

The purpose of this chapter is to provide a descriptive summary of some socioeconomic and demographic characteristics of the population in sampled households. These characteristics include age, sex, place of residence, educational status, marital status, household economic status (the wealth index), and children's living arrangements. The chapter also discusses household facilities and housing characteristics such as source of drinking water, electricity, sanitation facilities, flooring materials, and ownership of household durable goods. Information on the characteristics of the surveyed population is essential because it provides a more complete picture of the household population and gives a wider perspective for interpreting the survey findings in subsequent chapters.

For the purpose of the 2002 EDHS survey, a household is defined as a person or a group of related or unrelated persons who usually live in the same dwelling unit and who have common cooking and eating arrangements. A member of the household is any person who usually lives in the household and a visitor is someone who is not a member of the household, but who stayed in the household the night preceding the interview.

The Household Questionnaire in the survey collected information from all usual residents of the selected household (de jure population) and visitors who stayed in the selected household the night before the interview. The de facto population includes all persons who stayed in the household the night before the interview. The inclusion of both populations in the household survey allows the analysis of either the de jure or the de facto population.

2.1 HOUSEHOLD POPULATION BY AGE, RESIDENCE, AND SEX

The percent distribution of the de facto household population in the 2002 EDHS is shown in Table 2.1 by five-year age groups, according to sex and residence. Of the total household population sampled, 62 percent were living in rural areas and 38 percent in urban areas. Forty-five percent of the household population were males and 55 percent were females. The proportion of males in the sampled households is slightly lower than in 1995. Overall, the age distribution in Table 2.1 shows the expected pattern. The proportion in each five-year age group generally decreases with increasing age. An important exception is the age group 0-4 years, in which the proportions are lower than the next age group (i.e., 5-9). The lower proportions at age 0-4 years are partly due to a recent decline in fertility (see Chapter 3).

Figure 2.1 shows the age-sex structure of the household population more clearly in a population pyramid. The pyramid is broad at the base with the next adjacent bar slightly wider. This is a pattern of a youthful population with high but recently declining fertility.

The distribution of the male and female household population by single year of age is presented in Figure 2.2. The figure shows noticeable heaping at ages ending with 0 and 5 for both sexes. Ages ending with 1 and 9 are underreported.

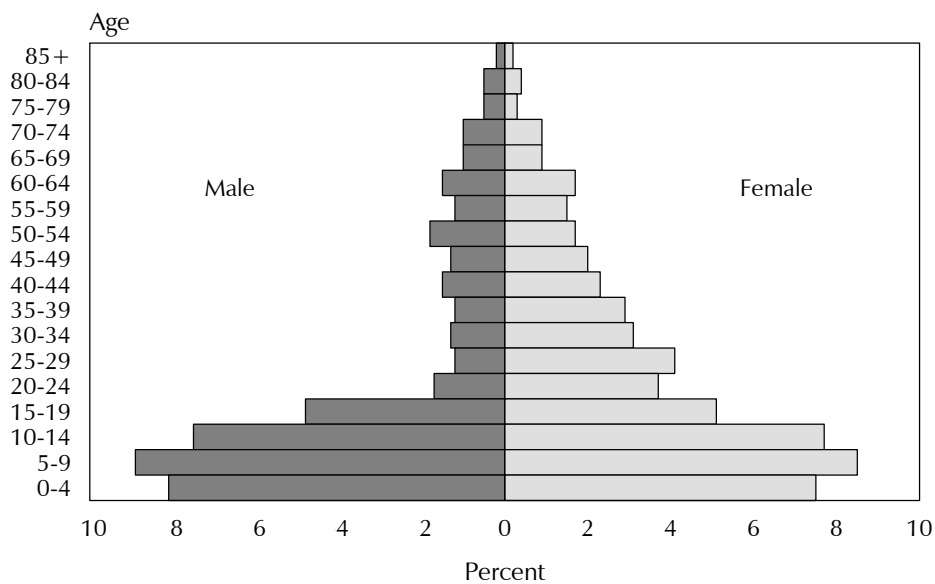
Table 2.1 Household population by age, residence and sex

Percent distribution of the de facto household population by five-year age group, according to sex and residence, Eritrea 2002

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	14.8	11.8	13.1	18.2	14.5	16.2	17.0	13.4	15.0
5-9	17.5	12.5	14.7	20.4	17.4	18.7	19.3	15.5	17.2
10-14	15.7	13.6	14.5	17.7	14.7	16.0	16.9	14.2	15.5
15-19	13.7	11.7	12.6	10.4	8.6	9.5	11.6	9.8	10.6
20-24	4.8	7.9	6.5	3.8	6.4	5.2	4.2	7.0	5.7
25-29	4.3	8.9	6.9	2.2	6.5	4.5	3.0	7.5	5.4
30-34	3.7	5.3	4.6	2.3	5.1	3.8	2.8	5.2	4.1
35-39	2.8	5.7	4.5	2.2	4.7	3.5	2.4	5.1	3.9
40-44	3.2	3.7	3.5	2.9	4.0	3.5	3.0	3.9	3.5
45-49	3.2	3.3	3.3	2.3	3.6	3.0	2.6	3.5	3.1
50-54	3.6	4.3	4.0	3.6	3.0	3.3	3.6	3.5	3.5
55-59	2.7	3.0	2.9	2.7	2.8	2.7	2.7	2.8	2.8
60-64	3.4	2.9	3.1	3.4	3.3	3.3	3.4	3.2	3.3
65-69	2.3	1.7	2.0	2.3	1.8	2.1	2.3	1.8	2.0
70-74	1.7	1.7	1.7	2.4	1.9	2.1	2.1	1.8	2.0
75-79	1.3	0.8	1.0	1.3	0.6	0.9	1.3	0.7	1.0
80 +	1.2	1.2	1.2	1.9	1.1	1.4	1.6	1.1	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	6,504	8,423	14,929	11,362	13,281	24,644	17,865	21,703	39,573

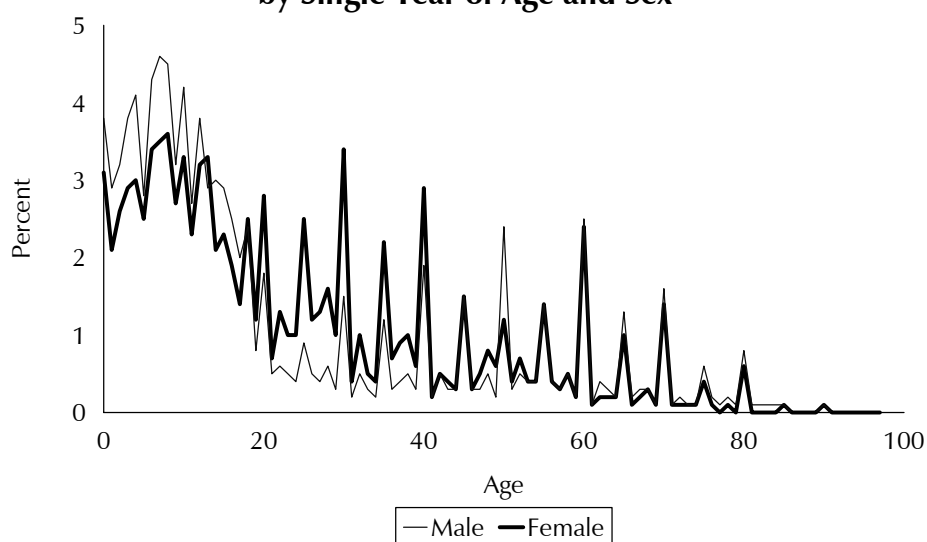
Note: Totals include a small number of people with age or sex not known.

**Figure 2.1
Population Pyramid**



EDHS 2002

Figure 2.2
Distribution of the De Facto Household Population
by Single Year of Age and Sex



EDHS 2002

2.2 HOUSEHOLD COMPOSITION

Table 2.2 presents the distribution of de jure households in the 2002 EDHS sample by sex of head of household and by number of household members. These characteristics are important because they are often associated with socioeconomic differences between households. In addition, the size and composition of households affect the allocation of financial and other resources among household members, which in turn influences the well-being of these individuals. Household size is related to crowding, which can lead to unfavorable health conditions.

Since 1995, the proportion of households in Eritrea headed by females has increased. Slightly more than half (53 percent) of household heads are males, indicating a substantial decrease since 1995 (69 percent). The proportion of female-headed households is higher in urban areas (52 percent) than in rural areas (43 percent). All zobas except zoba Debub, have predominantly male-headed households. Forty-three percent of households have 2-4 members. Large households (9 or more members) account for 8 percent of all households and single-person households account for 7 percent. The proportion of single-person households is higher in urban areas (9 percent) than in rural areas (6 percent). Large households are most common in rural areas. The average household size is 4.8 persons, which is larger than the household size observed in both urban areas and rural areas in 1995 (4.4). Since 1995, the mean household size has increased more in rural areas (4.9) than in urban areas (4.7).

In the 2002 EDHS, information was collected on the displacement status of household members due to the recent war between Eritrea and Ethiopia. Respondents to the Household Questionnaire were asked whether there were any members in the household who had been displaced from their usual place of residence due to the recent war. According to Table 2.2, 7 percent of households have at least one displaced person—11 percent of urban households and 4 percent of rural households. By zoba, the proportion of households with displaced persons is higher in zobas Maekel (11 percent) and Gash-Barka (8 percent) than in other zobas. The average number of displaced persons (in households with displaced persons) is 3.5. Zoba Gash-Barka has the highest mean number of displaced persons (4.6).

Table 2.2 Household composition according to residence and zoba

Percent distribution of households by sex of head of household and household size, and percentage of households with displaced persons, according to residence and zoba, Eritrea 2002

Characteristic	Zoba								Total
	Residence		Debubawi		Semenawi		Cash-Barka	Debub	
	Urban	Rural	Keih Bahri	Maekel	Keih Bahri	Anseba			
Sex of head of household									
Male	47.8	56.8	54.5	50.6	61.6	59.8	59.3	45.1	53.3
Female	52.2	43.2	45.5	49.4	38.4	40.2	40.7	54.9	46.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of usual members									
1	8.8	6.2	9.2	8.8	6.0	4.8	6.8	7.6	7.2
2	11.9	12.3	17.1	12.3	13.3	10.2	13.8	10.8	12.2
3	14.8	15.1	18.4	13.2	15.4	14.5	17.8	14.1	15.0
4	16.9	15.1	16.1	16.3	15.8	16.0	15.1	15.6	15.8
5	13.7	13.3	13.8	11.7	15.2	12.8	14.4	13.6	13.4
6	11.9	12.9	10.8	11.9	12.7	13.3	11.8	13.3	12.5
7	8.6	9.8	6.4	9.7	9.6	9.8	8.5	9.8	9.4
8	5.8	6.8	4.4	6.5	5.7	8.9	5.8	6.3	6.4
9+	7.6	8.5	3.7	9.7	6.3	9.8	6.0	9.0	8.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean size	4.7	4.9	4.1	4.9	4.7	5.1	4.6	4.9	4.8
Percentage of households with displaced persons	10.6	4.0	3.4	10.9	0.9	1.2	8.1	7.4	6.6
Number of households	3,634	5,755	328	2,122	1,195	1,181	1,800	2,763	9,389
Mean number of displaced persons per household ¹	3.4	3.5	2.6	3.2	*	*	4.6	3.1	3.5
Number of households with displaced persons	384	225	11	227	10	15	144	203	610

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

¹ Based on households with displaced persons

2.3 FOSTERHOOD AND ORPHANHOOD

Foster children are children under 15 years of age who are not living with either of their biological parents. Orphaned children are children under 15 years of age who have lost one or both of their biological parents. To measure the prevalence of child fostering and orphanhood, four questions were asked in the Household Questionnaire on the survival status and residence of the parents of children under 15 years of age. Information on children's living arrangements and orphanhood is presented in Table 2.3.

In Eritrea, 76 percent of children under age 15 live with both parents. The proportion of children living with both parents decreases with increasing age. Rural children are more likely to live with both parents than urban children. By residence, the percentage of children who live with both parents is lowest in Asmara and, among zobas, in zoba Maekel. Eighteen percent of children live with only one parent—

Table 2.3 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 15 by children's living arrangements and survival status of parents, according to background characteristics, Eritrea 2002

Background characteristic	Living with both parents	Living with mother but not father		Living with father but not mother		Not living with either parent			Missing information on father/mother	Total	Number of children	
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive				Both dead
Age												
<2	84.9	13.4	0.8	0.0	0.1	0.4	0.1	0.0	0.0	0.3	100.0	2,274
2-4	82.7	11.8	1.9	0.2	0.6	1.3	0.9	0.1	0.1	0.4	100.0	3,790
5-9	77.3	9.9	4.0	0.8	1.9	3.0	1.6	0.4	0.7	0.5	100.0	7,026
10-14	67.3	8.4	10.2	1.2	3.0	4.2	1.8	1.5	1.6	0.9	100.0	6,343
Sex												
Male	76.7	10.3	5.0	0.7	1.8	2.5	1.2	0.5	0.8	0.5	100.0	9,849
Female	75.2	10.1	5.4	0.7	1.8	3.0	1.5	0.7	0.8	0.7	100.0	9,582
Residence												
Total urban	67.6	16.1	6.2	1.2	1.3	3.5	1.2	1.1	1.0	0.9	100.0	6,462
Asmara	63.9	16.7	7.9	1.2	1.8	3.3	1.2	1.5	1.0	1.5	100.0	2,594
Other towns	70.1	15.6	5.0	1.2	1.0	3.7	1.2	0.8	1.0	0.4	100.0	3,868
Rural	80.1	7.3	4.8	0.5	2.1	2.4	1.4	0.4	0.6	0.5	100.0	12,970
Zoba												
Debubawi Keih Bahri	71.3	11.7	7.1	1.1	1.8	3.5	1.2	0.9	1.0	0.5	100.0	550
Maekel	69.1	13.5	7.2	1.1	1.4	3.3	1.0	1.2	0.8	1.4	100.0	3,654
Semenawi Keih Bahri	78.4	9.4	5.0	0.6	1.9	1.5	1.7	0.5	0.6	0.3	100.0	2,527
Anseba	82.4	6.2	3.2	0.5	2.3	2.7	1.5	0.5	0.6	0.1	100.0	2,836
Gash-Barka	77.1	8.0	5.9	0.5	2.8	1.9	2.3	0.2	1.0	0.2	100.0	3,626
Debub	75.8	11.5	4.5	0.8	1.2	3.4	0.9	0.6	0.7	0.6	100.0	6,241
Total 2002	76.0	10.2	5.2	0.7	1.8	2.8	1.4	0.6	0.8	0.6	100.0	19,433
Total 1995	71.8	11.8	6.4	1.0	2.7	2.8	1.1	0.8	0.7	0.9	100.0	11,269

Note: Total includes two children with missing information on sex.

15 percent with their mothers and 3 percent with their fathers. Seven percent of children live with only one parent because the other parent is dead. The proportion of children living with their father only because their mother is dead is higher in zoba Gash-Barka than in other zobas. Foster children—children not living with either parent—account for 6 percent of children under age 15 and orphaned children—children who have lost one or both parents—account for 10 percent. Among children age 10-14, one in six is an orphan.

A comparison of the last two rows in Table 2.3 shows that the proportion of children under 15 years who live with both of their parents has increased from 72 percent in 1995 to 76 percent in 2002. The proportion who live with their mothers only declined from 18 to 15 percent, and those who live with their fathers only decreased from 4 to 3 percent. The proportion of orphaned children decreased from 12 percent to 10 percent.

2.4 EDUCATION LEVELS OF THE HOUSEHOLD POPULATION

Education is a key determinant of the lifestyle and status an individual enjoys in society. It affects many aspects of life, including health, employment, marriage, and demographic behaviors. Studies have consistently shown that education has a strong effect on reproductive behavior, fertility, childhood mortality, morbidity, and contraceptive use, as well as attitudes and awareness related to family health and hygiene.

Educational Attainment of the Household Population

In the 2002 EDHS survey, information on educational attainment was collected for every member of the household age six years and above. Primary education in Eritrea starts at 7 years of age and continues until age 11; it is followed by two years for middle school, and an additional four years for secondary education. Table 2.4 shows the distribution of the de facto male and female household populations age six years and over by educational level, according to age, residence, and zoba.

Educational attainment at each age is higher for males than for females. Fifty-two percent of female household members have never attended school, compared with 39 percent of males. However, among the population with any schooling, about one-fourth of males as well females have completed at least primary school. The median number of years of schooling is 0.7 for males and 0.0 for females because the majority of women have never attended school.

Rapid increases in educational attainment for both sexes can be seen from the declining proportion without any formal education in successively younger age groups. For example, the proportion of women with no education decreases from 95 percent at age 65 and above to 21 percent at age 10-14. The higher proportions uneducated among those age 6-9 years for both sexes (51 percent and 54 percent for boys and girls, respectively) is mostly due to the inclusion of children age six in the age group; those children have not yet attended school. Officially, the minimum age for attending school in Eritrea is 7 years. There have been marked improvements since the 1995 EDHS in educational attainment among both males and females, but the differentials in 2002 show the same patterns by zoba, residence, and sex as in the past. For example, in 1995, the proportions of boys and girls age 10-14 who had never attended school were 32 percent and 40 percent, respectively, compared with 15 percent and 21 percent, respectively, in 2002.

Urban areas have a wide lead over rural areas in level of education attained. For example, 82 percent of males and 70 percent of females in urban areas have some education, compared with less than half of males (48 percent) and one-third of females in rural areas. Asmara, the most urbanized area in the country, has the highest proportion of males and females with some education (88 percent and 77 percent, respectively). The median number of years of schooling for urban males and urban females is 4.1 and 2.6, respectively, and 0.0 for both males and females in rural areas. By residence, the difference in the median number of years of schooling between males and females is highest in other towns (the median is 2.8 years for males and 1.1 years for females).

Educational attainment varies widely among zobas. The proportion of males and females with some education is lowest in zoba Gash-Barka (38 and 26 percent, respectively) and highest in zoba Maekel (86 and 76 percent, respectively). The median number of years of schooling for males is 4.7 years in zoba Maekel, much lower in zobas Debubawi Keih Bahri and Debub, and 0.0 in all other zobas. The median number of years for schooling is one year lower for females (3.7 years) than for males in zoba Maekel, and is 0.0 for females in all other zobas.

To determine the literacy level in the country, for each person age six and above, the question was asked if the person could read and write in any language without difficulty. More than half

Table 2.4 Educational attainment of the household population

Percent distribution of the de facto household populations age six and over by highest level of education attended or completed, median number of years of schooling, and percentage literate, by sex, according to background characteristics, Eritrea 2002

Background characteristic	Highest level of schooling attended or completed							Total	Number	Median number of years of schooling	Percentage literate
	No education	Some primary	Completed primary ¹	Some secondary	Completed secondary ²	More than secondary	Don't know/missing				
MALE											
Age											
6-9	50.8	47.7	0.0	0.0	0.0	0.0	1.5	100.0	2,940	0.0	31.5
10-14	14.7	80.6	1.1	3.4	0.0	0.1	0.1	100.0	3,024	2.0	79.5
15-19	12.3	47.4	3.2	33.7	1.9	1.4	0.1	100.0	2,072	5.3	86.7
20-24	20.1	27.1	3.8	30.2	9.5	8.5	0.7	100.0	751	6.3	81.4
25-29	19.7	25.1	1.5	21.0	19.7	12.3	0.7	100.0	528	7.0	81.4
30-34	37.8	21.0	2.9	11.6	17.5	8.4	0.8	100.0	503	3.9	67.1
35-39	47.0	22.3	3.0	10.5	10.8	6.2	0.2	100.0	430	1.6	60.8
40-44	54.5	20.6	1.9	7.3	7.6	7.1	1.0	100.0	536	0.0	54.7
45-49	49.6	25.3	3.0	7.6	7.2	6.6	0.7	100.0	473	0.0	59.6
50-54	58.8	20.3	2.2	6.9	4.8	5.6	1.4	100.0	648	0.0	49.6
55-59	63.1	19.5	1.3	5.5	4.2	5.3	1.0	100.0	480	0.0	46.3
60-64	74.2	15.8	1.5	2.2	3.1	1.7	1.6	100.0	605	0.0	34.5
65+	82.4	12.9	0.3	1.1	0.8	0.7	1.7	100.0	1,319	0.0	31.4
Residence											
Total urban	18.2	45.4	2.8	18.0	8.1	6.3	1.3	100.0	5,370	4.1	80.7
Asmara	10.4	42.2	2.6	18.9	12.3	11.5	2.1	100.0	2,420	5.5	88.9
Other towns	24.6	48.1	2.9	17.2	4.6	2.0	0.6	100.0	2,950	2.8	73.9
Rural	51.6	40.7	0.8	5.0	0.8	0.5	0.6	100.0	8,951	0.0	46.7
Zoba											
Debubawi Keih Bahri	37.6	37.8	2.8	9.8	8.4	2.5	1.0	100.0	410	1.7	60.0
Maekel	13.8	45.3	2.4	18.0	9.6	9.0	2.0	100.0	3,186	4.7	85.0
Semenawi Keih Bahri	52.7	37.6	2.2	4.7	1.4	0.8	0.7	100.0	1,893	0.0	48.1
Anseba	45.7	44.2	1.3	5.6	2.5	0.4	0.4	100.0	2,028	0.0	52.3
Gash-Barka	61.7	30.4	1.2	4.7	0.8	0.6	0.5	100.0	2,700	0.0	37.5
Debub	34.4	50.1	0.8	11.6	1.6	1.0	0.4	100.0	4,105	0.7	62.8
Total	39.1	42.5	1.6	9.9	3.5	2.7	0.8	100.0	14,321	0.7	59.4
FEMALE											
Age											
6-9	53.8	44.6	0.1	0.0	0.0	0.0	1.5	100.0	2,825	0.0	28.7
10-14	21.3	74.0	1.1	3.5	0.0	0.0	0.2	100.0	3,092	1.9	73.4
15-19	21.5	47.2	2.7	24.4	3.0	1.0	0.1	100.0	2,136	4.6	77.1
20-24	41.5	27.9	3.0	16.4	8.8	2.1	0.2	100.0	1,515	2.1	57.9
25-29	46.4	26.3	1.8	12.9	9.7	2.7	0.2	100.0	1,618	1.2	53.5
30-34	65.7	19.1	0.9	5.4	7.4	1.2	0.4	100.0	1,130	0.0	35.6
35-39	65.5	20.4	1.2	4.8	6.3	1.7	0.1	100.0	1,105	0.0	34.4
40-44	72.8	15.7	1.1	3.7	3.8	2.7	0.3	100.0	845	0.0	27.0
45-49	79.5	14.9	1.4	1.5	1.7	0.5	0.5	100.0	753	0.0	20.5
50-54	78.7	12.7	0.5	1.6	1.2	1.3	4.0	100.0	750	0.0	19.6
55-59	85.4	10.0	0.0	1.7	0.5	0.4	2.0	100.0	616	0.0	12.1
60-64	91.0	4.7	0.2	0.9	0.0	0.3	2.9	100.0	684	0.0	5.9
65+	95.0	2.1	0.3	0.2	0.2	0.0	2.3	100.0	1,178	0.0	3.3
Residence											
Total urban	30.2	41.8	2.3	14.7	7.3	2.3	1.4	100.0	7,259	2.6	65.6
Asmara	20.6	38.3	2.7	20.7	11.7	3.6	2.3	100.0	3,525	4.7	75.3
Other towns	39.2	45.1	1.9	9.0	3.2	1.0	0.6	100.0	3,734	1.1	56.4
Rural	67.0	29.8	0.5	1.9	0.3	0.0	0.5	100.0	10,994	0.0	28.9
Zoba											
Debubawi Keih Bahri	54.8	28.9	2.5	8.3	4.1	0.4	1.0	100.0	567	0.0	41.6
Maekel	23.9	41.0	2.5	18.1	9.3	2.9	2.3	100.0	4,506	3.7	72.0
Semenawi Keih Bahri	69.2	26.4	1.0	1.9	1.1	0.1	0.3	100.0	2,216	0.0	28.0
Anseba	60.2	34.2	0.7	3.5	1.0	0.0	0.5	100.0	2,368	0.0	36.6
Gash-Barka	74.2	23.1	0.6	1.5	0.4	0.1	0.1	100.0	3,179	0.0	22.0
Debub	52.7	40.0	0.7	4.5	1.1	0.6	0.5	100.0	5,417	0.0	41.9
Total	52.4	34.5	1.2	7.0	3.1	0.9	0.9	100.0	18,253	0.0	43.5

Note: Total includes 8 females and 13 males with missing information on age, who are not shown separately.

¹ Completed 5 grade at the primary level

² Completed 11 grades at the secondary level

(51 percent) of the population are literate. There is a significant difference in the literacy level by sex. Overall, 59 percent of males and 44 percent of females are literate. There are marked differentials in the literacy level by residence. Eight in ten males and almost two-thirds of females in urban areas are literate, compared with less than half (47 percent) of males and less than one-third (29 percent) of females in rural areas.

School Attendance Ratios

Information on the net attendance ratio (NAR), gross attendance ratio (GAR), and gender parity index (GPI) by school level, according to sex, residence, zoba, and wealth index is shown in Tables 2.5.1-2.5.3. The NAR indicates participation in primary schooling for the population age 7-11, in middle schooling for the population age 12-13, and in secondary schooling for the population age 14-17. The GAR measures participation at each level of schooling among population age 6-24. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent. The GPI at a given school level is defined as the ratio of the GAR for females to the GAR for males, and indicates the magnitude of the gender gap in attendance ratios. If there is no gender difference, the GPI will be equal to 1, whereas the wider the disparity in favor of males, the closer the gap will be to zero. If the gender gap favors females, the GPI exceeds 1.

Table 2.5.1 Primary school attendance ratios

Primary school net attendance ratios (NAR), gross attendance ratios (GAR), and the gender parity index for the de jure household population age 7-11, by sex, according to background characteristics, Eritrea 2002

Background characteristic	Net attendance ratio ¹			Gross attendance ratio ²			Gender parity index ³
	Male	Female	Total	Male	Female	Total	
Residence							
Total urban	79.4	80.6	80.0	112.3	121.4	116.6	1.08
Asmara	86.9	89.3	88.1	114.7	119.2	116.9	1.04
Other towns	75.1	75.0	75.1	110.9	122.9	116.5	1.11
Rural	54.7	49.7	52.3	103.0	82.3	92.9	0.80
Zoba							
Debubawi Keih Bahri	57.2	47.7	52.7	84.0	71.0	77.9	0.84
Maekel	85.4	89.6	87.5	117.8	121.5	119.7	1.03
Semenawi Keih Bahri	46.7	38.3	42.7	89.2	69.2	79.6	0.78
Anseba	57.2	49.3	53.3	111.9	85.7	98.8	0.77
Gash-Barka	42.7	37.8	40.4	84.7	70.9	78.1	0.84
Debub	72.4	69.8	71.1	118.9	110.3	114.8	0.93
Wealth index							
Lowest	43.6	33.8	39.0	93.6	63.9	79.4	0.68
Second	52.8	46.6	49.8	96.4	79.7	88.4	0.83
Middle	64.1	64.9	64.5	114.3	104.9	109.6	0.92
Fourth	81.9	81.6	81.7	120.9	120.2	120.6	0.99
Highest	85.3	86.4	85.8	113.5	121.3	117.0	1.07
Total	62.8	59.4	61.2	106.1	94.6	100.5	0.89

¹ Percentage of the primary-school-age (7-11 years) population that is attending primary school

² Total number of primary school students, expressed as a percentage of the official primary-school-age population.

³ The gender parity index for primary school is the ratio of the primary school GAR for females to the GAR for males.

Table 2.5.2 Middle school attendance ratios

Middle school net attendance ratios (NAR), gross attendance ratios (GAR), and the gender parity index for the de jure household population age 12-13, by sex, according to background characteristics, Eritrea 2002

Background characteristic	Net attendance ratio ¹			Gross attendance ratio ²			Gender parity index ³
	Male	Female	Total	Male	Female	Total	
Residence							
Total urban	40.0	38.1	39.0	116.2	106.6	111.0	0.92
Asmara	49.6	54.7	52.3	121.1	133.6	127.7	1.10
Other towns	33.1	27.1	29.8	112.7	88.8	99.5	0.79
Rural	13.6	9.1	11.2	58.9	34.0	45.9	0.58
Zoba							
Deububawi Keih Bahri	31.8	28.1	29.8	76.3	63.7	69.5	0.84
Maekel	48.4	49.0	48.7	115.9	121.5	118.8	1.05
Semenawi Keih Bahri	14.3	10.7	12.3	92.4	29.9	57.0	0.32
Anseba	15.2	12.0	13.5	64.7	42.5	53.2	0.66
Gash-Barka	6.4	1.9	4.0	35.6	17.6	25.9	0.50
Deubub	20.6	17.4	19.0	79.6	67.2	73.2	0.84
Wealth index							
Lowest	4.6	4.2	4.4	38.6	18.5	27.6	0.48
Second	9.4	5.5	7.4	59.4	30.5	44.3	0.51
Middle	19.8	12.2	15.8	83.4	42.3	61.6	0.51
Fourth	34.3	32.1	33.2	95.0	106.9	101.2	1.12
Highest	51.5	52.2	51.9	129.0	124.4	126.6	0.96
Total	22.7	19.6	21.1	78.6	60.4	68.9	0.77

¹ Percentage of the middle-school-age (12-13 years) population that is attending middle school

² Total number of middle school students, expressed as a percentage of the official middle-school-age population.

³ The gender parity index for middle school is the ratio of the middle school GAR for females to the GAR for males.

Table 2.5.1 shows that more than six in ten (61 percent) primary-school-age children are currently attending primary school. Only one in five (21 percent) middle-school-age children is attending middle school (Table 2.5.2), while one in four (23 percent) secondary-school-age youths is attending secondary school (Table 2.5.3). The NAR is slightly higher among males than among females at each level. Attendance ratios are much lower in rural areas than in urban areas at all three levels of schooling.

Regarding variations by zoba, the NAR in zoba Maekel is the same for boys and girls at the middle-school level and the secondary-school level, but higher for girls than for boys at the primary-school level. In the other zobas, it is consistently higher for boys than for girls at each level. Net attendance ratios are lowest in zoba Gash-Barka and highest in zoba Maekel, followed by zoba Deubub. There is a positive correlation between the wealth index¹ and attendance ratios for both sexes at each school level.

The GAR has a pattern similar to that of the NAR. The GAR is higher among males than females, at 106 and 95, respectively, at the primary level; 79 and 60, respectively, at the middle-school level; and

¹ The wealth index used in this analysis is discussed on page 19.

50 and 35, respectively, at the secondary-school level. The GPI for these levels is 0.89, 0.77, and 0.71, respectively, indicating that the deficit of females increases with level of education.

Table 2.5.3 Secondary school attendance ratios

Secondary school net attendance ratios (NAR), gross attendance ratios (GAR), and the gender parity index for the de jure household population age 14-17, by sex, according to background characteristics, Eritrea 2002

Background characteristic	Net attendance ratio ¹			Gross attendance ratio ²			Gender parity Index ³
	Male	Female	Total	Male	Female	Total	
Residence							
Total urban	44.4	36.6	40.4	87.1	61.1	73.6	0.70
Asmara	48.3	45.4	46.6	86.5	80.7	83.2	0.93
Other towns	41.9	28.0	35.3	87.4	42.0	65.9	0.48
Rural	13.4	8.4	11.3	27.2	12.4	20.9	0.46
Zoba							
Debabawi Keih Bahri	42.5	24.3	33.7	57.7	37.8	48.1	0.66
Maekel	42.6	42.6	42.6	78.6	72.3	75.2	0.92
Semenawi Keih Bahri	14.2	8.4	11.9	27.1	13.7	21.9	0.51
Anseba	16.1	13.2	15.0	33.8	21.5	28.8	0.64
Gash-Barka	9.4	4.8	7.4	29.3	7.2	19.9	0.25
Debub	28.6	16.3	22.9	56.5	24.3	41.7	0.43
Wealth index							
Lowest	7.0	2.0	5.1	14.5	4.4	10.7	0.30
Second	8.4	4.9	6.9	22.1	6.4	15.2	0.29
Middle	18.2	11.6	15.2	36.2	15.0	26.7	0.41
Fourth	45.2	29.4	37.4	91.9	46.5	69.4	0.51
Highest	47.5	45.2	46.3	85.4	78.3	81.6	0.92
Total	25.1	21.6	23.5	49.7	35.3	43.0	0.71

¹ Percentage of the secondary-school-age (14-17 years) population that is attending secondary school
² Total number of secondary school students, expressed as a percentage of the official secondary-school-population.
³ The gender parity index for secondary school is the ratio of the secondary school GAR for females to the GAR for males.

The differentials in GAR and GPI by residence and zoba are small at the primary school level but become more pronounced as the level of education increases. At the middle school level, the total GAR is lower in rural areas than in urban areas and in zobas Semenawi Keih Bahri, Anseba, and Gash Barka than in other zobas. The lowest GAR is in zoba Gash-Barka (26). The GPI at the middle-school level ranges from 0.32 in zoba Semenawi Keih Bahri to 1.10 in Asmara, indicating that there is a huge deficit of females in the zoba, while females have a slight edge in school attendance in Asmara. The GAR and GPI at the secondary-school level are generally lower than at the middle-school level. The GPI is lowest for zoba Gash-Barka (0.25) and deficit of females is evident for all subgroups. The female deficit observed at the secondary-school level could be partly due to young women getting married and dropping out of school, especially in rural areas.

At the primary school level, for different levels of the wealth index the GAR varies from 79 to 117 and the GPI varies from 0.68 to 1.07. The differences by sex are small at the primary-school level. At higher levels of schooling, there is greater variation in the GAR and the GPI by wealth index. At the middle-school level, the total GAR increases from 28 to 127 going from the lowest to the highest quintile. The GPI is around 0.50 for the three lowest quintiles of the wealth index. Females from households in the

fourth quintile of the wealth index have a slight edge over males, and the deficit of females at the secondary-school level is even greater for the three lowest quintiles.

The wealth index used here is one recently developed and tested in a large number of countries in relation to inequities in household income, use of health services, and health outcomes (Rutstein, Johnson, and Gwatkin, 2000). It is an indicator of wealth that is consistent with expenditure and income measures (Rutstein, 1999).

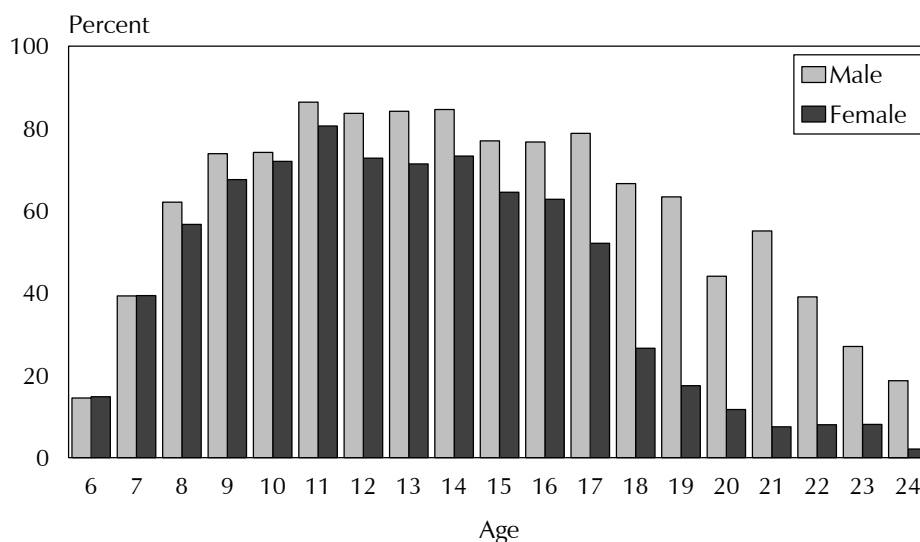
The wealth index was constructed using household asset data (including country-specific assets) and principal components analysis. The asset information was collected through the 2002 EDHS Household Questionnaire, and covers information on household ownership of a number of consumer items ranging from a television to a bicycle or car, as well as dwelling characteristics such as source of drinking water, sanitation facilities, and type of material used in flooring.

Each asset was assigned a weight (factor score) generated through principal components analysis, and the resulting asset scores were standardized in relation to a standard normal distribution with a mean of zero and a standard deviation of one (Gwatkin et al., 2000). Each household was then assigned a score for each asset, and the scores were summed for each household; individuals were ranked according to the total score of the household in which they resided. The sample was then divided into population quintiles; each quintile was designated a rank, from one (lowest) to five (highest).

Current School Attendance

The age-specific attendance rates (ASARs) for the population age 6-24 by single year and sex are shown in Figure 2.3. The ASAR indicates school attendance at any level, from primary to higher levels of education. Although the minimum age for schooling in Eritrea is 7 years, there are some children attending school at younger ages. A majority of children are not attending school at age 7. The peak attendance is at age 11 when 86 percent of boys and 82 percent of girls are currently attending school. The male-female disparity in attending school is small at younger ages (in favor of males). However,

Figure 2.3
Age-Specific Attendance Rates



Note: Figure shows percentage of the de jure household population age 6-24 years attending school.

EDHS 2002

differentials by sex in school attendance become wider beginning at age 17. For example, one in five males age 24 is attending school, compared with only one in 50 females.

2.5 MARITAL STATUS

The 2002 EDHS includes information on the marital status of all household members age 15 and above. Table 2.6 shows the current marital status of the de facto household population by age, sex, and residence. In this report, “marriage” refers to both formal and informal unions. An informal union is one in which the man and woman live together for some time, intending to have a lasting relationship, but do not have a formal civil, cultural or religious marriage ceremony. Among females age 15 and above, 62 percent are currently married and 19 percent have never been married. The proportion never married is much higher among males (39 percent) than among females (19 percent), and is higher in urban areas (46 percent for males and 28 percent for females) than in rural areas (34 percent for males and 12 percent for females). Percentages currently divorced and separated are generally small, regardless of age, sex, and place of residence. One in eight women age 15 and above in urban areas and rural areas is currently widowed, compared with 2-3 percent of men. By age group, the percentage of women widowed is small except at older ages (age 40 and above). For example, among women age 50 and above in both urban areas and rural areas, more than two in ten women are widowed. The higher percentage of older woman than men who are widowed reflects sex differentials in age at marriage, longevity, and remarriage rates. A discussion of marital patterns among women age 15-49 is contained in Chapter 6.

Table 2.6 Marital status of the de facto household population

Percent distribution of the de facto household population age 15 and above by marital status, according to age, residence and sex, Eritrea 2002

Characteristic	Current marital status						Missing	Total	Number of women
	Never married	Married	Living together	Widowed	Divorced	Not living together			
URBAN									
Male									
15-19	98.0	0.5	0.0	0.0	0.0	0.0	1.5	100.0	889
20-24	92.4	3.7	1.2	0.0	1.0	0.0	1.7	100.0	315
25-29	73.0	24.1	1.8	0.0	1.0	0.0	0.0	100.0	277
30-34	38.7	55.6	3.9	0.0	0.8	0.0	1.0	100.0	243
35-39	21.0	70.8	4.1	0.8	2.2	1.1	0.0	100.0	184
40-44	8.1	85.0	3.1	2.4	0.7	0.1	0.5	100.0	209
45-49	4.4	90.3	3.0	1.0	1.4	0.0	0.0	100.0	207
50+	1.6	90.6	1.6	2.1	2.3	0.0	1.7	100.0	240
Total	45.6	48.8	1.4	1.8	1.3	0.2	0.9	100.0	3,386
Female									
15-19	88.5	10.0	0.5	0.0	0.7	0.2	0.1	100.0	988
20-24	48.9	42.0	3.1	0.4	3.4	2.1	0.0	100.0	662
25-29	21.8	63.3	5.0	2.4	5.5	1.8	0.2	100.0	749
30-34	9.2	68.3	4.5	4.5	9.1	3.7	0.7	100.0	447
35-39	4.4	76.1	3.5	4.2	9.4	2.1	0.2	100.0	481
40-44	2.5	71.6	2.6	12.1	5.1	6.2	0.0	100.0	313
45-49	1.5	61.1	4.5	14.8	15.0	2.7	0.4	100.0	280
50+	4.2	59.0	0.5	21.1	13.1	1.7	0.3	100.0	360
Total	28.0	48.7	2.5	12.0	6.4	2.0	0.4	100.0	5,234
RURAL									
Male									
15-19	96.3	2.3	0.1	0.1	0.2	0.0	1.0	100.0	1,183
20-24	80.4	17.9	0.0	0.4	0.7	0.0	0.6	100.0	436
25-29	47.8	47.3	2.1	0.9	0.9	0.5	0.4	100.0	250
30-34	12.1	82.1	1.3	1.2	3.3	0.0	0.0	100.0	260
35-39	7.0	86.3	2.0	1.2	2.9	0.0	0.5	100.0	245
40-44	2.5	92.3	0.0	2.3	2.0	0.0	1.0	100.0	326
45-49	2.6	91.5	0.5	3.8	1.6	0.0	0.0	100.0	266
50+	1.0	93.2	0.7	3.0	2.1	0.1	0.0	100.0	415
Total	33.9	60.6	0.6	3.1	1.3	0.1	0.4	100.0	4,971
Female									
15-19	52.7	43.5	0.5	0.0	2.1	0.4	0.8	100.0	1,148
20-24	14.2	77.4	0.9	1.0	4.5	1.5	0.5	100.0	853
25-29	4.9	83.2	1.8	0.9	7.7	1.0	0.4	100.0	868
30-34	2.2	85.9	1.6	3.3	5.7	1.3	0.0	100.0	682
35-39	1.6	83.0	2.9	5.1	5.7	1.8	0.0	100.0	624
40-44	0.4	84.8	0.9	9.4	4.1	0.4	0.0	100.0	532
45-49	0.6	79.0	1.8	10.9	6.4	1.3	0.0	100.0	473
50+	0.8	67.9	0.8	22.3	7.4	0.3	0.5	100.0	394
Total	11.5	68.2	1.1	12.8	5.2	0.9	0.3	100.0	7,103
TOTAL									
Male									
15-19	97.0	1.5	0.1	0.1	0.1	0.0	1.2	100.0	2,072
20-24	85.4	11.9	0.5	0.2	0.9	0.0	1.0	100.0	751
25-29	61.1	35.1	2.0	0.4	1.0	0.2	0.2	100.0	528
30-34	25.0	69.3	2.6	0.6	2.1	0.0	0.5	100.0	503
35-39	13.0	79.7	2.9	1.0	2.6	0.5	0.3	100.0	430
40-44	4.7	89.4	1.2	2.4	1.5	0.0	0.8	100.0	536
45-49	3.4	91.0	1.6	2.6	1.5	0.0	0.0	100.0	473
50+	1.2	92.2	1.0	2.7	2.2	0.0	0.6	100.0	655
Total	38.6	55.8	0.9	2.6	1.3	0.1	0.6	100.0	8,357
Female									
15-19	69.3	28.0	0.5	0.0	1.4	0.3	0.5	100.0	2,136
20-24	29.4	61.9	1.9	0.7	4.1	1.7	0.3	100.0	1,515
25-29	12.8	74.0	3.3	1.6	6.7	1.4	0.3	100.0	1,618
30-34	5.0	79.0	2.7	3.7	7.0	2.3	0.3	100.0	1,130
35-39	2.8	80.0	3.2	4.7	7.3	1.9	0.1	100.0	1,105
40-44	1.2	79.9	1.5	10.4	4.5	2.5	0.0	100.0	845
45-49	1.0	72.4	2.8	12.4	9.6	1.8	0.1	100.0	753
50+	2.4	63.7	0.7	21.7	10.1	1.0	0.4	100.0	754
Total	18.5	59.9	1.7	12.5	5.7	1.4	0.4	100.0	12,337

2.6 EMPLOYMENT STATUS OF HOUSEHOLD POPULATION

Tables 2.7.1 and 2.7.2 show the distribution of household populations of females and males age 10 and above by employment status and type of earnings, according to background characteristics. Sixty-nine percent of males and 16 percent of females age 15 years and above were employed in the month before the survey and are considered currently employed. The proportions for males and females age 15-64 employed are 72 percent and 17 percent, respectively. The proportion currently employed peaks at age 30-34 for males (93 percent) and at age 25-29 for females (26 percent). For both sexes, there is a moderate decline in employment at age 60 and above. However, remarkably, almost half of males age 65 and above were employed the month before the survey. Tables 2.7.1 and 2.7.2 show that overall, the vast majority of children age 10-14 attend school, and only a small proportion were employed in the month before the survey. Children's employment varies by sex; boys are more likely to be employed than girls (4 percent and 1 percent, respectively). Around four in ten persons age 10-14 are not paid for their work.

Table 2.7.1 Employment status: women

Percent distribution of the de jure female household population age 10 and over by employment status and type of earnings, according to background characteristics, Eritrea 2002

Background characteristic	Employment status					Number of women	Type of earnings					Total employed women	
	Not employed, in school	Not employed in past month	Employed in past month	Missing	Total		Cash	In-kind	Both cash and in-kind	Not paid	Missing		Total
Age													
10-14	69.7	24.2	1.3	4.9	100.0	3,185	40.5	7.0	2.3	39.4	10.8	100.0	41
15-19	43.2	47.0	9.1	0.7	100.0	2,247	80.1	3.6	0.7	12.9	2.7	100.0	205
20-24	7.2	69.5	22.7	0.6	100.0	1,660	86.0	1.4	0.7	11.0	0.8	100.0	377
25-29	0.0	73.5	25.7	0.8	100.0	1,719	86.6	1.1	1.0	8.6	2.7	100.0	442
30-34	0.0	80.8	18.7	0.4	100.0	1,172	81.8	2.4	2.5	12.2	1.2	100.0	220
35-39	0.0	77.8	21.7	0.5	100.0	1,135	81.7	3.5	4.5	10.2	0.0	100.0	247
40-44	0.0	82.8	16.8	0.3	100.0	878	81.2	3.4	2.2	9.5	3.7	100.0	148
45-49	0.0	80.8	19.0	0.2	100.0	783	76.7	3.2	7.0	13.0	0.0	100.0	149
50-54	0.0	83.3	16.2	0.5	100.0	796	79.9	5.7	4.4	8.9	1.0	100.0	129
55-59	0.0	88.5	10.5	1.0	100.0	650	78.3	6.3	5.8	9.7	0.0	100.0	68
60-64	0.0	92.5	5.9	1.6	100.0	715	75.0	2.7	5.3	17.0	0.0	100.0	42
65+	0.0	93.4	5.4	1.2	100.0	1,220	75.8	8.5	5.6	8.5	1.6	100.0	66
Residence¹													
Urban	14.1	57.5	27.5	0.9	100.0	5,072	89.5	1.6	0.6	6.8	1.4	100.0	1,394
Asmara	13.7	52.7	32.3	1.3	100.0	2,596	90.4	0.6	0.1	7.2	1.6	100.0	840
Other towns	14.5	62.6	22.4	0.6	100.0	2,476	88.1	3.2	1.4	6.2	1.1	100.0	554
Rural	5.7	84.4	9.5	0.4	100.0	6,684	67.7	4.9	6.6	19.2	1.6	100.0	634
Zoba¹													
Deubawi Keih Bahri	7.4	58.1	34.4	0.2	100.0	409	58.8	0.6	0.3	40.2	0.1	100.0	141
Maekel	13.6	55.3	30.0	1.1	100.0	3,202	89.0	1.2	0.3	7.5	1.9	100.0	961
Semenawi Keih Bahri	5.5	84.1	9.4	0.9	100.0	1,458	84.4	4.5	1.3	9.8	0.0	100.0	138
Anseba	10.8	82.2	6.9	0.1	100.0	1,421	76.8	4.0	13.3	4.9	1.0	100.0	98
Gash-Barka	3.5	83.9	11.9	0.7	100.0	2,012	81.9	1.6	5.2	9.1	2.3	100.0	239
Debub	9.9	76.0	13.8	0.3	100.0	3,255	77.6	6.1	4.5	10.6	1.1	100.0	451
Population age 10+	20.5	64.8	13.2	1.5	100.0	16,170	81.6	2.9	2.6	11.2	1.7	100.0	2,134
Population age 15+	8.4	74.8	16.1	0.7	100.0	12,986	82.4	2.9	2.6	10.6	1.5	100.0	2,093
Population age 10-64	22.1	62.5	13.8	1.6	100.0	14,941	81.8	2.8	2.5	11.3	1.7	100.0	2,068
Population age 15-64	9.3	72.8	17.2	0.6	100.0	11,756	82.7	2.7	2.5	10.7	1.5	100.0	2,028

Note: The populations age 10 and over and age 15 and over include 9 women with missing information on age.

¹ Based on women age 15-64

Table 2.7.2 Employment status: men

Percent distribution of the de jure male household population age 10 and over by employment status and type of earnings, according to background characteristics, Eritrea 2002

Background characteristic	Employment status					Number of men	Type of earnings					Total employed men	
	Not employed, in school	Not employed in past month	Employed in past month	Missing	Total		Cash	In-kind	Both cash and in-kind	Not paid	Missing		Total
Age													
10-14	76.7	15.5	3.9	3.9	100.0	3,158	31.2	13.1	7.8	43.8	4.1	100.0	122
15-19	63.2	13.4	23.0	0.5	100.0	2,416	60.4	5.1	11.8	21.2	1.5	100.0	555
20-24	19.7	11.4	68.5	0.4	100.0	1,539	76.9	1.1	6.0	13.3	2.8	100.0	1,054
25-29	0.0	10.5	89.2	0.3	100.0	1,424	77.4	1.3	4.5	14.3	2.5	100.0	1,270
30-34	0.0	6.7	93.2	0.1	100.0	1,166	79.2	1.4	8.4	9.8	1.2	100.0	1,087
35-39	0.0	8.0	91.9	0.1	100.0	910	79.6	1.5	9.6	8.3	1.0	100.0	836
40-44	0.0	8.5	91.4	0.1	100.0	898	72.2	4.5	12.7	8.4	2.1	100.0	821
45-49	0.0	10.0	90.0	0.0	100.0	704	71.9	5.3	13.3	8.3	1.2	100.0	633
50-54	0.0	12.9	87.1	0.0	100.0	814	61.8	7.3	21.3	8.3	1.4	100.0	709
55-59	0.0	13.9	86.1	0.0	100.0	567	54.3	11.2	21.8	11.6	1.0	100.0	489
60-64	0.0	24.8	75.2	0.0	100.0	673	47.0	11.3	27.7	11.9	2.1	100.0	506
65+	0.0	52.2	47.5	0.3	100.0	1,427	36.3	14.9	32.2	13.7	2.8	100.0	678
Residence¹													
Urban	19.2	10.9	69.6	0.3	100.0	4,568	85.0	0.9	1.3	11.0	1.7	100.0	3,179
Asmara	14.6	12.2	72.7	0.5	100.0	2,217	82.2	0.3	0.0	14.9	2.6	100.0	1,613
Other towns	23.5	9.6	66.6	0.2	100.0	2,352	88.0	1.5	2.7	7.1	0.7	100.0	1,566
Rural	14.6	12.2	73.1	0.1	100.0	6,542	61.5	6.0	18.8	11.7	1.9	100.0	4,781
Zoba¹													
Debabawi Keih Bahri	10.7	11.9	77.2	0.2	100.0	345	77.7	0.1	0.2	21.4	0.7	100.0	266
Maekel	16.2	12.1	71.4	0.4	100.0	2,810	80.4	0.9	0.4	15.4	2.9	100.0	2,005
Semenawi Keih Bahri	16.5	12.9	70.3	0.3	100.0	1,327	67.7	6.1	15.9	8.7	1.6	100.0	933
Anseba	18.5	11.0	70.5	0.0	100.0	1,436	64.7	0.8	30.3	3.1	1.1	100.0	1,013
Gash-Barka	11.5	13.3	74.9	0.2	100.0	2,150	59.1	5.7	22.9	10.1	2.1	100.0	1,611
Debub	19.9	9.9	70.1	0.2	100.0	3,042	74.5	6.6	5.2	12.7	1.0	100.0	2,131
Population age 10+	27.1	16.2	55.8	1.0	100.0	15,710	67.7	5.0	13.4	12.1	1.9	100.0	8,765
Population age 15+	14.6	16.3	68.9	0.2	100.0	12,552	68.2	4.8	13.5	11.6	1.9	100.0	8,642
Population age 10-64	29.8	12.5	56.6	1.0	100.0	14,268	70.3	4.1	11.8	11.9	1.8	100.0	8,082
Population age 15-64	16.5	11.7	71.6	0.2	100.0	11,110	70.9	4.0	11.9	11.5	1.8	100.0	7,960

Note: The populations age 10 and over and age 15 and over include 15 men with missing information on age.

¹ Based on men age 15-64

Differentials in employment status by residence and zoba are examined for persons age 15-64, the age considered economically active in Eritrea. There is a slight difference in the level of current employment for males by urban-rural residence, with rural males more likely to be employed than urban males. However, rural males and males living in Asmara have the same level of employment (73 percent). In contrast, females are almost three times as likely to be employed in urban areas as in rural areas. However, females are also most likely to be employed in Asmara than in other areas. By zoba, the highest levels of both female and male employment are in zoba Debubawi Keih Bahri (34 percent and 77 percent, respectively). The differentials by zoba in male employment are small; at least 70 percent of males are employed in all zobas. The differentials in female employment are marked: one-third of females in Debubawi Keih Bahri are currently employed, compared with only 7 percent in Anseba. A substantial majority of employed females and males age 15-64 reported that they earn only cash (83 percent and 71 percent, respectively), and 3 percent of females and 12 percent of males reported that they receive cash

plus some payment in kind. Men and women employed in rural areas and in zobas Anseba and Gash-Barka are more likely to be paid in cash and in-kind than other men and women. Thus, there are only small differences in the proportion of employed persons receiving some cash by residence and zoba.

2.7 HOUSING CHARACTERISTICS

In the Household Questionnaire, respondents were asked about characteristics of their households, including access to electricity, source of drinking water, time to water source, time at water source, type of toilet facilities, fuel used for cooking, main flooring material, and number of rooms used for sleeping. Table 2.8 summarizes this information by residence.

In Eritrea, 32 percent of the households have electricity, a substantial increase from 23 percent in 1995. However, there has been almost no increase in households with electricity in rural areas. Only 3 percent of rural households have electricity, compared with 78 percent of urban households—almost all households in Asmara and 61 percent of households in other towns.

Information on a household's source of drinking water is important because potentially fatal diseases including typhoid, cholera, and dysentery are prevalent in unprotected water sources. Sources of water expected to be relatively free of these diseases are piped water, water drawn from protected wells, and water delivered by tanker trucks. Piped water is mainly accessible in urban areas; seven in ten households in Asmara, more than six in ten in other towns, and 18 percent (all from public tap) in rural areas use piped water. Around one-fourth of households in Asmara and other towns depend on tanker trucks to deliver water. More than half of households in rural areas have access to public wells (half of them protected and the other half unprotected) and 17 percent use spring water. Overall, half of rural households have access to clean water.

The accessibility to water is reflected by the time required to get to the water source. At least 50 percent of urban households have water available in the dwelling or yard and 69 percent are within 15 minutes of a water source. In contrast, only 8 percent of rural households are within 15 minutes to a water source, and more than half spend at least an hour to reach water. Respondents were asked about the waiting time at the source of water, excluding the time to go to and come back from the water source. For 57 percent of households there is no wait at the water source. But one in nine households in urban areas and almost one in four households in rural areas wait at least an hour at the water source.

Access to adequate sanitation facilities is an important determinant of health conditions. Three-fourths of households in Eritrea, and almost all households in rural areas (96 percent) have no toilet facility. Half of the households in other towns and slightly more than one-fourth of those in Asmara also do not have any toilet facility. Figure 2.4 shows that since 1995 access to flush toilets in Eritrea has increased from 12 percent to 17 percent, mainly because of better toilet facilities in other towns.

Several types of fuel are used for cooking in Eritrea. More than half of the households (59 percent) use wood or straw for cooking, 28 percent use kerosene, and 5 percent each depend on animal dung cakes and gas. Regarding urban-rural variation, wood or straw is more commonly used for cooking in rural areas (82 percent) than in urban areas (23 percent). In Asmara, most households use either kerosene (70 percent) or gas (22 percent) as fuel for cooking.

The type of material used for flooring is an indicator of the economic standing of the household as well as the potential exposure of household members to disease-causing agent. According to Table 2.8, two-thirds of households in Eritrea live in structures with floors made of earth, sand or dung, 20 percent have floors made of cement, and 13 percent have ceramic tile floors. The flooring material differs considerably by place of residence. Rural houses have poorer quality floors than urban houses (89 percent

Table 2.8 Household characteristics

Percent distribution of households by household characteristics, according to residence, Eritrea 2002

Characteristic	Urban			Rural	Total
	Total urban	Asmara	Other towns		
Electricity					
Yes	78.3	98.7	60.9	3.0	32.2
No	21.7	1.3	39.1	96.9	67.8
Total	100.0	100.0	100.0	100.0	100.0
Source of drinking water					
Piped into residence/yard/plot	41.9	56.9	29.0	0.1	16.3
Public tap	25.1	15.1	33.8	18.1	20.8
Unprotected well in dwelling/yard/plot	0.1	0.0	0.2	0.6	0.4
Unprotected public well	2.1	0.0	3.9	24.7	15.9
Protected well in dwelling/yard/plot	0.3	0.0	0.5	0.4	0.4
Protected public well	4.2	0.2	7.6	26.3	17.8
Spring	0.3	0.0	0.6	17.2	10.7
River, stream	0.2	0.0	0.3	4.8	3.0
Pond, lake	0.1	0.0	0.1	1.4	0.9
Dam	0.1	0.0	0.2	2.3	1.5
Tanker truck	25.5	27.7	23.6	3.8	12.2
Total	100.0	100.0	100.0	100.0	100.0
Time to water source					
Percentage <15 minutes	68.7	80.9	58.3	8.2	31.6
Median time to source	0.0	0.0	0.0	59.7	29.9
Normal wait at water source					
None	72.5	81.1	65.2	47.9	57.4
<5 min	0.4	0.6	0.3	0.0	0.2
5-14 min	3.7	2.7	4.7	4.2	4.0
15-29 min	5.4	3.1	7.5	7.8	6.9
30-44 min	6.3	4.1	8.1	15.4	11.9
45-59 min	0.6	0.4	0.7	0.7	0.7
60+ min	11.1	8.1	13.6	23.8	18.9
Total	100.0	100.0	100.0	100.0	100.0
Sanitation facility					
Own flush toilet	23.0	32.2	15.1	0.4	9.1
Shared flush toilet	18.8	29.6	9.5	0.3	7.5
Traditional pit toilet	15.6	8.4	21.7	1.3	6.8
Ventilated improved pit latrine	3.2	2.7	3.6	1.5	2.2
No facility, bush, field	39.4	27.0	50.1	96.4	74.3
Other	0.0	0.0	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0
Fuel used for cooking					
Gas	11.9	21.9	3.3	0.2	4.7
Electricity	1.6	3.0	0.4	0.0	0.6
Kerosene	58.2	70.3	47.9	8.9	28.0
Charcoal/coal	3.0	0.4	5.2	0.9	1.7
Wood, straw	23.4	3.0	41.0	82.1	59.4
Animal dung cakes	1.2	0.8	1.5	7.7	5.2
Other	0.5	0.4	0.6	0.1	0.2
Missing	0.2	0.3	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0

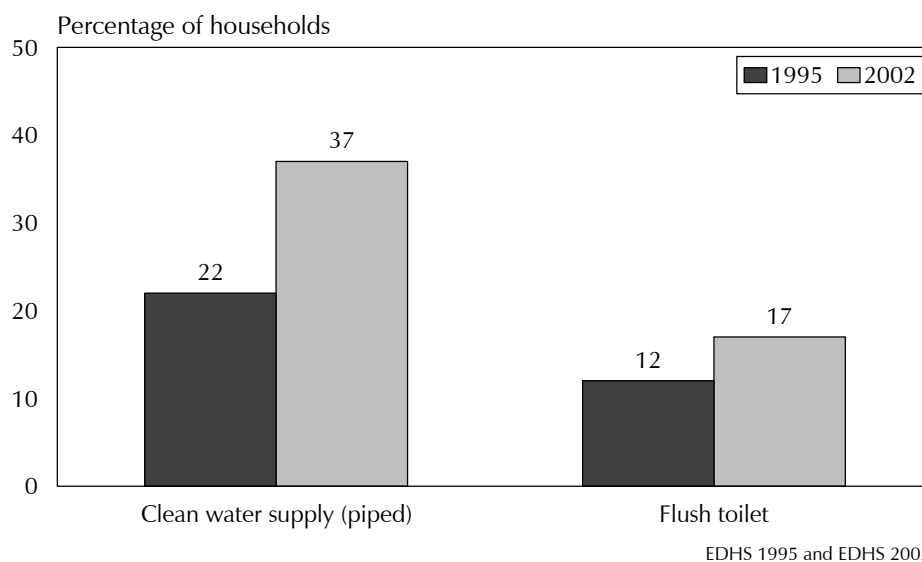
continued

Table 2.8 Household characteristics (cont.)

Percent distribution of households by household characteristics, according to residence, Eritrea 2002

Characteristic	Urban			Rural	Total
	Total urban	Asmara	Other towns		
Flooring material					
Earth, sand	31.6	12.6	47.9	75.4	58.5
Dung	1.3	0.3	2.1	13.5	8.7
Wood planks	0.1	0.1	0.0	0.0	0.0
Parquet, polished wood	0.1	0.1	0.0	0.0	0.0
Vinyl, asphalt strips	0.6	1.2	0.2	0.0	0.2
Ceramic tiles	30.6	50.1	13.9	1.2	12.6
Cement	35.3	35.3	35.4	9.8	19.7
Carpet	0.4	0.3	0.5	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0
Persons per room					
<3	40.8	46.5	36.0	26.0	31.7
3-4	32.7	28.6	36.3	33.8	33.4
5-6	16.7	15.1	18.1	22.5	20.3
7+	9.7	9.8	9.6	17.7	14.6
Total	100.0	100.0	100.0	100.0	100.0
Mean number of persons per room	3.4	3.2	3.5	4.2	3.9
Persons per sleeping room					
<3	31.8	36.3	27.9	21.8	25.7
3-4	36.5	34.6	38.2	33.3	34.6
5-6	20.0	18.0	21.8	24.4	22.7
7+	11.7	11.2	12.1	20.4	17.0
Total	100.0	100.0	100.0	100.0	100.0
Mean number of persons per sleeping room	3.8	3.6	3.9	4.5	4.2
Farm animals in living area	1.1	0.7	1.4	5.9	4.1
Wealth index					
Lowest	0.8	0.0	1.4	26.1	16.3
Second	3.2	0.0	5.9	31.3	20.4
Middle	9.6	0.1	17.7	29.4	21.7
Fourth	35.3	25.9	43.4	12.6	21.4
Highest	51.1	74.0	31.6	0.5	20.1
Total	100.0	100.0	100.0	100.0	100.0
Number of households	3,634	1,678	1,956	5,755	9,389

Figure 2.4
Access to Clean Water and Flush Toilet



of rural households have earth, sand or dung floors, while 66 percent of urban houses have cement or ceramic tile floors). In Asmara, floors in half the households are made of ceramic tiles, one-third have cement floors, and one in ten has flooring made of lesser quality materials. Compared with the quality of flooring in 1995, some improvement is evident. For example, the proportion of households with floors made of earth or sand decreased from 69 to 59 percent, the proportion of households with floors made of ceramic tiles increased from 9 to 13 percent, and the proportion of households with cement floors more than doubled from 9 percent to 20 percent. The increase in households with floors made of cement is almost entirely due to improvement in housing in rural areas.

Information on the total number of rooms (excluding toilets and kitchens) and sleeping rooms was collected to measure household crowding. Overall, one-third of households have less than 3 persons per room and the same proportion have 3-4 persons per room. Crowding is more common in rural areas than urban areas. For example, 10 percent of the households in urban areas have 7 or more persons per room, compared with 18 percent in rural areas. The mean number of persons per room and per sleeping room in rural areas is 4.2 and 4.5, respectively; in urban areas, it is 3.4 and 3.8, respectively.

The presence of farm animals in the living area increases crowding, pollutes the living area, and exposes household members to disease-causing agents. In Eritrea, farm animals in the living area are not common; only 4 percent of households have farm animals in their living areas. The problem is more common among rural households (6 percent) than urban households (1 percent).

The wealth index is discussed in Section 2.4 (page 19). Table 2.8 shows that the proportion of households in the lowest quintile is 16 percent and the proportion of households in the other quintiles is nearly the same, 20-22 percent. Regarding differences by residence, more than half of urban households (51 percent) are in the highest quintile of the wealth index, compared with only 1 percent of rural households. This difference in wealth is a result of rural areas not having access to many of the amenities common in urban areas, such as electricity and piped water. In contrast, only 4 percent of urban households are in the two lowest quintiles of the wealth index. All households in Asmara are in the higher quintiles of the wealth index—three-fourths in the highest quintile and the remaining in the fourth

quintile. This is not surprising because of the concentration of amenities in the city (Table 2.8). Households in Asmara are also most likely to own various durable goods and transportation vehicles (Table 2.9).

2.8 HOUSEHOLD POSSESSIONS

Information on household possession of durable goods and means of transportation is presented in Table 2.9. Combined with other indicators, information on ownership of durable goods can be used to generate a wealth index that acts as a proxy estimate for the socioeconomic status of a household. Ownership of a radio or television is a measure of access to mass media; telephone ownership measures access to efficient communications; refrigerator ownership indicates a capacity for more hygienic storage. Bicycle, motorcycle, car, and donkey cart ownership reflects access to means of transportation. In general, ownership of these items has a bearing on the households' access to health information and services.

Possession of the durable goods mentioned above is not common in Eritrea. Six in ten households in Eritrea own a radio—81 percent of urban households and 43 percent of rural households. Radio ownership is almost universal in Asmara and very high in zoba Maekel. Less than half the households in zobas Anseba, Gash-Barka, and Semenawi Keih Bahri have radios. A household in zoba Gash-Barka is even less likely to have a radio than a household in rural areas. Basically, television is only in urban areas (34 percent), and zobas Maekel (46 percent) and Debubawi Keih Bahri (18 percent). Fifty-seven percent of households in Asmara have television. Overall, four in ten households in Eritrea have no television or radio.

Four percent of households have a telephone and 7 percent own a refrigerator. These amenities are almost exclusively in urban areas and zobas Maekel and Debubawi Keih Bahri. Regarding ownership of any means of transportation, 87 percent of the households do not own any means of transportation.

Durable goods/vehicles	Residence				Zoba						
	Total urban	Asmara	Other towns	Rural	Debubawi Keih Bahri	Maekel	Semenawi Keih Bahri	Anseba	Gash-Barka	Debub	Total
Durable consumer goods											
Radio	81.3	93.4	71.0	42.9	50.5	89.3	43.8	46.7	36.7	58.8	57.8
Television	33.6	57.4	13.2	0.3	17.6	46.2	4.5	4.6	0.6	3.0	13.2
Telephone	11.3	18.5	5.1	0.1	4.6	14.7	1.6	3.1	0.3	1.0	4.4
Refrigerator	18.2	25.7	11.8	0.1	35.2	20.4	4.5	2.5	0.8	0.9	7.1
No mass media ¹	18.1	6.0	28.6	57.1	47.9	10.1	56.0	53.2	63.2	41.2	42.0
Transport vehicles											
Donkey cart	1.9	1.4	2.3	0.4	0.6	1.6	0.2	0.2	2.4	0.3	1.0
Bicycle	19.4	29.0	11.2	4.9	6.2	29.6	2.4	3.8	2.4	8.0	10.5
Motorcycle	0.5	0.8	0.2	0.0	0.0	0.7	0.1	0.0	0.0	0.1	0.2
Car/truck	7.9	14.5	2.3	0.4	3.0	11.8	1.8	0.8	0.4	0.6	3.3
None of the above	73.9	60.7	85.2	94.6	90.6	62.0	95.9	95.6	95.7	91.3	86.6
Total	3,634	1,678	1,956	5,755	328	2,122	1,195	1,181	1,800	2,763	9,389

¹ No radio or television

Bicycles are the most common means of transportation; one in ten households owns a bicycle. Only 3 percent of households own a car or a truck. Not surprisingly, households in urban areas, in Asmara, and zoba Maekel are more likely to own durable consumer goods and means of transportation.

Ownership of durable consumer goods and means of transportation has increased since 1995. For example, the proportion of households with radios has increased from 40 to 58 percent and the proportion of households that have a bicycle has increased from 7 to 11 percent.

Respondents to the Household Questionnaire were asked whether they owned the house they lived in, whether they owned animals and cropland, and whether they grew cash crops. Seven in ten households own a house, 56 percent own cropland, and almost half of the households own animals (Table 2.10). Possession of livestock, a house, and cropland is more concentrated in rural areas than urban areas. For example, nine in ten rural households own a house, compared with only two in five urban households. Two-thirds of rural households own animals, half own horses, mules, or donkeys, four in ten own sheep or goats, and the same proportion own cattle or camels. Four percent of households in rural areas and 2 percent in other towns grow cash crop.

Ownership	Total urban	Asmara	Other towns	Rural	Total
House	42.2	28.8	53.7	88.2	70.4
Any animals	12.6	1.2	22.4	68.8	47.0
Cattle or camel	5.2	0.9	9.0	41.6	27.5
Horse, mule, or donkey	7.4	0.8	13.0	49.5	33.2
Sheep or goat	6.9	0.3	12.6	38.9	26.6
Cropland	17.6	4.4	28.9	80.8	56.4
Grow cash crops	1.1	0.2	1.8	3.8	2.7
Total	3,634	1,678	1,956	5,755	9,389

2.9 MOSQUITO NETS

Malaria is endemic and is a major public health problem in Eritrea. Use of mosquito nets is one of the methods to prevent malaria. The global Roll Back Malaria (RBM) movement, which Eritrea endorsed, has set the framework within which the country is implementing malaria control. In the 2002 EDHS, information on the possession of mosquito nets by households was collected in the Household Questionnaire. Table 2.11 shows the distribution of households by number of mosquito nets, according to household characteristics. One-third of households reported owning at least one mosquito net. The likelihood of possessing at least two mosquito nets increases with household size. For example, one-fifth of large households (nine members or more) have at least two mosquito nets, compared with only 8 percent of households with three members.

Table 2.11 Household possession of mosquito nets

Percent distribution of households by number of mosquito nets present in household, percentage with at least one net, and mean number of nets per household, by household size, residence, and zoba, Eritrea 2002

Household characteristic	Number of mosquito nets in household				Total	Number of households	Percentage with at least one net	Mean number of mosquito nets per household (for households with mosquito nets)
	None	One	Two	Three or more				
Household size								
1	80.9	17.4	1.7	0.0	100.0	676	19.1	1.1
2	75.6	18.2	5.7	0.5	100.0	1,144	24.4	1.3
3	66.3	25.3	7.1	1.3	100.0	1,407	33.7	1.3
4	63.3	23.4	10.9	2.5	100.0	1,480	36.7	1.4
5	61.1	21.2	13.8	3.9	100.0	1,259	38.6	1.6
6	61.2	21.0	12.0	5.8	100.0	1,176	38.8	1.7
7	63.6	15.9	12.6	8.0	100.0	880	36.4	1.9
8	63.8	17.6	10.4	8.2	100.0	603	36.2	1.9
9+	64.9	16.2	10.9	8.0	100.0	763	35.1	2.0
Residence								
Urban	71.7	15.7	8.7	3.9	100.0	3,634	28.3	1.7
Asmara	91.2	6.5	1.9	0.3	100.0	1,678	8.8	1.3
Other towns	54.9	23.6	14.5	7.0	100.0	1,956	45.1	1.7
Rural	62.6	23.3	10.3	3.8	100.0	5,755	37.3	1.5
Zoba								
Debubawi Keih Bahri	71.4	19.5	6.8	2.3	100.0	328	28.6	1.4
Maekel	91.3	6.5	2.0	0.3	100.0	2,122	8.7	1.3
Semenawi Keih Bahri	57.3	23.0	13.3	6.5	100.0	1,195	42.6	1.7
Anseba	55.3	25.1	15.2	4.4	100.0	1,181	44.6	1.6
Gash-Barka	46.8	27.5	15.9	9.7	100.0	1,800	53.1	1.8
Debub	67.2	23.3	7.9	1.5	100.0	2,763	32.7	1.3
Total	66.1	20.3	9.7	3.8	100.0	9,389	33.8	1.6

Possession of mosquito nets is more common in rural areas (37 percent) than urban areas (28 percent), but it is most common in small towns (45 percent). Mosquito nets are less likely to be available in households in zoba Maekel than in the other zobas, probably because it is not a high-risk malaria area. Households in zobas Gash-Barka, Anseba, and Semenawi Keih Bahri are more likely to own at least one mosquito net than households in the other two zobas. Smaller households with one or two members (19-24 percent) are less likely to possess a mosquito net than larger households (34-39 percent). Among households with mosquito nets, the mean number of nets is 1.6. Although crowding is greater in rural areas (Table 2.2), the mean number of mosquito nets in rural households is smaller than in urban areas. The use of mosquito nets by women age 15-49 and by their children under age five is discussed in Chapter 9. Chapter 9 also discusses intermittent treatment for malaria among women age 15-49 during the last pregnancy ending in a live birth.