relatively common in the Chattisgarh Region only, where 5 percent of household heads are Christian. In all other regions, less than 1 percent of households have a Christian household head. About one-fourth of households (24 percent) in Madhya Pradesh have heads who belong to the scheduled tribes. These households are largely concentrated in the rural areas, where they constitute 30 percent of households. By region, scheduled tribe households are most common in Chattisgarh (37 percent), followed by the South Western (30 percent) and South Central Regions (29 percent). Sixteen percent of households have household heads belonging to the scheduled castes; this proportion is similar in urban and rural areas but ranges from 8 percent in the South Western Region to 21–22 percent in the Vindhya and Central Regions. Forty percent of household heads belong to other backward classes (OBC)<sup>1</sup>. Fifty-six percent of all households are nuclear-family households (consisting of an unmarried adult living alone or a married person or couple and their unmarried children, if any). Mean household size, at 5.6 persons per household, does not vary by urban-rural residence, but does vary by region, from 5.2 in the South Central Region to 6.5 in the Northern Region.

<sup>1</sup>Other backward classes are castes and communities that have been designated by the Government of India as socially and educationally backward and in need of 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 and region, Madhya Pradesh, 1998–99

Characteristic	Residence		Region <sup>1</sup>							Total
	Urban	Rural	1	2	3	4	5	6	7	
<b>Sex of household head</b>										
Male	90.3	93.9	91.4	94.1	94.4	93.7	91.3	93.3	94.7	93.0
Female	9.7	6.1	8.6	5.9	5.6	6.3	8.7	6.7	5.3	7.0
<b>Age of household head</b>										
< 30	9.1	12.5	12.1	15.3	11.9	9.9	11.1	8.8	10.8	11.6
30–44	41.0	39.8	38.7	39.9	39.4	41.2	41.1	42.1	40.1	40.1
45–59	30.0	24.3	27.4	25.4	22.8	25.3	25.8	22.9	27.6	25.7
60+	20.0	23.3	21.6	19.4	25.9	23.6	22.1	26.2	21.6	22.5
Don't know/missing	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Median age	45.0	41.2	43.5	40.8	43.3	42.7	42.4	43.9	42.9	42.5
<b>Religion of household head</b>										
Hindu	82.9	95.3	92.5	97.2	90.2	89.7	95.2	87.2	89.9	92.2
Muslim	13.8	2.0	1.4	2.3	8.6	6.9	3.4	11.4	8.7	5.0
Christian	0.6	1.7	4.8	0.3	0.4	0.2	0.1	0.2	0.0	1.4
Sikh	0.3	0.1	0.2	0.0	0.3	0.2	0.0	0.0	0.3	0.2
Buddhist/Neo-Buddhist	0.1	0.2	0.0	0.0	0.1	0.0	0.9	0.5	0.0	0.2
Jain	2.1	0.6	1.1	0.2	0.3	2.8	0.3	0.6	1.2	1.0
No religion	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0
Missing	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
<b>Caste/tribe of household head</b>										
Scheduled caste	15.4	16.4	15.0	21.3	21.5	14.9	13.4	8.2	18.4	16.1
Scheduled tribe	5.7	29.9	36.7	20.2	7.9	19.4	28.9	30.3	5.6	23.7
Other backward class	41.4	39.3	39.0	38.8	37.1	38.7	44.3	41.1	41.3	39.8
Other	37.5	14.4	9.4	19.5	33.2	27.0	13.4	20.4	34.7	20.2
Don't know/missing	0.0	0.1	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0
<b>Household type</b>										
Nuclear household	58.1	55.8	55.6	62.9	58.3	50.3	61.4	55.9	51.1	56.4
Non-nuclear household	41.8	44.1	44.3	37.1	41.7	49.6	38.6	44.1	48.9	43.5
Household with no usual members	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
<b>Number of usual members</b>										
0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
1	3.8	3.1	3.1	4.7	3.0	2.5	3.2	2.7	3.3	3.2
2	6.0	8.6	8.6	10.8	8.4	6.2	7.4	6.5	5.8	7.9
3	11.1	10.1	12.4	8.4	11.7	10.2	11.1	9.9	6.5	10.4
4	16.7	15.7	18.7	14.5	16.3	13.4	19.2	12.6	13.2	15.9
5	18.7	17.4	16.9	16.6	17.7	19.4	21.2	18.2	14.8	17.8
6	16.6	14.9	15.1	17.2	14.4	16.4	13.5	15.3	14.3	15.3
7	10.0	11.0	9.6	12.5	10.5	9.8	11.0	11.4	11.9	10.7
8	5.0	7.3	5.7	6.0	7.1	6.2	6.5	8.4	9.7	6.7
9+	12.1	12.0	9.8	9.3	11.0	15.7	6.9	15.0	20.4	12.0
Mean household size	5.6	5.6	5.3	5.4	5.5	5.9	5.2	6.0	6.5	5.6
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of households	1,712	5,037	1,817	1,017	669	1,076	869	585	716	6,749

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

<sup>1</sup>See Section 1.4, Chapter 1, for names of regions.

## 2.4 Educational Level

The level of education of household members may affect reproductive behaviour, contraceptive use, the health of children, and the adoption of proper hygienic practices. Table 2.6 shows the percent distribution of the *de facto* household population by literacy and educational 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.)

Table 2.6 shows that 56 percent of females and 28 percent of males age 6 and above are illiterate. Comparable figures from NFHS-1 are 66 percent for females and 36 percent for males, indicating a substantial decline in illiteracy in six and one-half years. Cohort differences in literacy also suggest that there has been considerable progress over time. For example, only 13 percent of women age 50 and over are literate, but the literacy rate doubles for the age group

Table 2.6 Educational level of the household population										
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, Madhya Pradesh, 1998–99										
Age	Educational level <sup>1</sup>							Total percent	Number of persons	Median number of years of schooling
	Illiterate	Literate, < primary school complete	Primary school complete	Middle school complete	High school complete	Higher secondary complete and above	Missing			
<b>URBAN</b>										
Male										
6–9	17.8	82.1	0.2	0.0	0.0	0.0	0.0	100.0	474	1.6
10–14	6.7	35.2	48.9	9.1	0.0	0.0	0.0	100.0	636	5.4
15–19	6.6	6.5	24.1	27.9	20.5	14.4	0.0	100.0	592	9.0
20–29	9.6	4.3	13.8	18.0	13.3	41.0	0.0	100.0	856	10.4
30–39	12.0	7.0	17.1	11.6	11.1	41.3	0.0	100.0	722	10.4
40–49	15.3	8.2	19.5	11.1	8.2	37.6	0.0	100.0	434	8.7
50+	22.9	17.3	16.6	11.1	6.9	25.3	0.0	100.0	595	6.0
Total	12.5	20.4	20.4	13.4	9.1	24.3	0.0	100.0	4,309	7.5
Female										
6–9	21.9	77.9	0.2	0.0	0.0	0.0	0.0	100.0	452	1.7
10–14	11.2	32.0	45.9	10.9	0.0	0.0	0.0	100.0	540	5.3
15–19	16.1	4.9	23.2	23.0	18.2	14.5	0.0	100.0	460	8.6
20–29	25.0	6.5	13.1	14.2	8.7	32.5	0.0	100.0	854	8.5
30–39	44.2	7.3	10.6	8.0	7.8	22.1	0.0	100.0	640	4.5
40–49	45.1	8.4	13.1	9.9	7.2	16.3	0.0	100.0	378	4.1
50+	67.5	10.6	8.9	6.1	1.6	5.2	0.0	100.0	572	0.0
Total	33.0	19.0	16.3	10.5	6.3	14.8	0.0	100.0	3,897	4.7
Total										
6–9	19.8	80.0	0.2	0.0	0.0	0.0	0.0	100.0	926	1.6
10–14	8.7	33.7	47.6	10.0	0.0	0.0	0.0	100.0	1,176	5.3
15–19	10.7	5.8	23.7	25.8	19.5	14.4	0.0	100.0	1,052	8.9
20–29	17.3	5.4	13.5	16.1	11.0	36.7	0.0	100.0	1,709	9.6
30–39	27.1	7.1	14.0	9.9	9.5	32.3	0.0	100.0	1,362	8.2
40–49	29.1	8.3	16.6	10.6	7.8	27.7	0.0	100.0	812	6.7
50+	44.8	14.0	12.8	8.7	4.3	15.4	0.0	100.0	1,168	3.2
Total	22.2	19.7	18.5	12.0	7.8	19.8	0.0	100.0	8,206	5.9



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, Madhya Pradesh, 1998–99										
Age	Educational level <sup>1</sup>							Total percent	Number of persons	Median number of years of schooling
	Illiterate	Literate, < primary school complete	Primary school complete	Middle school complete	High school complete	Higher secondary complete and above	Missing			
<b>RURAL</b>										
Male										
6–9	37.0	62.7	0.3	0.0	0.0	0.0	0.0	100.0	1,583	1.1
10–14	18.4	43.9	34.4	3.3	0.1	0.0	0.0	100.0	1,740	4.3
15–19	18.3	10.1	33.9	27.8	7.5	2.3	0.1	100.0	1,369	7.2
20–29	25.7	9.5	23.1	19.0	8.2	14.6	0.0	100.0	2,025	6.7
30–39	38.4	14.4	19.3	10.6	7.3	9.9	0.0	100.0	1,896	4.5
40–49	38.8	16.4	21.7	10.5	4.8	7.8	0.0	100.0	1,126	4.2
50+	55.9	21.2	12.5	5.1	2.1	3.3	0.0	100.0	1,942	0.0
Total	33.6	25.3	20.4	10.6	4.3	5.7	0.0	100.0	11,690	3.8
Female										
6–9	41.8	57.9	0.1	0.0	0.0	0.0	0.2	100.0	1,511	0.0
10–14	31.1	38.6	27.4	2.8	0.0	0.0	0.0	100.0	1,715	3.6
15–19	46.3	9.2	24.3	14.7	4.4	1.1	0.0	100.0	1,190	3.5
20–29	66.8	7.8	12.5	6.3	3.2	3.5	0.0	100.0	2,219	0.0
30–39	78.0	6.5	9.6	2.5	1.3	2.1	0.0	100.0	1,730	0.0
40–49	84.1	7.1	4.5	1.2	1.0	2.2	0.0	100.0	966	0.0
50+	92.7	4.2	2.1	0.5	0.2	0.2	0.0	100.0	1,860	0.0
Total	63.3	18.6	11.5	3.8	1.4	1.3	0.0	100.0	11,192	0.0
Total										
6–9	39.3	60.4	0.2	0.0	0.0	0.0	0.1	100.0	3,093	1.0
10–14	24.7	41.3	30.9	3.1	0.0	0.0	0.0	100.0	3,454	4.1
15–19	31.3	9.7	29.4	21.7	6.1	1.8	0.0	100.0	2,559	5.8
20–29	47.2	8.6	17.6	12.4	5.5	8.8	0.0	100.0	4,244	3.4
30–39	57.3	10.7	14.7	6.7	4.4	6.2	0.0	100.0	3,626	0.0
40–49	59.7	12.1	13.7	6.2	3.0	5.2	0.0	100.0	2,093	0.0
50+	73.9	12.9	7.4	2.8	1.2	1.8	0.0	100.0	3,802	0.0
Total	48.1	22.0	16.1	7.3	2.9	3.6	0.0	100.0	22,882	1.5

40–49 and steadily increases to 74 percent for the age group 10–14. The literacy gap between males and females has narrowed over time, but even at age 10–14 there remains a significant gap of 11 percentage points (down from 16 percentage points in NFHS-1).

A higher proportion of males than of females has completed each level of schooling. The median number of years of schooling for males is 4.8, whereas the majority of females have never been to school, implying a median of zero. Nonetheless, educational attainment has been increasing over time for both females and males, as is evident from the differences in educational levels by age. For example, the proportion of males completing at least high school increases from 12 percent at age 50 and above to 32 percent at age 20–29. For females, the proportion completing at least high school is almost negligible (2 percent) at age 50 and above, but is 16 percent at age 20–29.

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, Madhya Pradesh, 1998–99										
Age	Educational level <sup>1</sup>							Total percent	Number of persons	Median number of years of schooling
	Illiterate	Literate, < primary school complete	Primary school complete	Middle school complete	High school complete	Higher secondary complete and above	Missing			
<b>TOTAL</b>										
Male										
6–9	32.6	67.2	0.3	0.0	0.0	0.0	0.0	100.0	2,057	1.2
10–14	15.2	41.6	38.3	4.9	0.0	0.0	0.0	100.0	2,375	4.6
15–19	14.8	9.0	31.0	27.8	11.4	6.0	0.0	100.0	1,961	7.6
20–29	20.9	8.0	20.3	18.7	9.7	22.4	0.0	100.0	2,881	8.1
30–39	31.1	12.4	18.7	10.9	8.3	18.6	0.0	100.0	2,618	5.6
40–49	32.3	14.2	21.1	10.7	5.7	16.1	0.0	100.0	1,561	5.3
50+	48.1	20.3	13.5	6.5	3.2	8.4	0.0	100.0	2,538	1.9
Total	27.9	24.0	20.4	11.4	5.6	10.7	0.0	100.0	15,999	4.8
Female										
6–9	37.2	62.5	0.1	0.0	0.0	0.0	0.1	100.0	1,963	1.1
10–14	26.3	37.0	31.8	4.8	0.0	0.0	0.0	100.0	2,255	4.1
15–19	37.9	8.0	24.0	17.0	8.3	4.9	0.0	100.0	1,650	5.4
20–29	55.2	7.4	12.7	8.5	4.7	11.5	0.0	100.0	3,072	0.0
30–39	68.9	6.7	9.9	4.0	3.1	7.5	0.0	100.0	2,370	0.0
40–49	73.1	7.5	6.9	3.7	2.7	6.1	0.0	100.0	1,344	0.0
50+	86.8	5.7	3.7	1.8	0.6	1.4	0.0	100.0	2,432	0.0
Total	55.5	18.7	12.7	5.6	2.7	4.8	0.0	100.0	15,089	0.0
Total										
6–9	34.8	64.9	0.2	0.0	0.0	0.0	0.1	100.0	4,019	1.2
10–14	20.6	39.4	35.1	4.8	0.0	0.0	0.0	100.0	4,631	4.4
15–19	25.3	8.6	27.8	22.9	10.0	5.5	0.0	100.0	3,611	6.9
20–29	38.6	7.7	16.4	13.4	7.1	16.8	0.0	100.0	5,953	5.5
30–39	49.0	9.7	14.5	7.6	5.8	13.3	0.0	100.0	4,988	2.6
40–49	51.2	11.1	14.5	7.4	4.3	11.5	0.0	100.0	2,905	1.7
50+	67.1	13.1	8.7	4.2	1.9	5.0	0.0	100.0	4,970	0.0
Total	41.3	21.4	16.7	8.5	4.2	7.9	0.0	100.0	31,088	2.8
<p>Note: This table and all the subsequent tables (unless otherwise indicated) are based on the <i>de facto</i> population. Illiterate persons may have been to school, but they cannot read and write. Total includes males and females with missing information on age, who are not shown separately.</p> <p><sup>1</sup>In 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.</p>										

Education levels are much higher in urban areas than in rural areas. The proportion illiterate is almost twice as high for rural females (63 percent) as for urban females (33 percent), and more than twice as high for rural males (34 percent) as for urban males (13 percent). Even in urban areas, however, only about half of the males (47 percent) and slightly more than one-quarter of the females (28 percent) age 20 and above 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, Madhya Pradesh, 1998–99									
Age	Male			Female			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
6–10	92.8	80.1	83.1	87.8	73.9	77.1	90.4	77.1	80.2
11–14	86.6	75.4	78.5	80.0	54.9	61.1	83.5	65.0	69.9
15–17	63.4	51.6	55.0	52.6	20.6	28.9	58.7	37.0	42.9
6–14	90.1	78.4	81.4	84.6	66.6	70.8	87.5	72.6	76.2
6–17	84.0	73.1	75.9	77.9	58.0	62.8	81.2	65.7	69.6

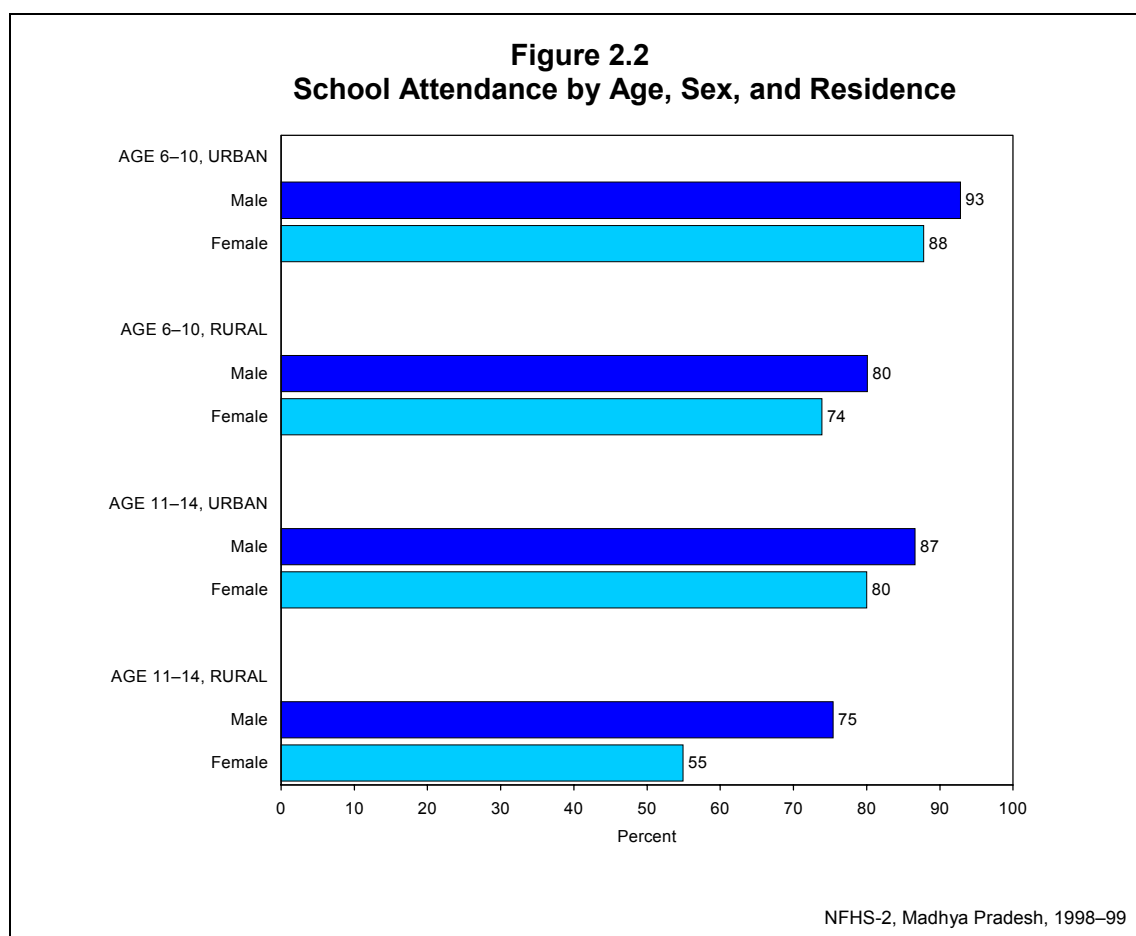


Table 2.7 and Figure 2.2 show school attendance rates for the school-age household population by age, sex, and residence. In the state as a whole, 76 percent of children age 6–14 are attending school, up from 62 percent in NFHS-1. The attendance rate drops off sharply to 43 percent by age 15–17. For the age group 6–17, the attendance rate is 76 percent for males and 63 percent for females. In the state as a whole, 70 percent of children age 6–17 attend school, which is lower than the all-India school attendance rate of 72 percent for this age group. Fifty-five percent of males and only 29 percent of females age 15–17 are attending school. Attendance rates are much higher in urban areas than in rural areas, and the urban-rural gap in attendance rates is greater for females than for males. The male-female gap in attendance rates increases

Table 2.8 Reasons for children not attending school

Percent distribution of children age 6–17 years who never attended school by the main reason for never attending school and 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 residence and sex, Madhya Pradesh, 1998–99

Reason	Urban		Rural		Total	
	Male	Female	Male	Female	Male	Female
<b>Main reason for never attending school<sup>1</sup></b>						
School too far away	1.0	4.0	2.6	5.2	2.4	5.1
Transport not available	1.0	0.6	0.7	1.0	0.7	0.9
Education not considered necessary	2.0	3.8	7.2	11.8	6.6	11.0
Required for household work	1.0	5.9	7.4	16.7	6.7	15.5
Required for work on farm/family business	5.7	2.5	12.3	4.5	11.6	4.3
Required for outside work for payment in cash or kind	3.1	1.5	6.2	2.5	5.9	2.4
Costs too much	29.3	31.9	20.1	20.3	21.1	21.6
No proper school facilities for girls	0.0	0.0	0.0	1.2	0.0	1.1
Required for care of siblings	1.0	6.6	2.1	7.2	2.0	7.1
Not interested in studies	20.0	12.0	17.5	12.1	17.7	12.1
Other	34.8	28.5	23.3	16.0	24.5	17.3
Don't know	1.0	2.6	0.8	1.4	0.8	1.5
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of children	75	125	627	1,049	703	1,174
<b>Main reason for not currently attending school<sup>2</sup></b>						
School too far away	0.0	2.8	1.6	9.1	1.2	7.9
Transport not available	0.0	0.0	0.4	2.9	0.3	2.3
Further education not considered necessary	0.0	2.0	2.1	2.7	1.6	2.6
Required for household work	2.3	15.2	8.9	16.8	7.3	16.5
Required for work on farm/family business	10.3	0.0	14.9	4.6	13.8	3.7
Required for outside work for payment in cash or kind	10.3	3.2	7.5	2.1	8.1	2.4
Costs too much	23.8	19.5	13.3	10.2	15.9	12.0
No proper school facilities for girls	0.0	0.0	0.0	3.7	0.0	3.0
Required for care of siblings	0.0	2.7	1.9	2.5	1.4	2.5
Not interested in studies	35.3	23.4	31.1	20.4	32.1	21.0
Repeated failures	10.6	12.4	9.0	5.6	9.4	7.0
Got married	0.0	6.3	0.2	12.8	0.2	11.5
Other	6.6	11.1	7.7	5.7	7.4	6.8
Don't know	0.9	1.3	1.4	0.9	1.2	1.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of children	156	152	490	615	645	766
<sup>1</sup> For children who never attended school						
<sup>2</sup> For children who have dropped out of school						

with age, and more so in rural areas than in urban areas. At age 6–10, the male-female difference in attendance rates is similar in urban and rural areas (the male attendance rate is 5–6 percentage points higher than the female attendance rate in both urban and rural areas), but at age 15–17 this difference in male-female attendance rates is about three times as high in rural areas (31 percentage points) as in urban areas (11 percentage points).

Table 2.8 shows reasons for children never attending school and not currently attending school. For both boys and girls, the cost of schooling is cited most often (in about one-fifth of cases) as the main reason for never attending school. This reason is slightly less likely to be

mentioned for children not currently attending school. The most mentioned reason for not currently attending school is that the child is not interested in studies, which was cited for 32 percent of boys and 21 percent of girls. A lack of interest in studies is also frequently given as a reason for children (especially boys) never attending school. Not surprisingly, the need to work in the household is mentioned more frequently for girls than for boys. Overall, however, work of any kind (including household work, taking care of siblings, working in a family farm or business, and working outside for payment in cash or kind) is mentioned as the main reason for never attending school for 26 percent of boys and 29 percent of girls, and for not currently attending school for 31 percent of boys and 25 percent of girls. Education is not considered necessary for 7 percent of boys and 11 percent of girls who have never attended school. Marriage is mentioned as the main reason for not currently attending school for 12 percent of girls but for almost none of the boys. The pattern of the reasons for not attending school for boys and girls is similar in urban and rural areas with the exception that the cost of schooling is cited more often in urban areas and education not considered necessary (especially as a reason for never attending school) and the need to work (in the household, on a family farm, or in a family business) are mentioned more often in rural areas. The inaccessibility of schools ('school too far away' and 'transport not available') is mentioned infrequently for both boys and girls, but is more likely to be mentioned in the case of females in rural areas than in any other case.

## **2.5 Housing Characteristics**

Table 2.9 provides information on housing characteristics by residence. Sixty-eight percent of households in Madhya Pradesh have electricity (up from 62 percent in NFHS-1). The proportion of households with electricity is 93 percent in urban areas and 60 percent in rural areas.

Water sources and the availability of sanitary facilities have an important influence on the health of household members, especially children. NFHS-1 and NFHS-2 both included questions on sources of drinking water and type of sanitation facilities. NFHS-2 found that 27 percent of households in Madhya Pradesh use piped drinking water (up from 24 percent in NFHS-1), 37 percent drink water from hand pumps, and 33 percent drink water from wells. As in the case of electricity, there are large urban-rural differences in sources of drinking water: 73 percent of urban households have piped drinking water compared with only 11 percent of rural households. In rural areas, the median time to fetch drinking water is 14 minutes, but in urban areas, since the majority of urban households have water piped into their residence, the implied median time is 0 minutes. Notably, however, for more than one-quarter of even urban households it takes at least 15 minutes to fetch drinking water. Fifty-five percent of households in urban areas and 36 percent of households in rural areas purify water before drinking it. Straining water through a cloth is the method most commonly used by households to purify drinking water. Even in urban areas, less than 1 in 10 households use water filters of any kind.

Regarding sanitation facilities, only 20 percent of households have a flush toilet (using either piped water or bucket water for flushing), up slightly from 16 percent in NFHS-1, 2 percent have a pit toilet or latrine, and 78 percent have no facility. Again there are large urban-rural differences: 61 percent of urban households have a flush toilet, whereas 92 percent of rural households have no toilet facility at all.

Table 2.9 Housing characteristics

Percent distribution of households by housing characteristics, according to residence and region, Madhya Pradesh, 1998–99

Housing characteristic	Residence		Region <sup>2</sup>							Total
	Urban	Rural	1	2	3	4	5	6	7	
<b>Electricity</b>										
Yes	93.1	59.6	58.4	52.2	80.6	89.5	61.5	83.1	66.8	68.1
No	6.9	40.4	41.6	47.8	19.4	10.5	38.5	16.9	33.2	31.9
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Source of drinking water</b>										
Piped	72.6	10.9	16.8	12.8	36.6	34.2	26.0	47.0	33.9	26.6
Hand pump	18.4	43.3	45.5	19.6	35.2	50.0	37.7	28.1	28.4	37.0
Well water	8.1	42.0	34.5	65.3	26.1	13.3	28.7	21.9	37.3	33.4
Surface water	0.1	3.8	3.1	2.4	1.8	1.7	7.4	2.9	0.3	2.9
Other	0.7	0.1	0.1	0.0	0.4	0.9	0.1	0.0	0.0	0.2
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Time to get drinking water</b>										
Percentage < 15 minutes	73.3	47.8	59.0	55.2	51.4	51.3	45.3	62.5	52.4	54.3
Median time (minutes)	0.0	14.2	9.5	9.7	9.8	9.9	14.4	9.1	9.8	9.7
<b>Method of drinking water purification<sup>1</sup></b>										
Strains water by cloth	40.0	30.3	31.8	23.0	24.2	62.6	32.2	39.1	7.6	32.8
Uses alum	3.6	2.6	4.8	0.9	1.6	4.1	3.4	0.5	0.8	2.8
Uses water filter	8.5	0.6	2.3	2.7	8.5	0.7	3.0	1.2	1.5	2.6
Boils water	5.7	2.4	6.3	1.3	2.6	1.4	4.4	1.6	1.3	3.2
Uses electronic purifier	0.7	0.3	0.6	0.0	0.9	0.2	0.5	0.0	0.3	0.4
Uses other method	1.6	1.7	2.5	1.2	1.2	1.8	0.9	3.4	0.1	1.7
Does not purify water	45.3	64.2	55.8	72.7	62.3	33.3	59.1	56.5	89.3	59.4
Missing	0.1	0.0	0.1	0.0	0.2	0.0	0.1	0.0	0.0	0.1
<b>Sanitation facility</b>										
Flush toilet	60.5	6.6	13.5	12.2	31.5	31.4	16.3	21.4	25.4	20.2
Pit toilet/latrine	4.2	1.2	1.4	0.8	3.4	2.1	3.2	1.9	1.7	1.9
No facility	35.2	92.3	85.1	87.0	65.1	66.4	80.5	76.6	72.9	77.8
Missing	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Main type of fuel used for cooking</b>										
Wood	35.9	88.0	81.5	80.4	61.3	62.8	84.6	80.7	64.0	74.8
Crop residues	0.3	0.2	0.3	0.0	0.0	0.3	0.0	0.5	0.0	0.2
Dung cakes	2.1	5.1	1.3	3.9	7.2	4.8	2.7	1.0	13.9	4.3
Coal/coke/lignite/charcoal	5.1	1.7	5.4	6.1	0.8	0.1	0.6	0.3	0.1	2.6
Kerosene	14.0	1.9	3.5	2.8	7.0	6.5	3.2	7.3	7.8	5.0
Electricity	0.5	0.2	0.4	0.5	0.1	0.3	0.0	0.0	0.4	0.3
Liquid petroleum gas	41.5	2.4	7.0	6.1	22.9	24.6	8.3	8.7	13.8	12.3
Biogas	0.5	0.5	0.6	0.2	0.2	0.6	0.5	1.4	0.0	0.5
Other	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0
Missing	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Contd...

Table 2.9 Housing characteristics (contd.)										
Percent distribution of households by housing characteristics, according to residence and region, Madhya Pradesh, 1998–99										
Housing characteristic	Residence		Region <sup>2</sup>							Total
	Urban	Rural	1	2	3	4	5	6	7	
<b>Type of house</b>										
<i>Kachha</i>	4.0	4.7	0.8	2.2	4.1	6.8	4.1	4.6	15.0	4.6
<i>Semi-pucca</i>	45.4	86.6	84.4	83.3	67.5	68.5	83.2	83.1	50.5	76.2
<i>Pucca</i>	50.4	8.6	14.6	14.4	28.4	24.8	12.6	12.3	34.3	19.2
Missing	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Persons per room</b>										
< 3	65.5	55.7	69.8	67.6	51.1	49.8	56.7	45.0	46.8	58.2
3–4	22.6	25.9	21.8	20.3	27.5	27.5	24.2	30.1	30.8	25.0
5–6	8.3	12.4	6.8	8.0	12.5	15.1	13.5	17.0	13.5	11.3
7+	3.6	6.0	1.5	4.1	8.7	7.4	5.5	7.8	8.2	5.3
Missing	0.0	0.2	0.0	0.0	0.1	0.1	0.0	0.2	0.7	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean number of persons per room	2.5	3.0	2.4	2.5	3.1	3.2	2.9	3.4	3.3	2.9
Number of households	1,712	5,037	1,817	1,017	669	1,076	869	585	716	6,749

<sup>1</sup>Total may add to more than 100.0 because households may use more than one method of purification.

<sup>2</sup>See Section 1.4, Chapter 1, for names of regions.

Households' access to electricity, piped water, and toilet facilities also varies greatly by region. In general, the Central, Malwa Plateau, and South Western Regions are more developed in terms of their access to these amenities than most other regions (although households in the South Western Region lag far behind households in the other two regions in their access to flush toilets). By contrast, households in the Vindhya and Chattisgarh Regions are much less likely to have access to each of these three amenities than households in most other regions.

Several types of fuel are used for cooking in Madhya Pradesh; however, wood is still the most common cooking fuel used by 75 percent of all households. Twelve percent of households in the state rely on liquid petroleum gas, 5 percent on kerosene, 4 percent on dung cakes, 3 percent on coal, coke, lignite, or charcoal, and 1 percent on other fuels. While the large majority (88 percent) of households in rural areas use wood as their main cooking fuel, in urban areas, households are somewhat more likely to be using liquid petroleum gas (42 percent) than wood (36 percent). More than 60 percent of households in all regions use wood as the main cooking fuel. With the exception of the Northern Region, in all other regions the second most common cooking fuel after wood is liquid petroleum gas. Even so, only about one in four households use liquid petroleum gas in the Malwa Plateau and Central Regions, and one in seven or less use it in other regions.

Regarding type of house construction, 5 percent of houses are *kachha* (made from mud, thatch, or other low-quality materials), 76 percent are *semi-pucca* (partly low-quality and partly high-quality materials), and 19 percent are *pucca* (high-quality materials throughout, including roof, walls, and floor). Due to possible differences in the NFHS-1 and NFHS-2 definitions of *kachha*, *semi-pucca* and *pucca* housing, results from the two surveys on 'type of house' may not be comparable. Fifty percent of houses in urban areas are *pucca* compared with only 9 percent in

rural areas. By region, the percentage of *pucca* houses ranges from 34 percent in the Northern Region to 12–13 percent in the South Western and South Central Regions.

Crowded conditions may also affect health as well as the quality of life. Forty-two percent of households live in houses with three or more persons per room. The mean number of persons per room is 2.9, almost unchanged from its level in NFHS-1, at 2.8. The mean number of persons per room is 2.5 in urban areas, 3.0 in rural areas, and varies by region between 2.4 in the Chattisgarh Region and 3.4 in the South Western Region.

Table 2.10 gives a number of measures related to the socioeconomic status of households, namely, ownership of agricultural land, a house, and livestock. In Madhya Pradesh, 43 percent of households do not own agricultural land. Thirty-one percent of households in rural areas do not own agricultural land (about the same as in NFHS-1), compared with 78 percent of households in urban areas (down from 86 percent in NFHS-1). In rural areas, over half (51 percent) of the households that own land, own at least some irrigated land. By region, households in the Chattisgarh Region are most likely (68 percent) to own agricultural land, and households in the Central Region are least likely to do so (43 percent). Among households that own agricultural land, however, households in Chattisgarh are less likely than those in most other regions (with the exception of the South Central Region) to own any irrigated land.

Eighty-nine percent of all households in Madhya Pradesh—77 percent in urban areas and 94 percent in rural areas—own a house. House ownership varies little between regions, with the exception of the Northern Region. In the Northern Region 76 percent of households own a house compared with at least 87 percent in all other regions. The proportion of households owning livestock is 23 percent in urban areas, 71 percent in rural areas, and 59 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, in the state as a whole, the majority of households have cots/beds (87 percent), clocks or watches (55 percent), or bicycles (51 percent). Other durable goods often found in households are mattresses (47 percent) and electric fans (40 percent). About one in four households have chairs, radios/transistors, televisions (black and white), tables, or pressure cookers, and smaller proportions have sewing machines (17 percent), water pumps (12 percent), mopeds, scooters, or motorcycles (12 percent), colour televisions (6 percent), refrigerators (6 percent), telephones (5 percent), and cars (1 percent). Urban households are much more likely than rural households to have each of these durable goods. In rural areas, 20 percent of households own a bullock cart, 3 percent own a thresher, and 3 percent own a tractor. Overall, five percent of households do not own any of the listed durable goods and this proportion is lower in urban areas (3 percent) than in rural areas (6 percent). By region, the proportion of households that do not own any of the listed durable goods is lowest (1 percent) in the Malwa Plateau Region, highest (11 percent) in the South Central Region, and between 3–6 percent in all other regions. Stainless steel kitchenware is used by the majority of households in urban and rural areas and in all regions except the South Central Region. Aluminium kitchenware is the next most common type of kitchenware used.



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, according to residence and region, Madhya Pradesh, 1998–99										
Asset	Residence		Region <sup>1</sup>							Total
	Urban	Rural	1	2	3	4	5	6	7	
No agricultural land	78.0	30.7	31.6	43.1	57.2	43.7	49.3	46.2	44.2	42.7
<b>Irrigated land only</b>										
< 1 acre	0.2	1.2	1.6	0.9	0.2	0.9	1.3	0.5	0.2	1.0
1–5 acres	5.8	13.7	14.0	11.5	8.9	10.0	8.3	13.0	14.0	11.7
6+ acres	3.9	5.8	1.5	2.6	4.8	7.0	3.4	5.5	18.9	5.3
<b>Nonirrigated land only</b>										
< 1 acre	0.5	3.1	4.0	3.1	0.1	3.0	2.8	0.2	0.3	2.5
1–5 acres	4.4	22.9	28.9	21.1	11.5	11.0	21.7	12.8	4.4	18.2
6+ acres	2.6	7.4	8.3	6.8	5.4	3.9	6.1	4.9	5.4	6.2
<b>Both irrigated and nonirrigated land</b>										
< 1 acre	0.1	0.1	0.2	0.2	0.0	0.1	0.1	0.0	0.0	0.1
1–5 acres	1.6	6.0	5.6	6.7	2.6	6.9	2.8	5.8	1.6	4.9
6+ acres	2.7	8.7	3.6	3.9	8.7	13.4	3.9	11.1	10.9	7.2
Missing	0.4	0.3	0.6	0.1	0.5	0.1	0.4	0.0	0.1	0.3
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percentage owning a house	76.5	93.6	91.4	91.9	86.8	90.1	93.4	90.1	75.5	89.3
Percentage owning livestock	22.5	71.1	60.4	64.8	49.6	57.9	58.1	58.4	57.1	58.8
Number of households	1,712	5,037	1,817	1,017	669	1,076	869	585	716	6,749

<sup>1</sup>See Section 1.4, Chapter 1, for names of regions.

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

*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;

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 and region, Madhya Pradesh, 1998–99

Asset	Residence		Region <sup>1</sup>							Total
	Urban	Rural	1	2	3	4	5	6	7	
<b>Durable goods</b>										
Mattress	72.9	38.7	25.8	47.1	67.5	71.7	39.1	58.8	47.6	47.4
Pressure cooker	60.0	11.1	15.9	14.3	33.1	38.6	17.0	35.5	22.2	23.5
Chair	59.2	18.4	32.4	20.4	33.9	32.1	27.8	28.2	23.1	28.8
Cot/bed	88.3	87.0	86.9	91.8	85.7	86.3	80.5	89.4	91.8	87.3
Table	52.5	15.2	26.0	18.2	31.7	26.8	22.3	24.4	24.0	24.7
Clock/watch	84.7	45.3	52.3	43.8	62.5	69.8	46.9	64.2	53.7	55.3
Electric fan	77.6	27.2	31.1	29.6	46.6	60.9	29.5	48.4	45.5	40.0
Bicycle	63.6	46.5	63.0	51.7	41.5	51.9	40.8	45.5	42.3	50.8
Radio/transistor	43.4	20.5	33.0	22.2	29.8	29.4	20.3	19.5	20.0	26.3
Sewing machine	41.8	8.3	13.1	11.7	25.2	24.0	11.8	16.3	21.1	16.8
Telephone	13.4	1.5	2.8	1.3	11.7	7.0	3.5	4.0	4.5	4.5
Refrigerator	20.1	1.8	4.6	3.0	15.8	9.2	4.8	3.7	7.0	6.4
Television (black and white)	53.7	15.2	19.5	14.2	28.6	40.5	18.4	30.2	31.5	25.0
Television (colour)	18.7	1.8	4.9	2.1	14.7	10.6	3.9	4.0	4.3	6.1
Moped/scooter/motorcycle	30.8	5.0	11.3	6.2	20.1	17.5	6.8	9.4	10.3	11.5
Car	2.7	0.3	0.9	0.1	3.8	0.6	0.4	0.5	0.8	0.9
Water pump	13.3	10.9	5.1	8.7	14.0	23.4	8.8	17.0	10.5	11.5
Bullock cart	4.8	20.3	13.5	10.0	21.1	18.3	12.2	37.5	13.2	16.4
Thresher	2.3	3.2	0.2	2.5	4.0	7.4	1.6	5.0	3.6	3.0
Tractor	1.9	2.6	0.4	1.1	4.8	4.2	1.3	3.5	5.0	2.4
None of the above	2.6	5.6	5.6	4.7	4.3	1.3	10.7	2.6	3.3	4.8
<b>Main type of kitchenware used</b>										
Clay	0.1	2.9	1.6	1.6	0.6	2.3	6.7	0.4	1.8	2.2
Aluminium	16.3	27.0	30.8	34.2	14.4	8.5	41.1	26.5	4.6	24.3
Cast iron	0.3	1.3	2.5	0.5	0.3	0.4	1.2	0.2	0.1	1.0
Brass/copper	0.6	4.2	8.2	1.6	1.5	1.4	2.1	2.1	0.3	3.3
Stainless steel	82.6	64.6	56.9	62.1	83.2	87.2	48.8	70.8	93.2	69.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Standard of living index</b>										
Low	20.2	42.4	37.7	46.8	32.4	22.7	50.8	30.5	33.3	36.8
Medium	42.2	48.9	49.2	43.2	43.2	52.8	38.5	52.2	49.9	47.2
High	37.2	8.4	12.8	9.7	24.1	24.3	10.6	17.1	16.1	15.7
Missing	0.4	0.3	0.3	0.3	0.3	0.2	0.1	0.2	0.6	0.3
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of households	1,712	5,037	1,817	1,017	669	1,076	869	585	716	6,749

<sup>1</sup>See Section 1.4, Chapter 1, for names of regions.

*Ownership of agricultural land:* 4 for 5.0 acres or more, 3 for 2.0–4.9 acres, 2 for less than 2.0 acres or acreage not known, 0 for no agricultural land;

*Ownership of irrigated land:* 2 if household 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 and 25–66 for a high SLI. By this measure, 37 percent of households in Madhya Pradesh have a low standard of living, 47 percent have a medium standard of living, and 16 percent have a high standard of living. The percentage with a low standard of living is more than twice as high in rural areas as in urban areas (42 and 20 percent, respectively), and the percentage with a high standard of living is more than four times as high in urban areas as in rural areas (37 and 8 percent, respectively). By this measure, the Malwa Plateau and the Central Regions stand out as the most prosperous of all regions (with the highest proportions of households with a high standard of living as well as relatively low proportions of households with a low standard of living), and the Vindhya and South Central Regions as the least prosperous (with the lowest proportions of households with a high standard of living and the highest proportions with a low standard of living).

## 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 can all have detrimental effects on health.

The respondent to the Household Questionnaire reports on these lifestyle indicators for all persons in the household; 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 these substances, underreporting is likely.

Forty-one percent of men and 15 percent of women age 15 and above are reported to chew *paan masala* or tobacco. These proportions rise with age, from 14 percent for men and 4 percent for women age 15–19 to 49–52 percent for men age 30 years and above and 25 percent for women age 50 years and above. The chewing of *paan masala* or tobacco is more common in rural areas than in urban areas and declines sharply with education and the standard of living for both men and women. Even so, almost one-third of the more educated men and men with a high standard of living, chew *paan masala* or tobacco.

Twenty-one percent of men and only 3 percent of women age 15 and above are reported to drink alcohol. The proportion who drink alcohol rises with age. In the age group 40–49, 32 percent of men and 6 percent of women drink alcohol. The proportion of men who drink alcohol is almost twice as high in rural areas as in urban areas. Illiterate men are three times as likely to drink alcohol as men who have completed at least high school. Alcohol consumption among women is negatively related to literacy status: 5 percent of illiterate women drink alcohol whereas 2 percent or less of literate women do so. Alcohol consumption by household members falls sharply with household standard of living.

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, Madhya Pradesh, 1998–99

Background characteristic	Chew <i>paan masala</i> or tobacco	Drink alcohol	Currently smoke	Ever smoked <sup>1</sup>	Number of household members
<b>MALE</b>					
<b>Age</b>					
15–19	14.0	3.4	3.9	4.3	2,024
20–24	31.4	8.7	14.0	15.0	1,551
25–29	39.7	18.9	26.3	30.6	1,458
30–39	49.6	28.5	37.2	43.5	2,700
40–49	52.3	32.0	45.9	54.2	1,643
50–59	49.1	28.8	44.8	53.4	1,018
60+	50.9	24.8	40.1	52.0	1,616
<b>Residence</b>					
Urban	33.7	12.9	21.0	24.8	3,294
Rural	43.1	23.5	32.7	39.0	8,715
<b>Education</b>					
Illiterate	50.1	31.0	43.0	50.5	3,582
Literate, < middle school complete	42.3	22.1	31.6	37.9	3,971
Middle school complete	31.8	12.1	19.5	22.8	1,747
High school complete and above	31.0	9.9	14.9	18.7	2,710
<b>Standard of living index</b>					
Low	47.8	30.2	38.8	45.5	3,459
Medium	39.9	20.0	29.4	34.8	6,078
High	31.8	8.3	16.8	21.2	2,444
Total	40.6	20.6	29.5	35.1	12,010
<b>FEMALE</b>					
<b>Age</b>					
15–19	3.8	0.6	0.0	0.0	1,669
20–24	6.2	1.7	0.2	0.2	1,610
25–29	10.6	2.5	0.2	0.3	1,557
30–39	16.2	3.3	1.0	1.0	2,447
40–49	21.8	6.4	1.4	2.4	1,376
50–59	25.3	5.5	2.0	2.1	1,044
60+	25.2	5.3	2.1	2.5	1,455
<b>Residence</b>					
Urban	10.7	0.3	0.3	0.4	2,949
Rural	16.3	4.5	1.1	1.4	8,208
<b>Education</b>					
Illiterate	19.2	4.7	1.1	1.4	7,234
Literate, < middle school complete	10.9	1.6	0.6	0.7	1,988
Middle school complete	3.8	0.5	0.3	0.3	783
High school complete and above	2.0	0.2	0.2	0.2	1,152
<b>Standard of living index</b>					
Low	22.0	6.4	1.8	2.2	3,255
Medium	14.1	3.0	0.7	0.9	5,579
High	6.2	0.1	0.0	0.1	2,297
Total	14.8	3.4	0.9	1.1	11,158
Total male and female	28.2	12.3	15.7	18.7	23,167
Note: Totals include 1 male with missing information on education and 29 males and 26 females with missing information on the standard of living index, who are not shown separately.					
<sup>1</sup> Includes household members who currently smoke					

Only 1 percent of women are reported to have ever smoked and to currently smoke. Among men age 15 and above, 30 percent currently smoke. The proportion of men who smoke rises from 4 percent at age 15–19 to 46 percent at age 40–49 and then falls to 40 percent at age 60 and above. The proportion who smoke is 56 percent higher in rural areas than in urban areas. Illiterate males are more than twice as likely to smoke as males who have completed at least middle school. The likelihood of smoking also falls sharply with increases in the household standard of living. Eighty-four percent of males 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.

## 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 that can affect health and family planning. 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 ever-married women age 15–49 who reside in rural areas. Ten percent of rural women live in a village with a PHC, 17 percent live in a village with a sub-centre, and 20 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 6 percent for hospitals and 12 percent for dispensaries or clinics. Overall, about one-quarter of rural women (23 percent) live in a village that has some kind of health facility. Median distances from particular health facilities are 9 km for a Primary Health Centre, 5 km for a sub-centre, 11 km for a hospital, and 7 km for a dispensary or a clinic.

Table 2.13 Distance from the nearest health facility						
Percent distribution of ever-married rural women age 15–49 by distance from the nearest health facility, Madhya Pradesh, 1998–99						
Distance	Health facility					Any health facility
	Primary Health Centre	Sub-centre	Either PHC or sub-centre	Hospital <sup>1</sup>	Dispensary/clinic	
Within village	9.5	17.4	20.1	6.3	11.5	22.6
< 5 km	19.2	28.7	31.0	19.2	29.1	36.9
5–9 km	23.0	26.5	26.1	20.6	22.0	24.7
10+ km	48.3	27.5	22.8	54.0	37.3	15.8
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Median distance (in km)	9.0	5.4	4.8	10.8	6.6	3.6

Note: The category '< 5 km' excludes cases where the facility is within the village. When median distance is calculated, 'within village' cases and cases with a facility less than 1 km from the village are assigned a distance of zero.  
 PHC: Primary Health Centre  
<sup>1</sup>Includes community health centre, rural hospital, government hospital, and private hospital

Table 2.14 Availability of facilities and services			
Percentage of rural residents living in villages that have selected facilities and services, Madhya Pradesh, 1998–99			
Facility/service	Percentage of residents	Facility/service	Percentage of residents
Primary school	64.1	At least one village household has a telephone	43.9
Middle school	28.2	Mill/small-scale industry	11.4
Secondary school	13.8	Credit cooperative society	18.6
Higher secondary school	10.3	Agricultural cooperative society	16.2
College	3.0	Fishermen's cooperative society	9.6
Anganwadi	67.9	Milk cooperative society	3.5
Adult education centre	14.4	<i>Kirana</i> /general market shop	66.2
Primary Health Centre	9.6	Weekly market	18.1
Sub-centre	17.1	Fair price shop	36.3
Hospital <sup>1</sup>	6.3	<i>Paan</i> shop	45.9
Dispensary/clinic	11.7	Pharmacy/medical shop	11.3
Private doctor	29.1	Mahila mandal	25.2
Visiting doctor	33.0	Youth club	19.5
Village health guide	61.2	Community centre	16.7
Traditional birth attendant	56.8	Community television set	22.1
Mobile health unit	14.1	Cable connection	24.6
Electricity	87.9	Integrated Rural Development Programme (IRDP)	56.9
Bank	12.0	National Rural Employment Programme (NREP)	8.1
Post office	20.6	Training Rural Youth for Self-Employment (TRYSEM)	23.9
Telegraph office	8.3	Employment Guarantee Scheme (EGS)	10.8
STD (Subscriber Trunk Dialling) phone booth	7.6	Development of Women and Children of Rural Areas (DWACRA)	15.8
		Indira Awas Yojana (IAY)	78.5
		Sanjay Gandhi Niradhar Yojana (SGNY)	24.9
		Total population	28,167

Note: Table is based on the *de jure* population.  
<sup>1</sup>Includes community health centre, rural hospital, government hospital, and private hospital

Table 2.14 shows the proportions of rural residents (the *de jure* rural population) in Madhya Pradesh that live in villages which have various facilities and services. A majority of rural residents (64 percent) live in villages that have a primary school, 28 percent live in villages that have a middle school, and 14 percent live in villages that have a secondary school. Higher secondary schools are available in villages where 10 percent of the rural population lives. More than two-thirds of rural residents (68 percent) live in villages that have an *anganwadi*<sup>2</sup> (a nursery school for children age 3–6 years) and 14 percent live in villages with an adult education centre. Sixty-one percent of rural residents live in villages with a village health guide, and 57 percent in villages with a traditional birth attendant, but only 29 percent live in villages with a private doctor.

The vast majority of rural residents (88 percent) live in villages that are at least partly electrified. Although only 8 percent of rural residents live in villages with an STD booth (for telephoning within India), 44 percent live in villages that have at least one household with a private telephone. One-quarter of rural residents live in villages that have cable television service and less than one-quarter (22 percent) live in villages with a community television, indicating that exposure to modern influences through the electronic mass media is still not pervasive in rural areas of the state. Twenty-five percent live in villages with a *mahila mandal*, a women's community group. Other facilities and clubs that are available in villages where about one-fifth

<sup>2</sup>*Anganwadi* workers provide integrated child development services and may also engage in the promotion of family planning among parents of preschool age children.

or more of rural residents live are *kirana* shops (small grocery stores), *paan* shops, fair price shops, post offices, and youth clubs. The most widely available rural development programmes as reported by the respondents to the Village Questionnaire are the Indira Awas Yojana (IAY) and the Integrated Rural Development Programme (IRDP) which are both available in villages where the majority of the rural population lives. Available in villages where about one-quarter of the rural population lives are the Sanjay Gandhi Niradhar Yojana (SGNY) and the Training Youth for Self-Employment Programme (TRYSEM). The Employment Guarantee Scheme (EGS) and the National Rural Employment Programme (NREP) are each available in villages where only about one-tenth the rural population resides.