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DHS COMPARATIVE STUDIES

Demographic and Socioeconomic Characteristics of Households



**DEMOGRAPHIC
AND HEALTH
SURVEYS**

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**Demographic and Health Surveys
Comparative Studies No. 26**

**Demographic and
Socioeconomic
Characteristics of
Households**

MOHAMED AYAD
BERNARD BARRÈRE
JAMES OTTO

Macro International Inc.
Calverton, Maryland

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Preface

One of the most significant contributions of the DHS program is the creation of an internationally comparable body of data on the demographic and health characteristics of populations in developing countries. The *DHS Comparative Studies* series and the *DHS Analytical Reports* series examine these data across countries in a comparative framework, focusing on specific topics

The objectives of DHS comparative research are: to describe similarities and differences between countries and regions, to highlight subgroups with specific needs, to provide information for policy formulation at the international level, and to examine individual country results in an international context. While *Comparative Studies* are primarily descriptive, *Analytical Reports* utilizes a more analytical approach.

The comparative analysis of DHS data is carried out primarily by staff at the DHS headquarters in Calverton, Maryland. The topics covered are selected by staff in conjunction with the DHS Scientific Advisory Committee and USAID.

The *Comparative Studies* are based on a variable number of data sets reflecting the number of countries for which data were available at the time the report was prepared. Each report provides detailed tables and graphs for countries in four regions: sub-Saharan Africa, the Near East and North Africa, Asia, Latin America and the Caribbean. Survey-related issues such as questionnaire comparability, survey procedures, data quality, and methodological approaches are addressed in each report, as necessary. Where appropriate, data from previous DHS surveys are used to evaluate trends over time.

Comparative Studies published under the current phase of the DHS program (DHS-III) are, in some cases, updates and expansions of reports published earlier in the series. Other reports, however, will cover new topics that reflect the expanded substantive scope of the DHS program.

It is anticipated that the availability of comparable information for a large number of developing countries will have long-term usefulness for analysts and policymakers in the fields of international population and health.

Martin Vaessen
Project Director

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Executive Summary

This report provides information on the demographic and socioeconomic characteristics of households for 41 countries; 25 from DHS-II and 16 from the DHS-III project. Household data from the second and third phase of the DHS project are more comprehensive than the data collected under the first phase. The core Household Schedule of DHS-II and DHS-III included additional questions on the educational attainment of adult members of the household, and the current enrollment and educational attainment of children. One question in DHS-I on fostering was expanded in DHS-II and DHS-III to four questions on parental survivorship and residence. This information can be used to measure the prevalence of child fostering and orphanhood. The questions on dwelling characteristics and household possessions, which were part of the individual questionnaire in DHS-I, were removed and placed in DHS-II and DHS-III as part of the Household Schedule.

The first aspect on the demographic characteristics of households examined is age structure. The results are not surprising. The distribution of the household population in most countries in sub-Saharan Africa conforms to the pattern characteristic of high-fertility populations, with the largest proportion of the population in the 0-4 age group, at the base of the population pyramid. Some sub-Saharan African countries such as Kenya and Zimbabwe and most countries in the other regions, which have begun their fertility transition, have smaller population bases. The trends in age structure using DHS data from 16 countries with more than one survey indicate that in most countries, there is a slight decline in the proportion of the population under the ages of 5 and 15. The decline has been more substantial in countries where fertility is in transition, among them the Dominican Republic, Egypt, Indonesia, Kenya, Morocco, Peru, and Zimbabwe.

Another aspect of the demographic characteristics examined is the size of households. Medium-size households (three to five members) predominate in Latin America and Asia, with the exception of Pakistan, where large households are the norm. In these two regions, medium-size households are largely the result of low fertility. Large households with six or more members are most common in the Near East and North Africa and parts of sub-Saharan Africa. Small households with one or two members are also prevalent in sub-Saharan Africa (compared with other regions), indicating that small households are more common than previously was thought.

With regard to household headship, the data indicate that the traditional image of the male-headed household is largely intact in most countries of the Near East, North Africa, Asia, and Latin America, where the percentage of male-headed households is more than 80 percent. A different pattern emerges, however, in sub-Saharan Africa and the Caribbean, where in 14 of 22 countries, the percentage of female-headed households is quite

high ranging from 21 percent to 39 percent. In these societies, it is accepted that women can be the head of their households, while men play a secondary role. The trends in female-headship rates for 16 countries indicate that there has been an increase in the proportion of female-headed households in about half of the countries and a decrease in the other half. The increase was most pronounced in Guatemala and Zambia, and Peru experienced the largest decrease.

The data on household characteristics also show that, overall, the level of orphanhood for children under age 15 is uniformly low, but it is higher in sub-Saharan Africa and the Caribbean than in the other regions. It is particularly high in countries with high death rates among adults due to AIDS such as Haiti, Uganda, and Zambia. The same pattern applies to the level of fostering for young children under age 5 and children between the ages of 5 and 14. The lowest levels of fostering are found in the Near East, North Africa, and Asia, with the exception of the Philippines. While there are no marked differentials for boys and girls in the percentage of orphans, there are striking differentials in the percentage of fostering according to the sex of the child. Girls are more likely to be living in foster homes than boys across all regions and cultures, particularly in sub-Saharan Africa.

This study also provides information on the socioeconomic profile of the households, including education of the household population, housing characteristics, household possessions, and the standard of living index. For example, most of the countries with the lowest levels of educational attainment have a Moslem majority. In addition, there is a gender gap in the proportion with no schooling. Overall, across all regions, there are more women who did not attend school than men. However, Latin America has the lowest gap between the sexes. An examination of the changes in educational attainment over successive cohorts indicates that there has been a substantial decrease over the years in the proportion of both men and women with no schooling in all countries.

Results regarding housing characteristics, household possessions, and the standard of living index (SLI) show clearly that most countries in sub-Saharan Africa have lower scores than most countries in the other regions. For example, most countries in sub-Saharan Africa have little access to electricity, safe drinking water, or flush toilets. In addition, a majority of dwellings in this region have floors made of earth, sand, or cow dung. Possession of household goods such as a television or a refrigerator is also rare. Finally, using the average household SLI, we found that 8 of the 20 countries in sub-Saharan Africa have a low SLI, and the rest of the countries fall in the medium low SLI range. Only seven countries from the other regions fall into these two categories (Bangladesh and Nepal have a low SLI, and Haiti, India, Indonesia, Pakistan, and Yemen have a medium low SLI).

1 Introduction

In the last two decades, information on demographic and socioeconomic characteristics of households is being used increasingly by planners and policymakers for programmatic purposes and for measuring several domains of household socioeconomic status. For example, household data can be used for the planning of community institutions, and for determining the community needs and requirements for housing, education, employment, and health infrastructure (Ekouevi et al., 1991). In addition, changes in household characteristics have an impact on the decisionmaking about resource allocations and the distribution of goods and services.

The World Fertility Survey (WFS) program, carried out between 1974 and 1984 in more than 40 countries, was the first source of information in the developing world to be used for the analysis of household characteristics across countries (Kabir, 1980; Zoughlami and Allsopp, 1985; and De Vos, 1987). The Demographic and Health Surveys (DHS) program, which began in 1984 as a follow-on activity to the WFS program, is the most

recent source of information on household characteristics throughout the developing world. A first cross-national comparative report, assessing the basic household characteristics from 25 surveys carried out during Phase I of the DHS program was published in 1994 (Ayad et al., 1994).

The current report presents household characteristics for 41 countries (25 from Phase II and 16 from Phase III of the DHS program). The report is divided into six sections. The first section is a general introduction to the topic of this report. The next section examines the definitions and concepts of the household. DHS data on households and their limitations are the subject of the third section. The following two sections are the core of the report. While section four discusses the demographic characteristics of households, the same type of information presented in the 1994 report, section five examines for the first time data on the socioeconomic characteristics of households. The report concludes with a summary of the main findings.

2 Definitions and Concepts

A household is defined, in DHS surveys, as a person or group of persons that usually lives and eats together. It includes any people who live together, whether they are related or unrelated (Institute for Resource Development, 1987a, 1990a; and Macro International, 1997). During training of interviewers, emphasis is placed on making the distinction between a *family*, where members are related either by blood or by marriage, and a *household*, which involves the sharing of a housing unit, facilities and food (Ibid.).

For practical reasons, censuses and surveys deal with the household unit rather than the family unit, since the meaning of the family differs across cultures. In sub-Saharan Africa, for example, the family has a broad meaning, and it is sometimes difficult to define its limits. The definition of the household also poses problems, and it is not easy to apply in practice in many regions of the developing world, especially in sub-Saharan Africa, where the model of a nuclear household composed of a married couple and children is not the norm. A household can be composed of many relatives of different generations and non-relatives as well. In addition to close family members, foster children and other members of the extended family and servants can be members of the same household, as long they eat together.

Another problem in identifying a household and its members is related to the practice of polygyny, which occurs mainly in sub-

Saharan Africa. Polygyny is accompanied by complex residential arrangements, especially in urban areas. Often, the husband alternates visits with his wives who live in separate residences. In such cases, the classification of the husband as a member of the household can be problematic. A similar problem exists in the Caribbean countries where visiting unions exist. To avoid double counts, interviewers in DHS surveys were instructed to consider the husband as part of the household where he slept most of the time.

It is important to note that a household may not necessarily be an independent economic unit. For example, an elderly person or a student living alone but who is dependent on resources from another household, is considered as a separate household, even though that person is economically an extension of another household. At the same time, sharing a common income is not part of the definition of the household, and this may have implications for the designation of the head of the household. In DHS surveys, during the listing of household members, an adult respondent is asked to identify the head of the household. With this procedure, sociocultural considerations may affect who is viewed as the head of the household. In some societies that have strong traditional values, even if a female member is the real provider for the household, she might not be designated as the head of the household, if there is an adult or elderly male who is a member of that same household.

3 DHS Data on Households

In this comparative report, the data used come from 41 household surveys conducted during the second and part of the third phase of the DHS program from 20 countries in sub-Saharan Africa, 5 in North Africa and the Near East, 8 in Asia, and 8 in Latin America and the Caribbean. The fieldwork for these surveys took place between 1990 and 1996. In general, DHS household surveys are based on nationally representative samples.¹ Following the selection of the primary sampling units (generally, census enumeration areas, or segments of such areas), a listing of households is carried out. Households are then systematically selected from this listing (Institute for Resource Development, 1987b, and Macro International, 1996). The DHS household survey is primarily aimed at identifying women eligible for the individual interview. The household questionnaire obtained from an adult person a listing of all usual household members and visitors,² starting with the head of the household. For each of the individuals included in the listing, information was collected on the relationship to the head of the household, age, sex, residential status, educational level, and survivorship of the biological parents of children.³ In some countries, questions on two other sociodemographic characteristics (marital status and economic activity) were asked (see Table 3.1). Following the household schedule, all surveys carried out under DHS-II and DHS-III have systematically collected in the household questionnaire information on characteristics of the physical and social environment of the household (e.g., source of drinking water, availability of electricity, type of toilet facilities, household possessions, etc.) which are assumed to be related to the health and the socioeconomic status of the household (see Table 3.2). However, in Jordan, Nigeria, and Paraguay, the information on housing characteristics was collected in the individual questionnaire, so no information on housing characteristics is available for households without eligible women who were interviewed.

During the first phase of the DHS program, the focus was on the individual questionnaire for women. As a consequence, standard recode files were only produced for data from the individual questionnaire. Files containing the household data are available as intermediate or raw data files. Under DHS-II and DHS-III, steps were taken to improve data collection procedures

¹ By design, a DHS sample can be either self-weighting or weighted. In the case of weighted samples, weights are applied in computing percentages, means, and rates.

² With the exception of Indonesia which uses a de jure sample, the standard DHS survey uses a de facto sample.

³ For each child under age 15 listed in the DHS-II and DHS-III household questionnaires, respondents were asked if the child's mother and father were still alive and, if so, if they lived in the household.

and to prepare recode files for the household.⁴ Moreover, a new chapter presenting data on household characteristics is included as part of the DHS final reports. It should be mentioned here that part of this expansion of the household questionnaire can be attributed to a growing interest in the household data for policy purposes.

Information on the characteristics of the samples covered by the DHS household surveys is shown in Table 3.3. As mentioned earlier, the DHS household survey is based in most cases on a national sample. In some countries, however, it was decided at the sample design stage to exclude certain parts of the national territory due to various practical constraints. The coverage rate is less than 100 percent in 12 countries: 4 in sub-Saharan Africa (Kenya, Mali, Niger, and Rwanda), 4 in the Near East/North Africa and Asia (India, Pakistan, Uzbekistan, and Yemen), and 4 in Latin America (Brazil, Colombia, Guatemala, and Paraguay). For these countries, the coverage rate varies between 90 and 99 percent. This table also shows the number of households selected, identified, and successfully interviewed. In general, the response rates of household interviews in most countries were relatively high, ranging between 96 percent and almost 99 percent. Only one country, the Dominican Republic, had a response rate under 90 percent. The main reason for nonresponse in the household in most countries was the absence of an adult at home during the interviewers' visits. In a few countries such as Colombia and Turkey, the refusal to be interviewed was another reason for nonresponse.

⁴ As part of the recode file, missing values for the following three household member variables were imputed according to the method described below.

Variables: HV102 - Usual resident of household
HV103 - Present in household the night preceding the survey
HV104 - Sex of household member

Method:

1. Prepare tables showing the proportion of valid cases with value "yes" for HV102 (DjProp), "yes" for HV103 (DfProp) and "male" for HV104 (MaleProp).
2. Randomly allocate values for variables with missing values using the proportions determined in step 1.
3. In addition to the imputation, systematic corrections were made as follows for the head of household:
 - a. HV102 was changed to 1 (usual resident) if the value was not 1.
 - b. HV015 (age) was changed to 15 if the age was less than 15 or missing.

Justification:

1. Insure a "standard" number for all tabulations of household population regardless of the population type (de facto or de jure).
2. Eliminate the missing category for HV104 (sex of household member).

Table 3.1 Demographic information collected in the DHS household questionnaire

Demographic information collected in the DHS household questionnaire, Demographic and Health Surveys, 1990-1996

Country	Usual residence	Slept last night/visitor	Relationship to head of household	Sex	Age	Education ¹	Orphanhood/fostering (children 0-14 years)	Marital status	Work activity ²
Sub-Saharan Africa									
Benin	X	X	X	X	X	X	X		
Burkina Faso	X	X	X	X	X	X	X	X ^d	
Cameroon	X	X	X	X	X	X	X	X ^d	
Central African Republic	X	X	X	X	X	X	X		
Comoros	X	X	X	X	X	X	X		
Côte d'Ivoire	X	X	X	X	X	X	X		
Ghana	X	X	X	X	X	X	X	X	X
Kenya	X	X	X	X	X	X	X		
Madagascar	X	X	X	X	X	X	X		
Malawi	X	X	X	X	X	X	X		
Mali	X	X	X	X	X	X	X		
Namibia	X	X	X	X	X	X	X		
Niger	X	X	X	X	X	X	X ^a	X	
Nigeria	X	X	X	X	X	X	X ^b		
Rwanda	X	X	X	X	X	X	X		
Senegal	X	X	X	X	X	X	X		
Tanzania	X	X	X	X	X	X	X		
Uganda	X	X	X	X	X	X	X		
Zambia	X	X	X	X	X	X	X	X	
Zimbabwe	X	X	X	X	X	X	X		
Near East/North Africa									
Egypt	X	X	X	X	X	X		X	X
Jordan	X	X		X	X	X	X ^b	X	X
Morocco	X	X	X	X	X	X	X		
Turkey	X	X	X	X	X	X	X	X	
Yemen	X		X	X	X	X		X	X
Asia									
Bangladesh	X	X	X	X	X	X		X ^e	X
India	X	X	X	X	X	X		X ^e	X
Indonesia ³	X		X	X	X	X	X	X ^e	
Kazakhstan	X	X	X	X	X	X	X		
Nepal	X	X	X	X	X	X		X ^e	
Pakistan	X	X	X	X	X	X	X ^a	X	
Philippines	X	X	X	X	X	X	X		
Uzbekistan	X	X	X	X	X	X	X		
Latin America/Caribbean									
Bolivia	X	X	X	X	X	X	X ^{bc}		
Brazil	X	X	X	X	X	X	X		
Colombia	X	X	X	X	X	X	X ^c	X	X
Dominican Republic	X	X	X	X	X	X	X		
Guatemala	X	X	X	X	X	X	X		
Haiti	X	X	X	X	X	X	X		
Paraguay	X	X	X	X	X	X	X ^a		
Peru	X	X	X	X	X	X			X

¹ Information on education was collected for household members in a selected age group, usually age 5 or 6 and older. Although questions were not identical across countries, a question was usually included that asked for the highest level of education reached and/or the highest grade completed.

² Work activity information was collected for persons aged 6 and older in India and Peru; 7 and older in Ghana and Egypt; 8 and older in Bangladesh; 10 and older in Yemen; 13 and older in Jordan; 15 and older in Colombia. The content of the work activity questions differed among the eight countries.

³ De jure sample

^a Survival of mother/father not asked in Nigeria, Pakistan, Paraguay.

^b Presence of mother in the household not asked in Rwanda, Jordan, and Bolivia.

^c Survival of father not asked in Bolivia and Colombia.

^d In Cameroon, question on marital status was limited to "Are you currently married?" for eligible women.

^e In Bangladesh, Indonesia, and Nepal, question on marital status was limited to "Have you ever been married?"

Table 3.2 Economic information collected in the DHS household questionnaire

Economic information collected in the DHS household questionnaire, Demographic and Health Surveys, 1990-1996

Country	Source of drinking water	Time to get water	Type of toilet	Number of rooms used for sleeping	Material of floor ¹	Electricity	Radio	TV	Refrigerator	Bicycle ²	Motor-cycle ²	Car ²
Sub-Saharan Africa												
Benin	X		X	X	X	X	X	X	X	X	X	X
Burkina Faso	X	X	X	X	X	X	X	X	X	X	X	X
Cameroon	X	X	X	X	X	X	X	X	X	X	X	X
Central African Republic	X	X	X	X	X	X	X	X	X	X	X	X
Comoros	X	X	X	X	X	X	X	X	X	X	X	X
Côte d'Ivoire	X	X	X	X	X	X	X	X	X	X	X	X
Ghana	X	X	X	X	X	X	X	X	X	X	X	X
Kenya	X	X	X	X	X	X	X	X	X	X	X	X
Madagascar	X	X	X	X	X	X	X	X	X	X	X	X
Malawi	X	X	X	X	X	X	X	X	X	X	X	X
Mali	X	X	X	X	X	X	X	X	X	X	X	X
Namibia	X	X	X	X	X	X	X	X	X	X	X	X
Niger	X	X	X	X	X	X	X	X	X	X	X	X
Nigeria ³	X	X	X	X	X	X	X	X	X	X	X	X
Rwanda	X	X	X	X	X	X	X	X	X	X	X	X
Senegal	X	X	X	X	X	X	X	X	X	X	X	X
Tanzania	X	X	X	X	X	X	X	X	X	X	X	X
Uganda	X	X	X	X	X	X	X	X	X	X	X	X
Zambia	X	X	X	X	X	X	X	X	X	X	X	X
Zimbabwe	X	X	X	X	X	X	X	X	X	X	X	X
Near East/North Africa												
Egypt	X	X	X	X	X	X	X	X	X	X	X	X
Jordan ³	X		X	X	X	X	X	X	X	X	X	X
Morocco	X	X	X	X	X	X	X	X	X	X	X	X
Turkey	X		X	X	X	X	X	X	X	X	X	X
Yemen ⁴	X	X	X	X	X	X	X	X	X	X	X	X
Asia												
Bangladesh	X	X	X	X	X	X	X	X		X		
India	X	X	X		X	X	X	X	X	X	X	X
Indonesia	X	X	X		X	X	X	X	X	X	X	X
Kazakhstan	X	X	X	X	X	X	X	X	X	X	X	X
Nepal	X	X	X	X	X	X	X	X	X	X	X	X
Pakistan	X	X	X	X	X	X	X	X	X	X	X	X
Philippines	X	X	X	X	X	X		X	X	X	X	X
Uzbekistan	X	X	X	X	X	X	X	X	X	X	X	X
Latin America/Caribbean												
Bolivia	X	X	X	X	X	X	X	X	X			
Brazil	X		X	X	X	X	X	X	X			X
Colombia	X	X	X	X	X	X	X	X	X	X	X	X
Dominican Republic	X	X	X	X	X	X	X	X	X	X	X	X
Guatemala	X	X	X	X	X	X	X	X	X	X	X	X
Haiti	X	X	X	X	X	X	X	X	X	X	X	X
Paraguay ³	X	X	X	X	X	X	X	X	X	X	X	X
Peru	X	X	X	X	X	X	X	X	X	X	X	X

¹ In Pakistan, material of roofs and walls instead of floor; in Jordan, material of building instead of floor; in India, quality of house instead of material of floor

² In Ghana/Uganda, question on motor vehicle instead of car; in Egypt, same category for "motorcycle/car"; in Pakistan, same category for "car/van/tractor"; in Indonesia, same category for "bicycle/row boat" and "motorcycle/motor boat"

³ Questions on housing characteristics asked in the individual questionnaire

⁴ Housing characteristics questionnaire

As indicated earlier, the listing of household members includes visitors in addition to the usual residents of the household. From the questions asked concerning the residential status it is possible to find out whether the listed individual usually lives in the household, and whether he/she slept in the household the preceding night. The percentage of visitors varies from 0.6 percent in Uzbekistan to 5.3 percent in Zimbabwe. In the majority of countries, the percentage of visitors is less than 3 percent of the total number of persons listed in the household. In only two cases, Zimbabwe and Kazakhstan, it exceeds 5 percent. While the percentage of visitors appears relatively low, this is not the case for the percentage of absent members of the household, ranging from 1.3 percent in Guatemala to 9.0 percent in Madagascar. In about half the countries the percentage of absentees is higher than 5 percent. Overall, the percentages are higher in sub-Saharan African and Asian countries than in other regions. Preliminary analyses not presented in this paper indicate that in most of the countries the absentees were mostly men. However, in most sub-Saharan African countries there were slightly more women reported as absentees than men. This is not what is usually expected; men are more likely to migrate for work. However, an absent person is not necessarily a migrant worker, but may have simply made a brief trip outside the household. Short absences to go to the fields or into town (coming from the rural area), or to go to the village (coming from the urban area) could largely explain the percentages of absent women, without bringing in migratory movements. Another plausible explanation is that women of childbearing age may be reported by interviewers as absent members in order to avoid interviewing them. The eligibility of women to be interviewed depends on whether they have spent the previous night in the household of interview.

Rutstein and Bicego (1990) elaborated on this problem in their assessment of the quality of household data. They found that many women in their reproductive years were misclassified according to the sleeping away criterion by interviewers in order to reduce their workloads.

A question here is how to treat visitors and absentees in the analyses. In the classical case of a de facto sample, visitors are included in the sample in addition to usual residents of the household that have slept there the night before. The inclusion of visitors means that some will not be attributed to their usual household of residence. The average household size and headship rates may be under-estimated by the exclusion of absentees. An alternative offered by the data is to exclude visitors and base calculations on usual residents independently of their de facto status. This type of sample is the de jure sample, that is, a sample of usual residents that are present in addition to those that are absent. Theoretically, this gives the appearance of an exhaustive count of household members and stability of households. However, this is true only if absent members are temporarily absent. However, when the duration of absence is long, this approach is also questionable. There is no question asked concerning the duration of absence for absent members. In the following analyses, all tables are based on the de jure population, with the exception of age and sex structure, as well as education of the household population, which are based on the de facto population.⁵

⁵ In Indonesia, only de jure members were listed on the household schedule.

Table 3.3 Characteristics of household samples

Characteristics of household samples, Demographic and Health Surveys, 1990-96

Country	Year of survey	Percent coverage	Household sample selected	Households identified	Households interviewed	Household response rate	Type of sample
Sub-Saharan Africa							
Benin	1996	100	4,777	4,562	4,499	98.6	W
Burkina Faso	1992/93	100	5,706	5,447	5,143	94.4	W
Cameroon	1991	100	4,272	3,647	3,538	97.0	W
Central African Republic	1994/95	100	6,159	5,583	5,551	99.4	W
Comoros	1996	100	2,363	2,277	2,252	98.9	SW
Côte d'Ivoire	1994	100	6,348	6,109	5,935	97.2	W
Ghana	1993	100	6,161	5,919	5,822	98.4	SW
Kenya	1993	96	8,805	8,185	7,950	97.1	W
Madagascar	1992	100	6,500	6,252	5,944	95.1	W
Malawi	1992	100	5,811	5,396	5,323	98.6	W
Mali	1995/96	90	9,512	8,833	8,716	98.7	W
Namibia	1992	100	5,006	4,512	4,101	90.9	W
Niger	1992	99	5,819	5,500	5,242	95.3	W
Nigeria ²	1990	100	9,998	9,173	8,999	98.1	W
Rwanda	1992	97	6,509	6,368	6,252	98.2	W
Senegal	1992/93	100	3,735 ^a	3,563	3,528	99.0	SW
Tanzania	1996	100	8,900	8,141	7,969	97.9	W
Uganda	1995	100	8,093	7,671	7,550	98.4	W
Zambia	1996	100	8,016	7,365	7,286	98.9	W
Zimbabwe	1994	100	6,483	6,075	5,984	98.5	W
Near East/North Africa							
Egypt	1995	100	16,046	15,689	15,567	99.2	W
Jordan ²	1990	100	10,708	8,588	8,333	97.0	W
Morocco	1992	100	7,012	6,635	6,577	99.1	SW
Turkey ³	1993	100	10,631	8,900	8,619	96.8	W
Yemen ³	1991/92	93	13,712	13,206	12,836	97.2	W
Asia							
Bangladesh	1993/94	100	9,681	9,255	9,174	99.1	W
India	1992/93	99	94,598	92,679	88,562	95.6	W
Indonesia	1994	100	35,510	34,060	33,738	99.1	W
Kazakstan	1995	100	4,480	4,241	4,178	98.5	W
Nepal	1996	100	8,500	8,111	8,082	99.6	W
Pakistan	1990/91	96	8,019	7,404	7,193	97.2	W
Philippines	1993	100	13,728	13,102	12,995	99.2	W
Uzbekistan	1996	99	3,945	3,763	3,703	98.4	W
Latin America/Caribbean							
Bolivia	1994	100	10,491	9,338	9,114	97.6	W
Brazil	1996	95	16,451	14,252	13,283	93.2	W
Colombia	1995	97	12,142	10,935	10,112	92.5	W
Dominican Republic	1991	100	8,975	8,127	7,144	87.9	W
Guatemala	1995	98	14,615	11,754	11,297	96.1	W
Haiti	1994/95	100	5,433	4,944	4,818	97.5	W
Paraguay ²	1990	98	6,348	5,901	5,683	96.3	W
Peru	1991/92	100	14,470	13,908	13,479	96.9	W

¹ W = weighted; SW = self-weighted

² Questions on housing characteristics asked in the individual questionnaire

³ Housing characteristics questionnaire

^a Number of compounds: a compound can have more than one household

4 Demographic Characteristics of Households

This main section of the report discusses the general demographic characteristics of the households. The following topics are presented:

- Age reporting and heaping
- Age and sex structure
- Size of households
- Headship of households
- Orphanhood and fostering.

4.1 AGE REPORTING AND HEAPING

In many developing countries, where most people are not aware of their exact age, there is a good chance that errors will occur in the reporting of age. Further, age in some cases may not be known at all. Since the following section focuses on the comparison of the age-sex structure, a brief description of the procedures used in DHS surveys to collect age data is covered in this section. In order to look at the quality of age data, the prevalence of age heaping is examined as well. Heaping at age 50 among women in DHS surveys is of primary concern, since women in their late 40s reported as being age 50 by household respondents would be excluded from the individual interview, when in fact they should be interviewed. Accurate age information is also important for the calculation of all-women fertility rates in ever-married samples, where the denominators for ever-married fertility rates are inflated to include all women. The expansion factors are calculated based on the proportion of women ever married at each single year of age. Heaping on any particular age could affect the accuracy of the expansion factors.

The question on age "How old is (NAME)?" was asked for each household member listed by the household respondent, who could be any responsible adult. If the exact age of a household member was unknown, interviewers were asked to probe for the age. Several methods were suggested to interviewers in order to determine the age of listed individuals (Institute for Resource Development, 1987a, 1990b). Current age can be calculated directly from date of birth, if known, or respondents may have birth certificates or baptism certificates available for household members that include date of birth. Additionally, age can be estimated based on the age of another household member, or the date of a major event that occurred in the country.

Errors in the reporting of age have probably been more intensively examined by demographers than any other type of errors because they are readily apparent and are relatively easy to quantify. Such errors fall into two categories; "age heaping," or the tendency to overreport ages ending in 0 or 5, and a systematic

tendency for age to be over or understated. Various indices have been developed for assessing the quality of age data, among them are the two which are used here: the Myers' blended index and Whipple's index (see Table 4.1). If heaping were nonexistent, the Myers' summary index would equal zero. Small deviations from 0 might reflect actual fluctuations in births; larger deviations from 0 are of greater concern. The Myers' blended method also allows for a more detailed estimation of age heaping. Columns 1-10 in Table 4.1 show the distribution of reported ages by the last digit of age. If heaping does not occur, each last digit of age would have close to 10 percent of reported ages. Whipple's index ranges from 1, representing virtually no age heaping, to 5, representing reports of ages ending only in 0 or 5.

The table below shows the classification of surveys based on the Myers' summary index (MSI). There are three groups, and within each group, the surveys are ranked according to increasing score on the MSI. If the value of MSI is less than 5, the surveys are classified as having a low level of digit preference; if it is between 5 and 10, the level of digit preference is moderate; and if MSI is above 10, the level of digit preference is high.

Low (MSI <5)	Moderate (MSI 5-10)	High (MSI >10)
Brazil	Rwanda	Comoros
Philippines	Zimbabwe	Ghana
Kazakhstan	Central African Republic	Cameroon
Namibia	Malawi	Egypt
Uzbekistan	Côte d'Ivoire	Uganda
Nepal	Colombia	Mali
Paraguay	Guatemala	Bangladesh
Peru	Bolivia	Niger
Morocco	Indonesia	India
Zambia	Jordan	Pakistan
	Yemen	
	Kenya	
	Nigeria	
	Benin	
	Dominican Republic	
	Turkey	
	Madagascar	
	Tanzania	
	Haiti	
	Burkina Faso	
	Senegal	

Table 4.1 Age digit preference

Percent distribution of age digit preference by last digit of age, and Myers' blended index and Whipple's index, according to sex, Demographic and Health Surveys, 1990-1996

Country	Last digit of age										Total percent	Myers' index	Whipple's index
	0	1	2	3	4	5	6	7	8	9			
Sub-Saharan Africa													
Benin	12.5	8.6	12.0	8.8	8.1	12.9	9.9	8.6	10.7	7.9	100.0	8.0	1.3
Male	12.4	8.5	11.7	8.6	8.4	14.0	9.6	8.7	10.6	7.5	100.0	8.7	1.4
Female	12.5	8.7	12.2	9.0	7.9	11.9	10.1	8.5	10.8	8.3	100.0	7.5	1.2
Burkina Faso	14.4	7.5	12.3	9.1	8.7	12.5	8.8	10.2	8.6	7.8	100.0	9.4	1.4
Male	13.3	7.5	12.2	9.4	8.3	12.8	9.4	10.2	8.7	8.3	100.0	8.5	1.4
Female	15.3	7.5	12.4	8.9	9.0	12.3	8.4	10.2	8.6	7.5	100.0	10.1	1.5
Cameroon	18.2	8.3	10.1	8.1	8.1	13.2	8.6	7.7	10.8	6.9	100.0	12.2	1.7
Male	17.7	8.3	10.1	7.8	8.2	13.5	8.5	8.1	10.3	7.6	100.0	11.5	1.7
Female	18.6	8.3	10.1	8.4	8.1	12.8	8.8	7.4	11.2	6.2	100.0	12.7	1.7
Central African Republic	12.3	8.3	10.9	8.7	10.5	11.4	9.4	9.0	10.1	9.4	100.0	5.2	1.2
Male	12.0	8.3	11.1	8.6	10.6	12.3	9.2	9.1	9.4	9.4	100.0	6.1	1.3
Female	12.5	8.3	10.8	8.7	10.4	10.7	9.6	9.0	10.6	9.4	100.0	5.0	1.2
Comoros	15.4	7.5	10.8	8.3	8.0	12.7	10.7	7.9	11.0	7.8	100.0	10.5	1.4
Male	16.6	7.4	10.7	7.8	7.9	13.0	9.6	7.7	11.6	7.7	100.0	11.8	1.6
Female	14.4	7.6	10.9	8.6	8.0	12.4	11.5	8.1	10.5	7.9	100.0	9.8	1.3
Côte d'Ivoire	12.9	8.4	10.8	8.3	10.5	11.4	9.2	9.6	9.8	9.1	100.0	5.6	1.3
Male	12.5	8.3	10.7	8.5	10.6	11.4	9.3	10.0	9.6	9.0	100.0	5.2	1.3
Female	13.3	8.4	10.9	8.1	10.3	11.3	9.2	9.2	10.0	9.3	100.0	5.9	1.3
Ghana	15.3	7.1	11.3	9.0	9.2	13.8	9.1	7.9	10.4	7.0	100.0	10.8	1.6
Male	15.3	7.0	10.8	8.7	9.2	14.5	8.9	8.5	10.1	7.1	100.0	10.6	1.6
Female	15.4	7.1	11.6	9.2	9.2	13.2	9.3	7.3	10.6	6.9	100.0	10.9	1.5
Kenya	15.4	7.4	10.3	10.4	9.5	11.5	9.2	8.3	10.2	7.8	100.0	7.8	1.4
Male	15.0	7.1	10.3	10.1	8.8	12.3	9.3	8.4	10.3	8.5	100.0	8.0	1.5
Female	15.7	7.7	10.3	10.7	10.1	10.7	9.2	8.2	10.2	7.3	100.0	7.7	1.4
Madagascar	15.4	7.7	11.2	8.4	9.9	10.7	9.4	8.8	10.7	7.6	100.0	8.1	1.4
Male	15.2	7.8	10.9	8.1	9.6	11.1	9.3	9.5	11.1	7.3	100.0	8.4	1.4
Female	15.6	7.6	11.5	8.7	10.2	10.4	9.5	8.2	10.4	8.0	100.0	8.0	1.3
Malawi	12.2	8.1	12.3	9.9	10.1	9.5	9.3	8.4	10.8	9.3	100.0	5.5	1.1
Male	12.2	7.9	13.3	9.4	9.7	9.9	9.1	8.3	10.8	9.5	100.0	6.3	1.1
Female	12.3	8.2	11.4	10.3	10.6	9.1	9.6	8.6	10.8	9.2	100.0	5.4	1.1
Mali	16.8	6.9	10.3	8.8	7.3	15.6	8.2	9.0	10.1	7.0	100.0	12.8	1.7
Male	16.1	6.8	10.1	8.9	7.6	14.9	8.5	9.4	10.5	7.1	100.0	11.7	1.6
Female	17.3	7.0	10.5	8.7	7.2	16.3	7.8	8.6	9.7	7.0	100.0	14.1	1.8
Namibia	11.2	8.6	11.9	9.5	10.0	9.7	9.8	9.2	10.5	9.6	100.0	3.6	1.0
Male	12.0	7.7	11.8	8.9	10.0	10.0	9.5	9.6	10.8	9.7	100.0	4.6	1.1
Female	10.5	9.4	12.0	10.1	9.9	9.4	10.0	8.9	10.3	9.6	100.0	2.8	1.0
Niger	22.9	5.1	10.1	7.4	6.1	18.9	6.7	9.9	8.1	4.8	100.0	21.8	2.3
Male	21.7	5.4	10.2	7.6	6.4	17.4	7.0	10.5	8.2	5.5	100.0	19.9	2.1
Female	23.8	4.8	9.9	7.3	5.8	20.2	6.5	9.5	8.0	4.2	100.0	24.0	2.4
Nigeria	29.2	4.1	8.7	5.6	5.8	21.3	5.6	6.0	8.9	4.8	100.0	30.5	2.9
Male	30.3	3.7	8.4	4.7	4.8	22.7	5.4	6.0	9.2	5.0	100.0	32.9	3.0
Female	28.2	4.6	9.0	6.6	6.7	20.0	5.8	5.9	8.6	4.7	100.0	28.2	2.7
Rwanda	12.0	8.3	12.5	9.4	10.5	9.9	9.2	9.7	10.0	8.5	100.0	5.0	1.1
Male	12.3	8.0	12.4	9.0	10.2	10.3	9.3	9.6	10.3	8.6	100.0	5.5	1.2
Female	11.8	8.6	12.6	9.7	10.8	9.5	9.1	9.8	9.7	8.5	100.0	5.1	1.1
Senegal	14.8	7.3	11.5	9.3	8.2	13.4	8.9	9.4	10.0	7.3	100.0	9.7	1.5
Male	13.8	7.1	11.6	9.2	8.6	13.1	9.0	9.8	10.3	7.5	100.0	8.8	1.4
Female	15.6	7.6	11.4	9.3	7.8	13.6	8.8	9.1	9.7	7.1	100.0	10.6	1.5
Tanzania	14.1	7.3	10.8	8.3	9.7	12.6	10.2	8.0	11.0	8.0	100.0	8.7	1.4
Male	14.3	7.4	10.7	7.7	9.5	13.1	10.5	8.0	10.8	8.1	100.0	9.2	1.5
Female	14.0	7.2	10.8	8.8	10.0	12.1	10.0	8.0	11.2	7.8	100.0	8.2	1.4

Continued

Table 4.1—Continued

Country	Last digit of age										Total percent	Myers' index	Whipple's index
	0	1	2	3	4	5	6	7	8	9			
Sub-Saharan Africa													
Uganda	16.7	6.5	10.7	9.1	8.6	13.4	8.6	7.8	11.7	7.0	100.0	12.5	1.6
Male	15.8	6.1	10.5	9.3	8.7	14.2	9.0	8.6	11.2	6.7	100.0	11.7	1.6
Female	17.5	6.8	10.8	8.9	8.6	12.7	8.3	7.0	12.1	7.3	100.0	13.1	1.6
Zambia	10.7	9.0	10.8	9.6	11.4	8.4	10.5	9.1	11.4	9.1	100.0	4.8	0.9
Male	10.6	8.6	10.9	9.4	11.5	8.7	10.5	9.2	11.3	9.1	100.0	4.9	0.9
Female	10.8	9.3	10.6	9.8	11.3	8.2	10.4	9.0	11.6	9.0	100.0	4.6	0.9
Zimbabwe	12.0	8.8	11.6	8.6	10.7	10.7	10.0	9.1	9.6	8.8	100.0	5.0	1.2
Male	11.6	8.4	11.8	8.2	10.6	11.1	9.7	9.4	9.8	9.1	100.0	5.2	1.1
Female	12.3	9.0	11.3	9.0	10.8	10.4	10.3	8.8	9.4	8.6	100.0	5.1	1.2
Near East/North Africa													
Egypt	15.7	7.0	9.7	8.8	7.8	16.8	8.0	9.1	9.4	7.8	100.0	12.5	1.7
Male	14.1	7.4	9.7	9.2	8.4	15.7	8.3	9.3	9.7	8.0	100.0	9.9	1.6
Female	17.1	6.6	9.6	8.4	7.1	17.8	7.7	8.9	9.1	7.5	100.0	15.0	1.8
Jordan	14.0	7.9	10.1	9.3	9.1	13.4	8.9	9.7	9.9	7.7	100.0	7.5	1.4
Male	12.9	8.0	10.2	9.7	9.3	13.0	9.2	10.1	10.3	7.3	100.0	6.6	1.4
Female	15.1	7.8	10.0	9.0	8.9	13.7	8.6	9.3	9.4	8.1	100.0	8.8	1.5
Morocco	12.3	9.5	10.4	9.0	9.6	10.7	11.1	9.0	9.8	8.6	100.0	4.5	1.1
Male	12.4	9.7	10.5	8.6	9.9	10.5	11.1	9.1	9.9	8.3	100.0	4.5	1.1
Female	12.1	9.3	10.3	9.3	9.4	11.0	11.1	9.0	9.8	8.8	100.0	4.5	1.1
Turkey	13.8	7.4	9.5	10.7	8.4	13.3	9.1	9.8	10.2	7.6	100.0	8.1	1.4
Male	13.4	7.0	9.1	10.8	8.5	13.7	9.1	9.9	10.4	8.0	100.0	8.4	1.4
Female	14.1	7.8	9.8	10.6	8.4	13.0	9.2	9.7	10.0	7.2	100.0	7.8	1.4
Yemen	25.2	5.4	8.2	5.9	6.0	21.8	6.7	6.3	8.6	5.9	100.0	27.0	2.7
Male	26.6	5.7	8.5	6.0	6.0	21.2	6.4	6.0	8.1	5.7	100.0	27.8	2.7
Female	23.9	5.2	7.9	5.8	6.1	22.4	6.9	6.5	9.1	6.1	100.0	26.3	2.6
Asia													
Bangladesh	18.0	6.1	11.3	8.1	7.7	17.0	8.6	7.4	9.5	6.3	100.0	16.3	1.8
Male	22.2	4.7	11.2	6.8	6.1	20.6	7.9	6.4	9.2	4.9	100.0	24.1	2.4
Female	13.8	7.6	11.4	9.4	9.3	13.4	9.3	8.5	9.8	7.6	100.0	8.6	1.3
India	20.8	5.3	11.0	6.2	6.7	19.7	8.1	6.1	10.7	5.5	100.0	22.2	2.2
Male	22.7	4.8	10.9	5.5	6.1	21.1	7.8	5.7	10.4	5.0	100.0	25.2	2.5
Female	18.8	5.8	11.0	6.9	7.2	18.3	8.4	6.5	11.0	6.0	100.0	19.1	2.0
Indonesia	13.8	8.8	10.4	8.8	9.7	12.9	8.8	9.0	9.2	8.8	100.0	7.0	1.4
Male	14.6	8.4	10.2	8.9	9.9	13.1	8.8	8.9	8.6	8.6	100.0	7.9	1.5
Female	13.0	9.1	10.5	8.7	9.5	12.7	8.8	9.0	9.7	8.9	100.0	6.2	1.3
Kazakhstan	9.7	8.4	9.8	10.7	10.1	11.5	10.2	10.6	10.2	8.7	100.0	3.4	1.0
Male	9.5	7.9	9.5	11.1	10.4	11.1	10.8	10.9	10.0	8.8	100.0	4.3	1.0
Female	9.9	8.8	10.1	10.4	9.9	11.8	9.7	10.4	10.4	8.6	100.0	3.1	1.1
Nepal	10.2	9.5	11.5	8.6	10.2	11.2	10.7	9.5	10.1	8.5	100.0	3.8	1.1
Male	10.4	9.4	11.9	8.1	10.4	11.4	11.0	9.3	9.8	8.3	100.0	5.1	1.1
Female	10.0	9.6	11.1	9.1	10.1	11.0	10.4	9.7	10.3	8.7	100.0	2.9	1.0
Pakistan	24.3	5.1	10.1	6.3	6.3	20.8	7.8	5.6	9.4	4.2	100.0	25.2	2.5
Male	26.1	4.6	10.0	5.7	6.1	21.0	7.8	5.5	8.9	4.3	100.0	27.1	2.7
Female	22.4	5.5	10.2	6.9	6.5	20.5	7.9	5.8	10.1	4.2	100.0	23.2	2.4
Philippines	11.0	8.6	10.7	10.5	9.6	10.6	9.7	9.8	10.4	9.0	100.0	3.3	1.1
Male	11.1	8.6	10.8	10.2	9.2	10.8	9.8	10.1	10.3	9.1	100.0	3.3	1.1
Female	11.0	8.5	10.6	10.8	10.0	10.5	9.6	9.5	10.5	8.9	100.0	3.4	1.1
Uzbekistan	11.7	8.1	9.7	9.9	9.8	11.0	11.0	9.7	10.1	9.1	100.0	3.7	1.1
Male	11.9	7.8	9.6	9.5	10.2	11.0	10.7	10.0	10.8	8.6	100.0	4.6	1.1
Female	11.4	8.3	9.8	10.3	9.5	11.0	11.2	9.5	9.4	9.6	100.0	3.9	1.1

Continued

Table 4.1—Continued

Country	Last digit of age									Total percent	Myers' index	Whipple's index	
	0	1	2	3	4	5	6	7	8				9
Latin America/Caribbean													
Bolivia	13.3	7.6	10.4	10.5	9.7	11.9	9.0	8.8	10.8	7.9	100.0	7.0	1.3
Male	13.2	7.3	10.6	10.5	10.0	11.9	9.1	8.6	11.0	7.8	100.0	7.2	1.3
Female	13.4	7.8	10.2	10.6	9.5	12.0	8.9	9.0	10.6	8.0	100.0	6.8	1.2
Brazil	10.9	8.7	10.6	10.0	9.5	10.4	10.2	9.8	10.5	9.3	100.0	2.6	1.1
Male	10.6	8.4	10.9	10.1	9.5	10.4	10.3	9.6	10.7	9.5	100.0	3.1	1.1
Female	11.1	9.1	10.3	10.0	9.5	10.3	10.2	10.0	10.3	9.2	100.0	2.2	1.1
Colombia	12.7	7.2	10.4	9.7	10.2	12.1	9.4	9.5	10.6	8.3	100.0	5.9	1.3
Male	12.3	7.1	10.5	9.9	10.3	12.1	9.4	9.7	10.6	8.1	100.0	5.8	1.3
Female	13.0	7.2	10.4	9.5	10.1	12.0	9.4	9.3	10.5	8.5	100.0	6.0	1.2
Dominican Republic	15.3	7.4	10.5	9.6	9.0	11.7	9.2	8.9	10.5	7.8	100.0	8.0	1.4
Male	15.0	7.4	11.1	9.7	9.0	11.5	9.5	8.8	10.6	7.4	100.0	8.2	1.4
Female	15.6	7.4	9.9	9.4	9.0	12.0	9.0	9.0	10.5	8.2	100.0	8.0	1.4
Guatemala	13.2	7.4	10.3	9.6	9.8	12.4	8.9	9.6	10.2	8.5	100.0	6.1	1.4
Male	13.1	7.1	10.7	9.8	9.6	12.7	8.6	9.7	10.7	8.1	100.0	7.2	1.4
Female	13.3	7.8	10.0	9.4	10.0	12.2	9.2	9.6	9.7	8.8	100.0	5.5	1.3
Haiti	14.5	6.6	11.6	9.1	9.3	12.1	9.6	8.4	10.7	8.0	100.0	8.9	1.4
Male	14.8	6.9	11.8	9.2	8.9	12.3	9.3	8.4	10.4	8.0	100.0	9.3	1.4
Female	14.4	6.4	11.5	9.0	9.7	11.8	9.8	8.5	10.9	8.1	100.0	8.5	1.3
Paraguay	12.8	7.8	10.4	10.2	9.8	10.6	9.7	9.4	10.0	9.3	100.0	4.0	1.2
Male	12.6	7.5	10.8	10.6	9.7	10.7	9.5	9.2	10.0	9.6	100.0	4.6	1.2
Female	13.0	8.1	10.0	9.9	9.9	10.5	9.9	9.6	10.0	9.1	100.0	3.6	1.2
Peru	11.7	8.7	11.1	9.6	9.5	11.1	10.0	9.4	10.2	8.8	100.0	4.1	1.1
Male	12.2	8.3	11.4	9.4	9.5	11.3	9.7	9.4	10.4	8.4	100.0	5.2	1.2
Female	11.4	9.0	10.7	9.8	9.5	10.9	10.2	9.3	10.0	9.1	100.0	3.2	1.1

Overall, the largest number of DHS-II and DHS-III surveys fall into the category of the moderate range of age heaping, the same pattern observed in the DHS-I surveys (Rutstein and Bicego, 1990). The table above shows that of the 12 countries with Myers' summary index greater than 10, seven are located in sub-Saharan Africa. In addition, Table 4.1 shows that of the 11 countries with Whipple's indices greater than 1.5, seven are also located in sub-Saharan Africa. The difference in age heaping for males and females is small: in most countries, in particular in non-Moslem countries, Whipple's indices and Myers' summary indices are slightly higher for males than females or there is no difference.

From the Myers' blended method, it can be determined what numbers are most likely to be underreported. Respondents were least likely to report ages ending in 1, 3, 7, and 9. In most countries the inclination is slightly greater to overreport ages ending in 0 rather than 5.

4.2 AGE AND SEX STRUCTURE

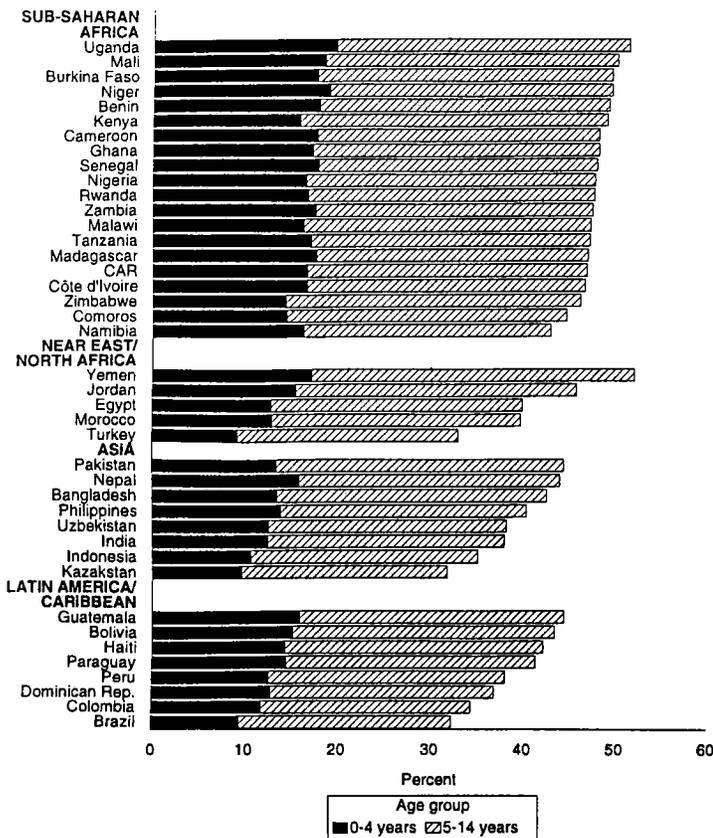
The age-sex structure of a country varies according to the levels of fertility, mortality, and migration. This section examines and compares the age-sex structure for each country included in

this report using the de facto population as a base. Summary indicators for the total population and urban-rural population for each country are shown in Table 4.2. The distribution of the household population by age and sex is presented in Appendix A (see Table A.1).

Approximately half of all household members in sub-Saharan Africa are under 15 years of age, ranging from 43 percent in Namibia to 52 percent in Uganda; the figure is around 35-45 percent in most countries of the Near East/North Africa, Latin America/Caribbean, and Asia (see Figure 4.1 and Table 4.2). At the country level, the highest percentages of children are observed in Yemen and Uganda (52 percent), and Mali (50 percent), and the lowest in Turkey (33 percent), and Brazil and Kazakhstan (32 percent). In the majority of countries studied, approximately one-third of children aged 0-14 are in the 0-4 age group. High-fertility countries in sub-Saharan Africa have the largest percentage of children under 5 years of age, varying between 14 percent in Zimbabwe and 20 percent in Uganda.

The data in Table 4.2 indicate that the percentage of persons age 65 and older is small, ranging between less than 3 percent and less than 5 percent in most countries. In nine countries (two in sub-Saharan Africa: Comoros and Namibia; one in the Near East/North Africa; Turkey; two in Asia; Kazakhstan and

Figure 4.1 Percent of population aged 0-4 and 5-14 years



Uzbekistan; and four in Latin America/Caribbean; Brazil, Colombia, Haiti, and Paraguay), the percentage is 5 percent or more. As expected, the percentage is particularly low in sub-Saharan Africa where fertility is still relatively high in comparison to the other regions.

Differences in the proportion of persons in the three large age groups (less than 15, 15-64, and 65 and older) are found in urban and rural areas. In general, probably due to rural-urban migration, proportionally more persons aged 0-14 and 65 and older live in rural households, while more persons aged 15-64 reside in urban households. In addition, recent fertility decline in urban areas may also be a factor in explaining the lower proportion of persons aged 0-14 in these areas. In six countries, four in Latin America/Caribbean (Brazil, Guatemala, Paraguay, and Peru), and two in Asia (Kazakhstan and Uzbekistan), there is a larger proportion of persons aged 65 and older in urban households.

In sub-Saharan Africa with the exception of Namibia (24 percent), the percentage of female population 15-49 to the total population varies between 20 percent and 23 percent. In the other regions, except for Yemen (19 percent) and Pakistan (21 percent), the percentage is higher than in the sub-Saharan countries,

ranging from 23 percent to 27 percent. Differentials by urban-rural residence are marked. In all countries, there are more women age 15-49 living in urban than in rural areas. In the Near East/North Africa, residential differentials are less pronounced than in the other regions.

Countries that have a high proportion of children and individuals aged 65 and older—groups often referred to as the *dependent population*—have different economic considerations than countries with a smaller proportion of nonworking individuals. Dependents place heavy demands on the health, education, and housing that must be maintained and funded by the non-dependent or “working” population aged 15-64.

The *dependency ratio*, or the ratio of persons aged 0-14 and aged 65 and older to the number of persons aged 15-64 in a population, is presented in column 5 of Table 4.2. The greatest demands placed on the nondependent population are in sub-Saharan Africa, as shown by the relatively high dependency ratios. Sixteen of 20 sub-Saharan countries have a dependency ratio higher than 100; that is, each productive person is in charge of more than one nonproductive individual. The countries with the lowest dependency ratios are one in the Near East/North Africa (Turkey), two in Asia (Indonesia and Kazakhstan), and two in Latin America/Caribbean (Brazil and Colombia). Significant urban-rural differences in the dependency ratio are found in all countries: the dependency ratios in rural areas are much higher than those in urban areas, often due to migration by the working-age population from rural to urban areas and higher fertility rates in rural areas.

The age-sex structure of a sample of countries from each region is graphically presented as a series of population pyramids in Figure 4.2. Populations at different stages of the fertility transition show distinct types of pyramids. Countries in sub-Saharan Africa that have high rates of fertility have the broadest population bases (the largest proportion of the population is in the 0-4 age group); a moderate percentage of people are found in the middle ages; and a small proportion of people in the oldest age groups. Mali, Niger, and Uganda have the broadest pyramidal bases. Some sub-Saharan African countries, such as Kenya and Zimbabwe, and most of the countries of the other regions have begun the fertility transition as can be seen from their pyramids with a relatively small base. A few other countries, such as Turkey, Kazakhstan, Indonesia, and Brazil are further along in the fertility transition; they have small bases, with a greater proportion of people in the middle age groups.

Figure 4.3 illustrates the difference in the age-sex structure between countries that have different demographic histories. In this figure, Turkey population pyramid overlays the pyramid for Uganda. Because of its high level of fertility, Uganda clearly has a larger proportion of children (area shaded in black). Declines in fertility are evident in Turkey: in the last 10 to 15 years, birth cohorts have become progressively smaller. Turkey also shows an excess of men and women in the working age groups 15-64 as well as in the older age groups.

Table 4.2 Age and sex structure of households

Percent distribution of the household population by age, and dependency ratios, percent of children age 0-4 years, and sex ratios, according to urban-rural residence, Demographic and Health Surveys, 1990-1996

Country	Age			Total percent ¹	Depend- ency ratio	Percent children 0-4 years	Sex ratio				Female popu- lation age 15-49 as percentage of total population	De facto popu- lation
	<15	15-64	65+				<15	15-64	65+	Total		
Sub-Saharan Africa	49.3	46.4	4.2	100.0	115.4	18.0	104.1	84.9	106.1	94.8	21.5	26,445
Benin	46.6	50.1	3.3	100.0	99.5	15.7	97.5	87.4	91.7	92.1	23.3	9,708
Urban	50.9	44.3	4.8	100.0	125.9	19.3	107.8	83.3	112.4	96.4	20.5	16,737
Rural	49.6	46.4	4.0	100.0	115.4	17.8	101.8	84.9	125.8	94.4	20.2	33,419
Burkina Faso	43.3	54.4	2.3	100.0	83.9	14.5	100.5	109.6	82.6	104.9	22.8	6,000
Urban	51.0	44.7	4.4	100.0	123.9	18.5	102.1	79.3	132.3	92.3	19.6	27,418
Rural	48.2	48.3	3.4	100.0	106.9	17.8	98.0	91.4	87.5	94.3	20.6	19,415
Cameroon	47.0	50.9	2.1	100.0	96.2	17.5	97.1	99.0	71.1	97.4	22.4	7,446
Urban	49.0	46.7	4.2	100.0	114.1	17.9	98.6	86.5	93.0	92.5	19.5	11,969
Rural	46.9	50.5	2.6	100.0	98.1	16.7	104.5	86.6	94.9	94.8	22.8	26,705
Central African Rep.	47.1	50.8	2.1	100.0	97.0	16.2	99.0	91.1	100.1	94.9	23.1	11,231
Urban	46.8	50.3	2.9	100.0	98.9	17.0	108.7	83.5	92.2	94.8	22.5	15,474
Rural	44.7	49.9	5.4	100.0	100.4	14.5	101.4	77.8	100.0	88.8	23.2	13,652
Comoros	40.3	55.2	4.4	100.0	80.9	12.7	103.2	87.4	96.5	93.9	24.8	3,786
Urban	46.4	47.8	5.7	100.0	109.0	15.1	100.7	73.9	101.1	86.9	22.6	9,866
Rural	46.7	50.7	2.6	100.0	97.2	16.7	100.0	96.4	108.4	98.4	22.3	36,930
Côte d'Ivoire	43.6	55.2	1.2	100.0	81.2	15.0	90.3	100.2	98.3	95.7	25.3	13,720
Urban	48.5	48.0	3.4	100.0	108.1	17.8	105.5	94.0	110.6	100.0	20.6	23,211
Rural	48.2	48.2	3.6	100.0	107.7	17.3	104.4	83.2	94.5	93.3	21.9	21,413
Ghana	43.8	53.0	3.2	100.0	88.7	14.6	101.1	80.0	69.7	88.3	25.6	6,929
Urban	50.3	45.9	3.8	100.0	118.1	18.6	105.8	85.0	106.7	95.8	20.2	14,484
Rural	49.1	47.1	3.8	100.0	112.3	15.9	94.7	87.9	102.4	91.7	21.0	38,237
Kenya	36.3	62.5	1.2	100.0	60.0	13.6	93.1	113.6	101.8	105.6	27.3	5,202
Urban	51.1	44.7	4.2	100.0	123.8	16.3	94.9	83.1	102.5	89.7	20.0	33,035
Rural	47.0	49.4	3.6	100.0	102.5	17.7	104.3	92.7	126.6	99.1	21.8	28,722
Madagascar	40.1	56.9	3.0	100.0	75.7	13.7	100.5	87.6	119.0	93.4	26.6	4,708
Urban	48.4	47.9	3.7	100.0	108.7	18.4	104.9	94.0	127.9	100.3	20.9	24,014
Rural	47.3	48.7	4.1	100.0	105.5	16.3	97.2	92.7	92.6	94.8	21.1	23,087
Malawi	45.7	52.8	1.4	100.0	89.1	15.0	93.3	126.8	97.0	109.7	21.3	2,798
Urban	47.5	48.1	4.4	100.0	108.0	16.5	97.7	88.4	92.4	92.9	21.1	20,289
Rural	50.2	46.2	3.6	100.0	116.6	18.6	98.8	83.2	156.3	92.8	21.2	46,856
Mali	46.8	50.3	2.9	100.0	98.9	16.3	95.6	90.0	150.6	93.9	22.7	13,844
Urban	51.6	44.4	4.0	100.0	125.0	19.6	100.1	80.2	158.0	92.4	20.5	33,012
Rural	43.0	50.6	6.1	100.0	96.9	16.3	97.4	83.6	94.8	90.2	23.5	24,260
Namibia	34.3	61.4	4.0	100.0	62.5	13.4	91.7	88.0	134.8	90.8	29.4	7,491
Urban	46.8	45.8	7.1	100.0	117.5	17.6	99.4	81.1	86.7	89.7	20.8	16,769
Rural	49.6	46.6	3.7	100.0	114.4	19.1	102.1	83.9	120.8	93.8	21.4	31,627
Niger	48.5	49.0	2.5	100.0	104.0	18.0	97.2	100.1	87.0	98.3	21.6	5,555
Urban	49.8	46.1	4.0	100.0	116.7	19.4	103.2	80.6	126.2	92.8	21.4	26,072
Rural	47.8	47.8	4.4	100.0	109.3	16.6	99.9	93.7	186.9	99.5	19.9	47,035
Nigeria	46.0	50.2	3.8	100.0	99.2	14.8	97.6	103.9	145.8	102.2	20.7	11,251
Urban	48.4	47.0	4.6	100.0	112.7	17.1	100.6	90.5	200.1	98.7	19.6	35,783
Rural	47.7	48.5	3.8	100.0	106.2	16.8	96.8	88.0	120.1	93.2	22.2	31,039
Rwanda	40.7	56.8	2.5	100.0	76.1	14.4	95.7	105.1	114.3	101.3	25.7	1,668
Urban	48.1	48.0	3.9	100.0	108.3	17.0	96.9	87.0	120.3	92.8	22.0	29,370
Rural	48.0	47.6	4.3	100.0	109.9	17.9	98.8	82.5	97.9	90.6	21.9	30,337
Senegal	43.9	52.7	3.3	100.0	89.7	15.8	94.9	92.3	85.2	93.1	23.9	11,553
Urban	50.6	44.5	4.9	100.0	124.6	19.2	101.0	76.0	103.8	89.1	20.7	18,784
Rural	47.2	48.5	4.3	100.0	106.0	17.1	101.5	84.3	113.9	93.2	22.3	38,297
Tanzania	41.1	55.9	2.9	100.0	78.8	15.1	101.4	90.9	94.1	95.2	26.3	7,569
Urban	48.7	46.7	4.6	100.0	114.1	17.6	101.5	82.5	117.3	92.7	21.3	30,728
Rural												

Continued

Table 4.2—Continued

Country	Age			Total percent ¹	Depend- ency ratio	Percent children 0-4 years	Sex ratio				Female popu- lation Percentage female 15-49 total population	De facto popu- lation
	<15	15-64	65+				<15	15-64	65+	Total		
Sub-Saharan Africa												
Uganda	51.5	45.0	3.4	100.0	122.0	19.8	97.1	89.4	113.7	94.0	20.4	35,635
Urban	46.3	52.2	1.5	100.0	91.6	18.3	85.1	91.2	94.2	88.4	25.8	4,271
Rural	52.2	44.1	3.7	100.0	127.0	20.0	98.6	89.1	114.8	94.9	19.6	31,364
Zambia	47.5	49.9	2.7	100.0	100.5	17.6	98.3	92.0	125.5	95.7	22.5	38,000
Urban	45.7	53.2	1.1	100.0	87.9	17.1	98.3	95.8	119.1	97.2	25.2	15,267
Rural	48.6	47.6	3.8	100.0	110.1	17.9	98.4	89.2	126.8	94.8	20.7	22,733
Zimbabwe	46.2	50.0	3.8	100.0	99.8	14.4	101.2	90.9	104.0	96.0	22.8	27,900
Urban	37.2	61.1	1.8	100.0	63.7	12.9	96.2	107.4	161.3	103.8	27.4	7,481
Rural	49.5	46.0	4.5	100.0	117.3	14.9	102.6	83.8	97.8	93.3	21.1	20,419
Near East/North Africa												
Egypt	39.9	56.3	3.7	100.0	77.6	12.8	106.0	92.4	103.8	98.1	25.1	81,523
Urban	36.2	60.3	3.6	100.0	66.0	11.1	103.4	95.7	112.6	99.0	26.6	36,768
Rural	43.1	53.1	3.9	100.0	88.4	14.1	107.9	89.4	97.5	97.3	24.0	44,755
Jordan	45.8	51.5	2.7	100.0	94.1	15.5	108.8	95.6	106.1	101.7	23.1	55,051
Urban	44.2	53.2	2.6	100.0	87.8	14.8	106.8	97.5	97.0	101.5	23.6	40,347
Rural	50.3	46.8	2.9	100.0	113.8	17.4	113.8	90.1	132.2	102.5	21.7	14,703
Morocco	39.7	55.6	4.6	100.0	79.8	12.9	104.6	87.9	112.1	95.3	24.7	38,785
Urban	33.8	62.0	4.2	100.0	61.4	10.2	106.8	91.7	94.4	96.7	27.5	17,254
Rural	44.5	50.5	5.0	100.0	97.9	15.0	103.3	84.3	126.1	94.2	22.5	21,531
Turkey	32.9	61.4	5.7	100.0	62.8	9.1	104.4	91.4	92.8	95.6	26.1	38,285
Urban	31.7	63.7	4.6	100.0	57.0	8.9	106.7	95.9	81.6	98.4	27.1	23,128
Rural	34.8	58.0	7.2	100.0	72.4	9.4	101.3	84.4	105.1	91.4	24.5	15,157
Yemen	52.1	43.6	4.3	100.0	129.4	17.2	105.3	90.2	123.4	99.1	19.2	85,836
Urban	47.1	49.4	3.3	100.0	102.3	15.0	103.6	101.1	118.8	102.8	21.0	16,516
Rural	53.2	42.2	4.5	100.0	137.0	17.8	105.7	87.4	124.3	98.3	18.7	69,321
Asia												
Bangladesh	42.6	53.4	4.0	100.0	87.3	13.5	102.1	95.2	156.3	100.0	23.5	48,866
Urban	39.3	58.1	2.6	100.0	72.2	11.6	99.3	102.6	119.8	101.7	25.9	5,612
Rural	43.0	52.8	4.2	100.0	89.4	13.7	102.4	94.2	159.9	99.8	23.2	43,254
India	38.0	57.2	4.8	100.0	74.8	12.5	107.4	101.5	119.0	104.5	23.9	495,085
Urban	34.5	61.3	4.2	100.0	63.0	10.8	107.7	107.1	106.2	107.3	25.3	131,100
Rural	39.3	55.7	5.0	100.0	79.4	13.1	107.3	99.4	123.2	103.5	23.4	363,984
Indonesia	35.1	60.3	4.6	100.0	65.7	10.7	107.7	95.4	92.5	99.4	25.6	150,850
Urban	31.7	64.5	3.8	100.0	55.1	9.7	107.1	96.3	85.3	99.1	28.1	46,671
Rural	36.6	58.5	4.9	100.0	71.0	11.2	108.0	94.9	95.1	99.5	24.5	104,179
Kazakstan	31.8	61.3	6.9	100.0	63.1	9.7	99.3	95.5	44.9	92.1	24.9	15,635
Urban	26.4	65.3	8.3	100.0	53.1	7.2	94.4	91.1	44.3	86.9	26.8	7,222
Rural	36.5	57.9	5.6	100.0	72.7	11.9	102.4	100.0	45.7	96.7	23.3	8,413
Nepal	44.0	52.2	3.8	100.0	91.6	15.9	102.9	84.7	103.5	93.0	24.1	42,870
Urban	37.8	58.4	3.8	100.0	71.1	12.2	117.2	97.1	96.2	104.2	25.7	3,702
Rural	44.6	51.6	3.8	100.0	93.7	16.3	101.9	83.5	104.2	92.0	23.9	39,168
Pakistan	44.4	50.6	4.9	100.0	97.5	13.4	106.9	105.1	166.0	108.3	20.5	45,750
Urban	42.8	53.2	3.9	100.0	87.8	13.1	98.0	109.4	146.5	105.5	21.6	14,576
Rural	45.2	49.4	5.4	100.0	102.4	13.5	111.1	103.0	173.5	109.6	20.0	31,174
Philippines	40.4	55.6	3.9	100.0	79.8	13.9	104.5	98.5	82.0	100.1	23.6	66,767
Urban	37.5	58.7	3.8	100.0	70.2	13.2	104.1	92.8	79.0	96.3	26.1	34,169
Rural	43.5	52.3	4.1	100.0	91.1	14.7	104.8	105.5	84.9	104.2	21.0	32,598
Uzbekistan	38.2	56.8	5.0	100.0	76.2	12.6	99.8	102.7	78.7	100.3	23.7	19,028
Urban	33.8	59.9	6.3	100.0	66.9	11.3	99.8	95.5	62.9	94.5	25.2	7,422
Rural	41.0	54.7	4.2	100.0	82.7	13.4	99.8	108.1	96.8	104.1	22.8	11,606

Continued

Table 4.2—Continued

Country	Age			Total percent ¹	Depend- ency ratio	Percent children 0-4 years	Sex ratio				Female popu- lation age 15-49 as percentage of total population	De facto popu- lation
	<15	15-64	65+				<15	15-64	65+	Total		
Latin America/Caribbean												
Bolivia	43.5	52.2	4.3	100.0	91.5	15.3	103.2	88.7	83.8	94.5	23.2	40,301
Urban	41.0	55.7	3.3	100.0	79.4	14.1	101.8	87.4	77.8	92.7	25.5	23,059
Rural	46.9	47.5	5.6	100.0	110.5	16.8	104.8	90.9	88.9	97.1	20.1	17,241
Brazil	32.3	62.2	5.5	100.0	60.7	9.5	100.5	92.4	81.8	94.3	26.8	53,498
Urban	30.7	63.7	5.6	100.0	57.0	9.1	98.9	89.6	77.5	91.6	27.9	42,370
Rural	38.1	56.5	5.4	100.0	76.9	11.1	105.6	105.1	100.7	105.1	22.8	11,128
Colombia	34.4	60.5	5.1	100.0	65.3	11.9	101.7	87.3	85.7	91.9	27.1	44,490
Urban	32.0	63.1	5.0	100.0	58.6	11.0	99.4	80.2	77.6	85.8	29.6	30,400
Rural	39.6	55.0	5.4	100.0	81.9	13.9	105.7	107.7	103.9	106.7	21.7	14,091
Dominican Republic	36.9	58.5	4.6	100.0	71.0	12.9	103.0	93.0	95.5	96.6	25.9	32,553
Urban	34.1	61.5	4.4	100.0	62.5	12.3	99.6	82.0	73.6	87.2	29.4	19,769
Rural	41.3	53.8	4.9	100.0	85.9	13.8	107.5	116.1	136.8	113.4	20.6	12,784
Guatemala	44.5	51.1	4.3	100.0	95.5	16.0	102.0	88.5	94.4	94.5	23.1	59,267
Urban	38.2	56.5	5.3	100.0	76.8	13.4	103.6	85.4	82.2	91.8	26.0	23,064
Rural	48.5	47.7	3.7	100.0	109.5	17.6	101.2	90.9	106.8	96.3	21.2	36,202
Haiti	42.3	52.3	5.3	100.0	91.0	14.5	99.4	87.5	78.7	91.9	23.6	23,906
Urban	37.8	58.5	3.7	100.0	71.0	12.0	89.8	77.4	59.0	81.1	28.9	8,592
Rural	44.9	48.9	6.2	100.0	104.4	16.0	104.3	95.0	86.5	98.5	20.7	15,314
Paraguay	41.4	53.3	5.2	100.0	87.4	14.6	105.7	97.9	91.4	100.7	22.4	28,172
Urban	37.1	57.3	5.5	100.0	74.4	13.1	100.5	87.3	79.5	91.5	25.4	14,079
Rural	45.8	49.4	4.9	100.0	102.5	16.1	110.2	111.8	106.9	110.8	19.3	14,093
Peru	38.1	57.3	4.6	100.0	74.6	12.7	103.0	93.2	96.1	97.0	25.1	69,901
Urban	34.7	60.6	4.6	100.0	64.9	11.1	103.0	91.4	92.9	95.4	27.0	50,409
Rural	46.9	48.6	4.5	100.0	105.9	17.1	103.2	99.3	104.8	101.3	20.2	19,492

¹ Including missing age

A comparison of Uganda's age-sex structure with another country, Zimbabwe, shows a different pattern. The level of fertility in Zimbabwe lies between that of Turkey and Uganda. Although fertility is declining in Zimbabwe, the decline has not been as extensive as that found in Turkey. The difference in the relative proportion of children between Uganda and Zimbabwe is less than the difference in the proportion between Uganda and Turkey.

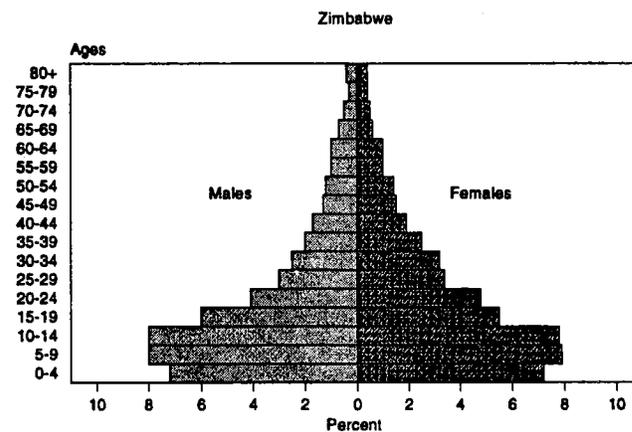
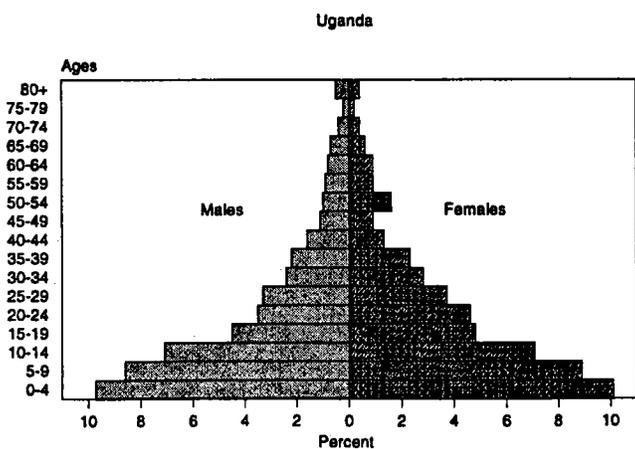
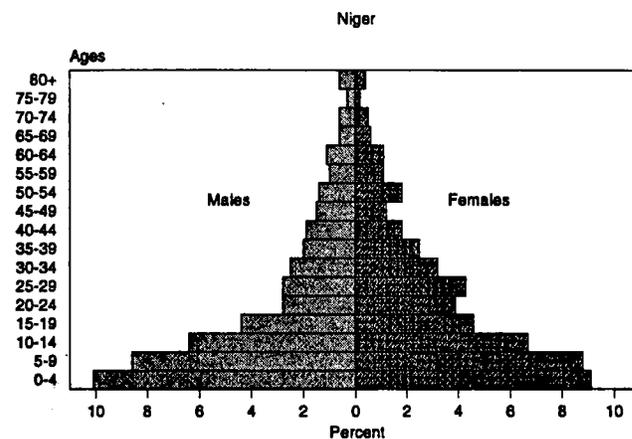
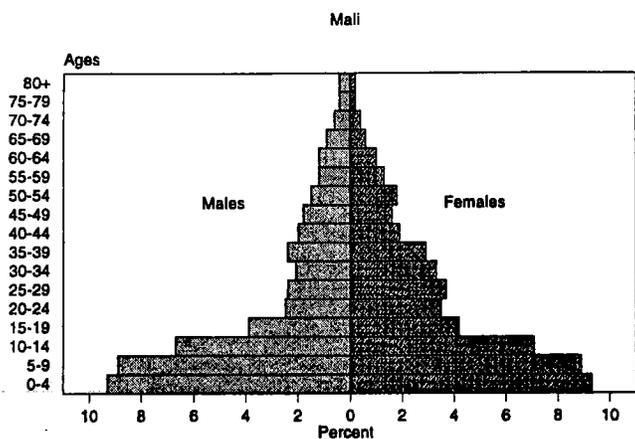
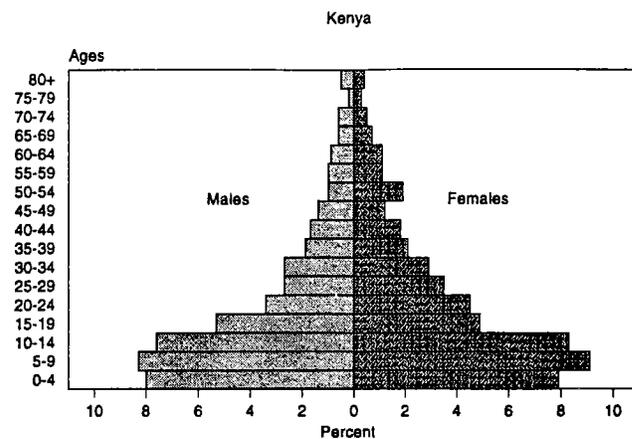
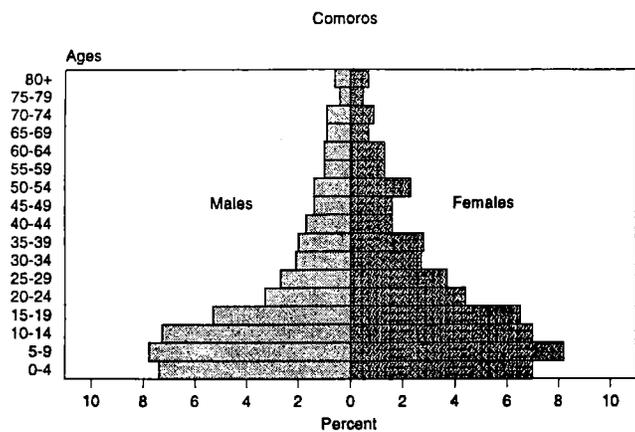
Population pyramids for several countries show a noticeable bulge for women aged 50-54. Although heaping on age 50 probably accounts for some of the excess of women in this age group, a good portion of it is most likely due to displacement of women by interviewers. At times, interviewers will place women aged 45-49 into the older age group in order to decrease the number of women eligible for interview, thus reducing the number of individual interviews. Evidence of this transference is mainly found in sub-Saharan African countries (Burkina Faso, Cameroon, Comoros, Kenya, Niger, Nigeria, Senegal, and Uganda) but also in some countries of the other regions (Turkey and Pakistan).

Another important indicator in Table 4.2 (columns 7-10) is the *sex ratio*, calculated for each country at the national level and by residence for the total population and by broad age groups. A ratio of 100 represents a balance between the sexes. A ratio above 100 represents more males than females while a ratio below 100 represents the opposite. Sex ratios usually follow age-specific patterns. Ratios above 100 are most common among age groups under 15 years of age due to the excess of males over females at birth. In the adult years 15-64, sex ratios of 100 or slightly less usually reflect the higher mortality rates among males. Because mortality differences in favor of women are even greater among individuals aged 65 and older, ratios are usually much lower in this age group.

At the national level, sex ratios usually fall within the range of 95 and 102, unless there is an unusual situation such as a history of war losses or massive migration movements (Shryock and Siegel, 1976). If the adult male population is subject to high levels of out-migration, households are more likely to be composed of women, children, and the elderly. Sex ratios at the national level (column 10) fall into the expected range (95-102)

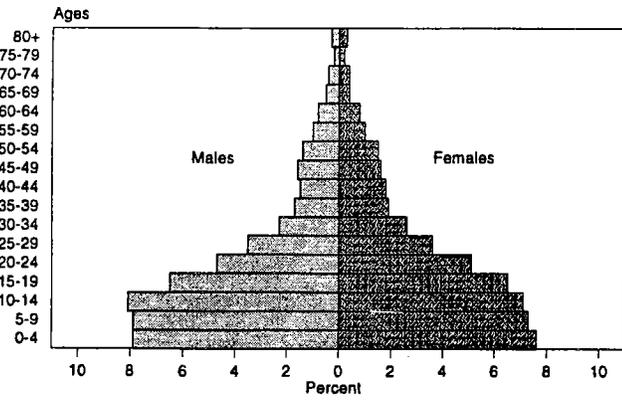
Figure 4.2 Age-sex structure of the household population, Demographic and Health Surveys, 1990-1996

Sub-Saharan Africa

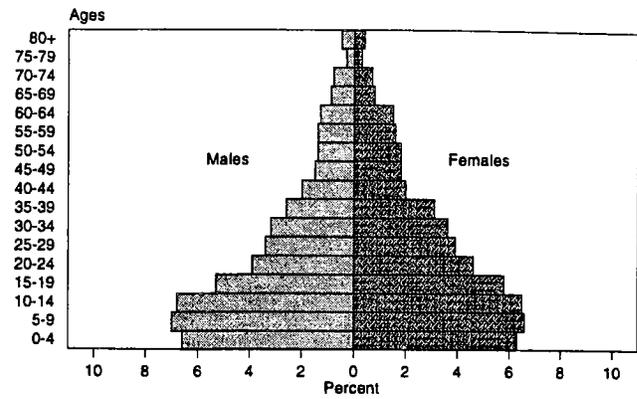


Near East/North Africa

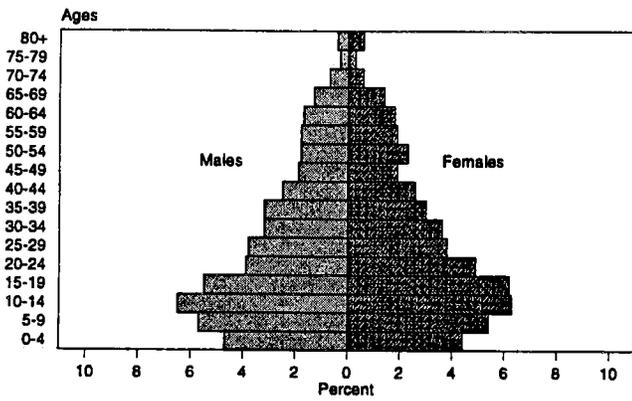
Jordan



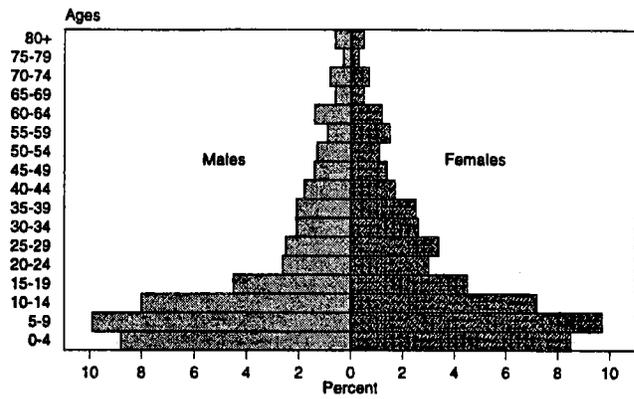
Morocco



Turkey

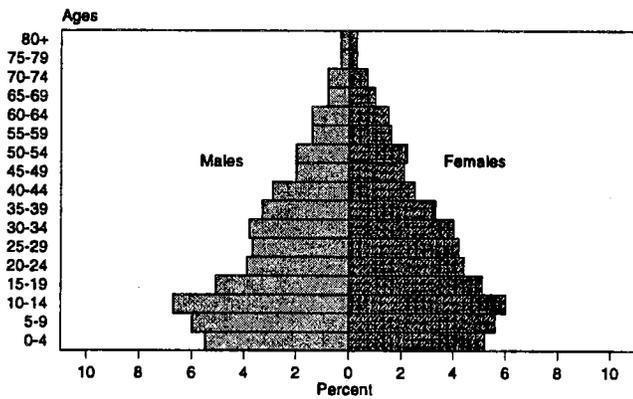


Yemen

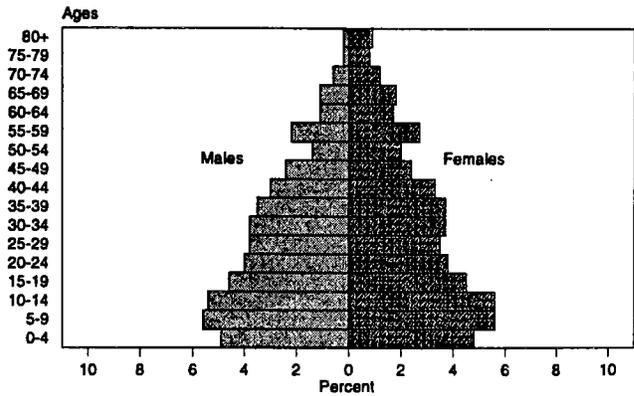


Asia

Indonesia

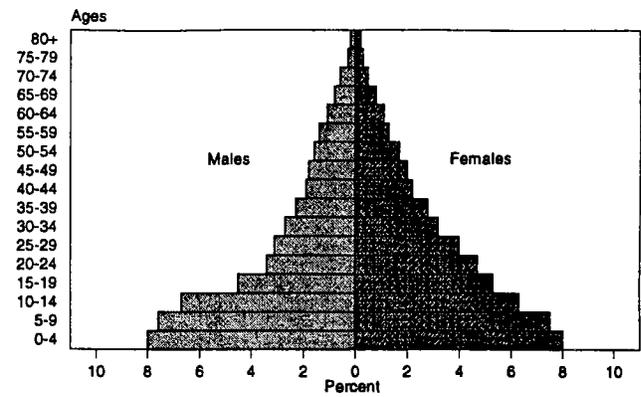
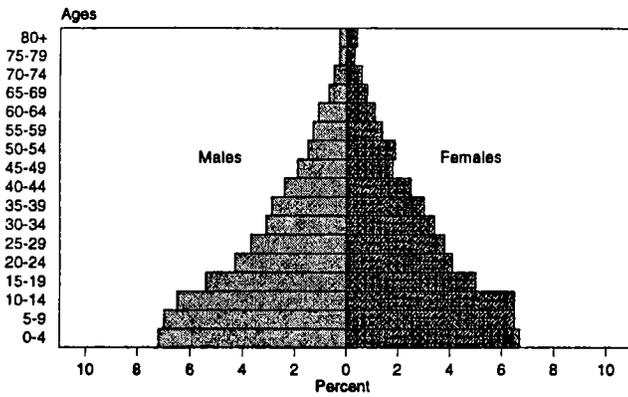


Kazakhstan



Philippines

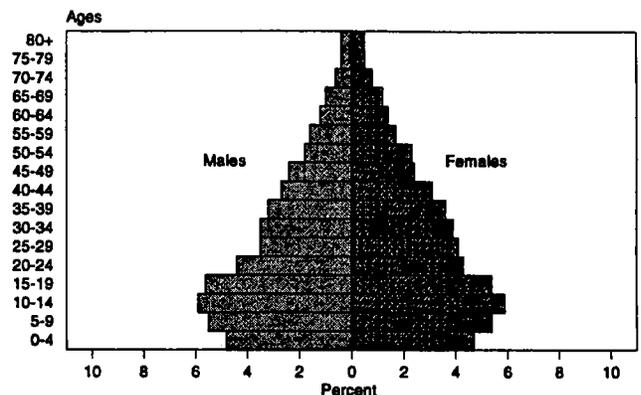
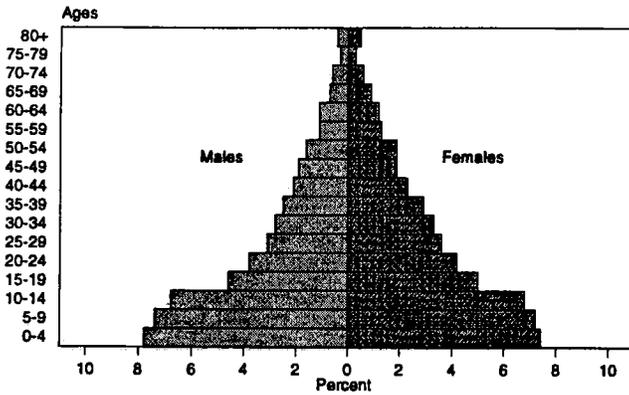
Nepal



Latin America/Caribbean

Bolivia

Brazil



Colombia

Guatemala

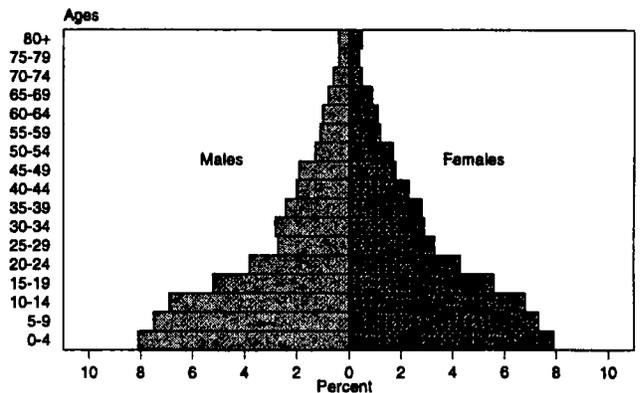
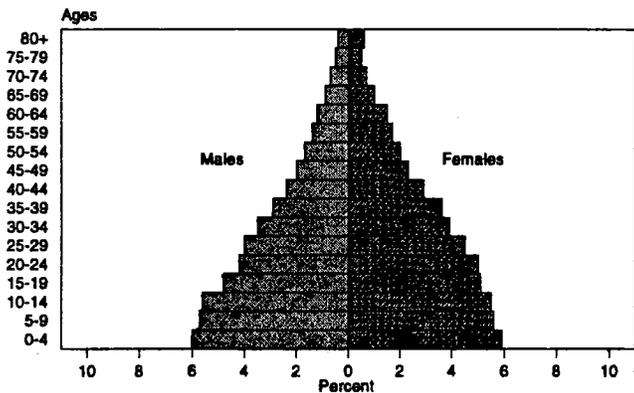
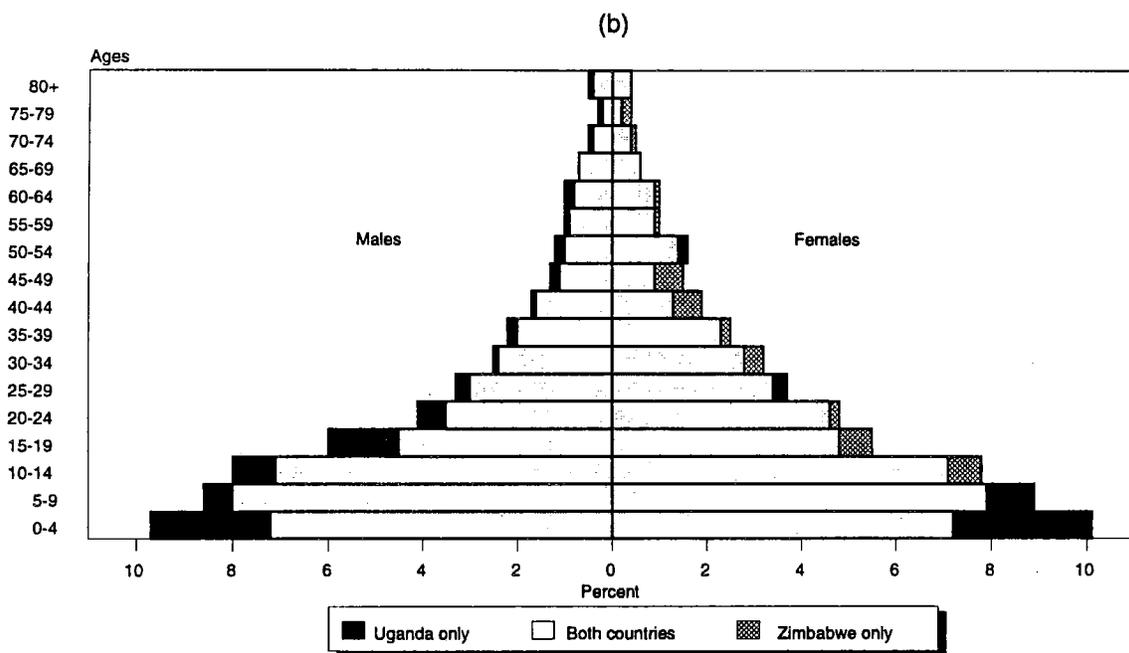
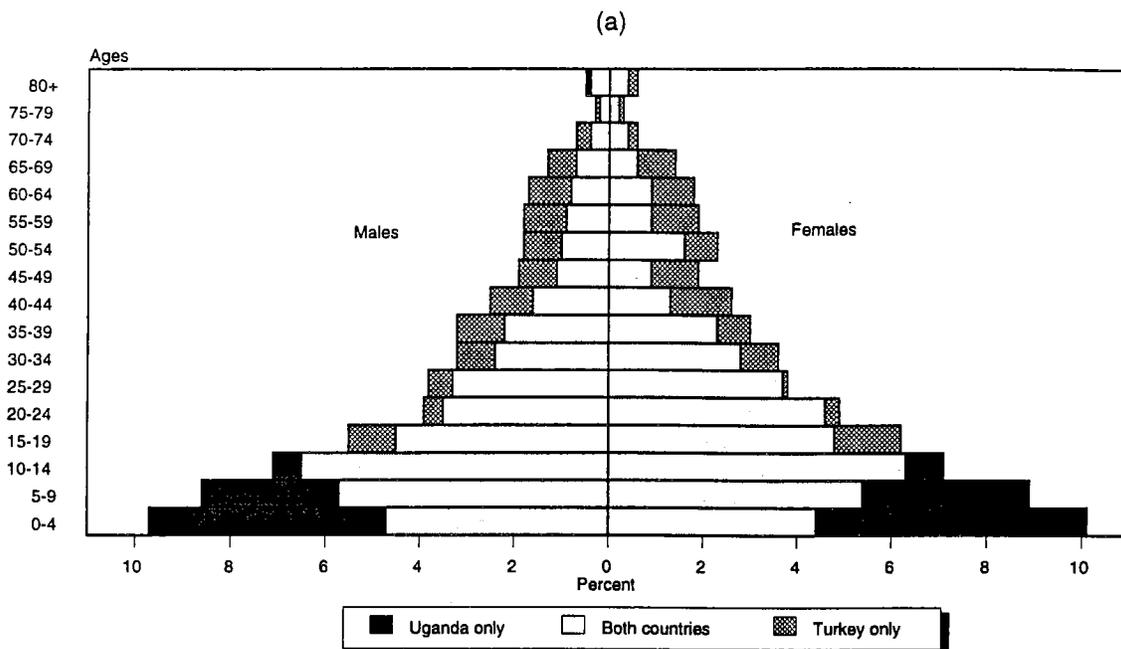


Figure 4.3 Comparison of population pyramids for (a) Uganda and Turkey, and (b) Uganda and Zimbabwe



in only 17 of 41 countries. However in more than half of the countries in sub-Saharan Africa, the sex ratio is under 95. Aside from the possibility of sex-selective undercounting, male emigration probably explains the lower sex ratios in these countries, especially in countries like Comoros (89), Senegal (91), Ghana (93), Mali (93), and Burkina Faso (94). In Namibia, the war for independence and its consequences on the male population are probably responsible for the low sex ratio (90). In the other regions, five countries have a sex ratio below 95: two in Asia (Kazakhstan: 92⁶ and Nepal:93), and three in Latin America/Caribbean (Colombia:92, Haiti:92, and Brazil:94).

In Pakistan, the sex ratio (108) is much higher than the expected range. The situation in Pakistan is due to errors in the data (National Institute of Population Studies and IRD/Macro International, 1992), in particular underreporting of females.

The sex ratio by residence for the age group 15-64 indicates that there are relatively more males in the urban population than in the rural population in almost all countries in sub-Saharan Africa and the Near East/North Africa: this situation is mainly due to extensive rural-urban migration. The opposite is observed in Latin America and the Caribbean. Countries in Asia do not fall consistently into one group or the other.

The trends in age and sex structure are shown in Table 4.3. Sixteen DHS countries which have undertaken more than one survey are included in this table. In most countries, the population under the ages of 5 and 15 has decreased slightly over time. The decrease is more pronounced in countries where fertility is in transition (i.e., Kenya, Zimbabwe, Egypt, Morocco, Indonesia, Dominican Republic, and Peru).

The sex ratio has also changed slightly over time. In all countries, with the exception of Indonesia, the sex ratio has decreased in favor of the female population. The largest decline is observed in Kenya (99 in 1988/89 and 92 in 1993).

The distribution of households according to size varies across geographical regions and among countries in the same region (see Table 4.4 and Figure 4.5). The distribution of households according to ungrouped household size is presented in Appendix A, Table A.2. In Table 4.4 the household distributions are aggregated into three groups: small households with 1 or 2 members, medium households with 3 to 5 members, and large households with 6 or more members.

⁶ In Kazakhstan, this figure is the result of the extremely low sex ratio for the population age 65 and older (45 men for 100 women).

Medium-size households predominate in Latin America/Caribbean and in Asia, with the exception of Pakistan where large households are the norm. In these two regions, medium-size households are largely the result of relatively low fertility. The high proportion of medium-size households is believed to be associated with the nuclearization of the household unit.

In most of the countries of sub-Saharan Africa and in the Near East/North Africa, with the exception of Turkey and Egypt where medium-size households predominate, large household size is more prevalent. In these settings, especially in sub-Saharan Africa, the nuclear family is not the norm; fertility levels are high and social and cultural factors favor coresidence of the extended family, the elderly, and nonrelatives.

A high proportion of small households (1 or 2 members) is found in sub-Saharan Africa compared with other regions. Burch (1980) discussed similar findings from a United Nations report (1973) in which a large proportion of small/medium households was found in sub-Saharan Africa, indicating that households of this size are more common than was initially thought.

Summary measures used to study the composition of households in each country—the average number of adults per household and the average number of children per household—are shown in Table 4.5 and Figure 4.4. On average, as expected, households in countries with low fertility are likely to have a small number of children, while households in countries with high fertility are likely to have a large number of children.

On average, slightly less than half of all household members in sub-Saharan Africa are children. The average number of adults per household exceeds 2 in all sub-Saharan countries. Senegal stands out with an average of 4.6 adults per household. The average number of children per household in the Near East/North Africa region is similar to averages found in sub-Saharan Africa; the number of adults per household exceeds 3 in the six countries surveyed in that region. The mean number of adults per household is 3 or above in the Asian countries, except in Indonesia and Kazakhstan. The average number of children per household ranges between 1.2 in Kazakhstan and 3 in Pakistan. In Latin America and the Caribbean, the average numbers of children (ranging from 1.3 to 2.3) and adults (ranging from 2.6 to 3.3) are generally smaller than those found in the other regions. Overall, whereas there are almost as many children as adults in sub-Saharan Africa, the ratio of adults to children, on average, is less than three-fourths in the Near East/North Africa and less than two-thirds in the other two regions.

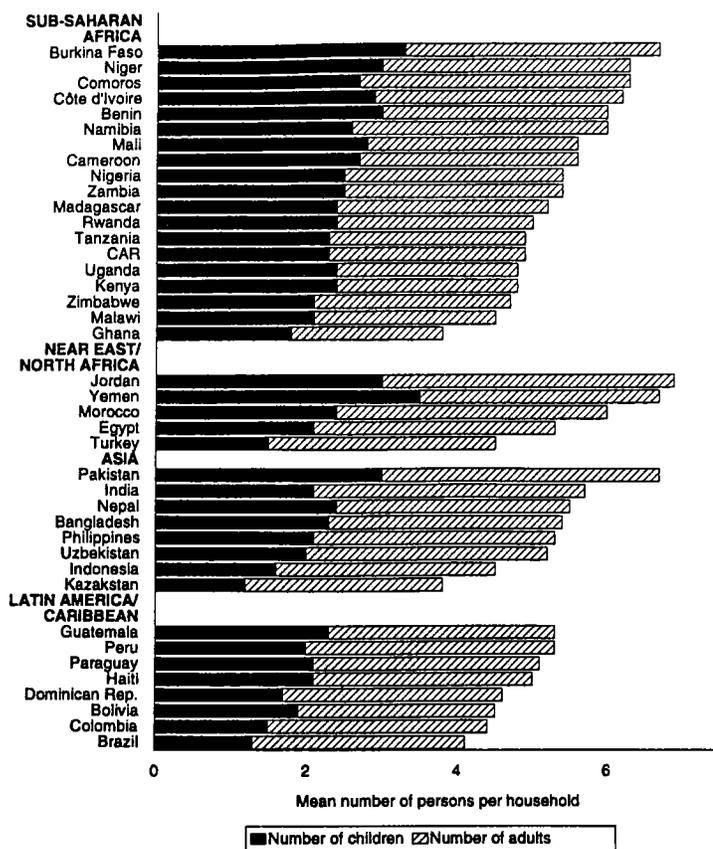
Table 4.3 Trends in age and sex structure of households

Trends in age and sex structure of households, Demographic and Health Surveys, 1986-1996

Country	Age			Total percent ¹	Percentage of population age 0-4 years	Female population age 15-49 as percentage of total popul.	Sex ratio	De facto population
	<15	15-64	65+					
Sub-Saharan Africa								
Ghana								
DHS 1988	48.4	47.7	3.8	100.0	18.6	21.5	95.9	21,283
DHS 1993	48.2	48.2	3.6	100.0	17.3	21.9	93.3	21,413
Kenya								
DHS 1988/89	52.5	44.2	3.3	100.0	17.6	18.2	99.4	42,759
DHS 1993	49.1	47.1	3.8	100.0	15.9	21.0	91.7	38,237
Mali								
DHS 1987	49.9	46.3	3.7	100.0	19.8	20.8	94.9	15,208
DHS 1995/96	50.2	46.2	3.6	100.0	18.6	21.2	92.8	46,856
Senegal								
DHS 1986	46.9	48.8	4.3	100.0	18.3	21.7	91.9	29,030
DHS 1992/93	48.0	47.6	4.3	100.0	17.9	21.9	90.6	30,337
Tanzania								
DHS 1991/92	46.8	49.3	3.9	100.0	17.6	21.9	95.2	43,457
DHS-KAP 1994	49.3	46.4	4.3	100.0	17.2	20.8	93.9	21,296
DHS 1996	47.2	48.5	4.3	100.0	17.1	22.3	93.2	38,297
Uganda								
DHS 1988/89	50.7	45.9	3.4	100.0	20.3	20.6	94.4	23,168
DHS 1995	51.5	45.0	3.4	100.0	19.8	20.4	94.1	35,635
Zambia								
DHS 1992	47.3	50.1	2.6	100.0	17.4	22.1	96.5	33,943
DHS 1996	47.5	49.9	2.7	100.0	17.6	22.5	95.7	38,000
Zimbabwe								
DHS 1988/89	48.2	48.1	3.6	100.0	16.0	21.0	97.3	21,307
DHS 1994	46.2	50.0	3.8	100.0	14.4	22.8	96.0	27,900
Near East/North Africa								
Egypt								
DHS 1988/89	41.2	55.0	3.8	100.0	15.3	23.7	100.2	54,298
DHS 1992	41.7	54.6	3.7	100.0	14.1	24.1	98.5	59,033
DHS 1995	39.9	56.3	3.7	100.0	12.8	25.1	98.1	81,523
Morocco								
DHS 1987	41.3	54.3	4.4	100.0	13.8	23.8	97.1	41,477
DHS 1992	39.7	55.6	4.6	100.0	12.9	24.7	95.3	38,785
Asia								
Indonesia								
DHS 1987	36.9	59.2	3.9	100.0	11.3	25.2	97.9	67,839
DHS 1991	36.1	59.9	3.9	100.0	11.2	25.9	98.8	124,486
DHS 1994	35.1	60.3	4.6	100.0	10.7	25.6	99.4	150,850
Latin America/Caribbean								
Bolivia								
DHS 1989	43.2	52.2	4.6	100.0	14.5	22.3	97.9	37,404
DHS 1994	43.5	52.2	4.3	100.0	15.3	23.2	94.5	40,301
Colombia								
DHS 1986	37.4	58.7	3.9	100.0	11.4	26.1	97.8	21,623
DHS 1990	35.5	59.6	4.8	100.0	11.6	27.2	90.8	31,271
DHS 1995	34.4	60.5	5.1	100.0	11.9	27.1	91.9	44,490
Dominican Republic								
DHS 1986	39.6	56.4	4.0	100.0	13.3	24.9	98.9	34,675
DHS 1991	36.9	58.5	4.6	100.0	12.9	25.9	96.7	32,553
Guatemala								
DHS 1987	46.2	50.2	3.6	100.0	16.4	21.8	99.7	28,288
DHS 1995	44.5	51.1	4.3	100.0	16.0	23.1	94.5	59,267
Peru								
DHS 1986	41.2	54.4	4.3	100.0	13.2	22.9	100.4	23,067
DHS 1991/92	38.1	57.3	4.6	100.0	12.7	25.1	97.0	69,901

¹Including missing age

Figure 4.4 Mean number of persons per household



Note: Figure does not include Senegal.

4.3 SIZE OF HOUSEHOLDS

A descriptive assessment of the size and structure of households across countries and geographical regions is presented in this section. Table 4.4 shows the percent distribution of households according to household size (number of members) and the median and mean household size, according to urban-rural residence. Unlike, the three earlier tables, Table 4.4 and those which will follow in this report are based on the de jure population. Mean household size ranges from 3.8 in Ghana and Kazakhstan to 8.8 in Senegal.⁷ Most countries in sub-Saharan Africa, the Near East/North Africa, and Asia have on average at least 5 persons, with the exception of the Central African Republic, Ghana, Indonesia, Kazakhstan, Kenya, Malawi, Tanzania, Turkey, Uganda, and Zimbabwe. In these countries, the mean size varies between 3.8 in Ghana and Kazakhstan and 4.9 in the Central African Republic and Tanza-

⁷ The large mean household size in Senegal is due to the definition of a household. In Senegal, a household is often assimilated into a compound, which is a typical settlement pattern in that country.

nia. In Latin America/Caribbean, the household size is smaller than in the other regions. It varies between 4.1 in Brazil and 5.3 in Guatemala and Peru (see Figure 4.4). Differentials in the mean household size by urban-rural residence, shown in Table 4.4, indicate that households in the majority of countries are larger in rural areas than in urban areas. Larger households in urban areas compared to rural areas are found in 12 countries: Bangladesh, Cameroon, the Central African Republic, Indonesia, Malawi, Mali, Niger, Pakistan, Peru, the Philippines, Yemen, and Zambia.

A comparison of the changes in the mean household size over time from the current DHS findings with the results of earlier DHS surveys is presented in Table 4.6. Sixteen countries are part of this comparison. A decline in the mean household size—on average, 0.3 person per household—is observed in 11 countries with the exception of Ghana. Ghana lost more than 1 person between 1988 (5.1) and 1993 (3.8).⁸ Three countries (Mali, Peru, and Senegal) experienced a slight increase in mean household size. Uganda is the only country where there was no change in the average household size.

4.4 HEADSHIP OF HOUSEHOLDS

In the DHS Household Questionnaire, one adult respondent was asked to list all persons who usually lived in the household or had spent the night before the interview in the household, starting with the head of household. Headship was assigned by the household respondent with only one restriction: children (persons under 15) were not allowed to be designated as household heads. This leaves a great deal of room for interpretation on the part of respondents (Bruce and Lloyd, 1992). No other questions were asked about the household heads, as was the case in the World Fertility Survey (Zoughlami and Allsopp, 1985).

Typically in traditional societies, the oldest male is designated as the head of household regardless of whether he is the primary source of economic support, the authority figure, or fulfills other tasks purportedly performed by household heads. However, circumstances which give rise to female headship have become more prevalent; thus female headship is now relatively common in many countries. Situations customarily associated with female headship are varied and encompass a wide range of circumstances. Bruce and Lloyd (1992) have highlighted several of these: widowhood, migration of men and/or women, nonmarital fertility, marital instability, and noncoresidential polygyny.

⁸ For Ghana, this decline between 1988 and 1993 seems to be exaggerated since no major events such as civil war or massive migration occurred during this time period.

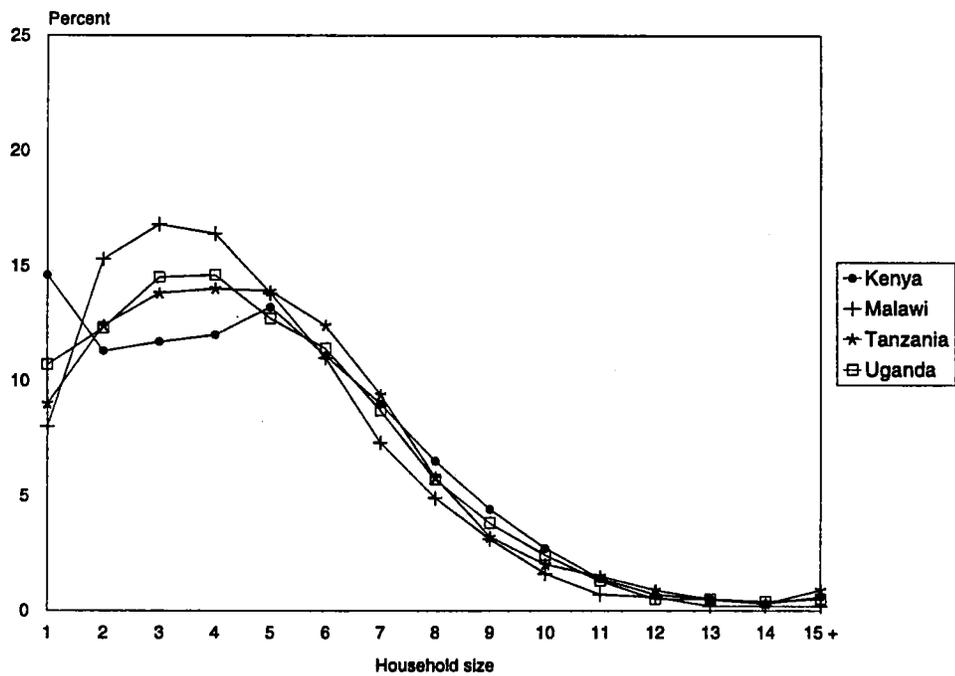
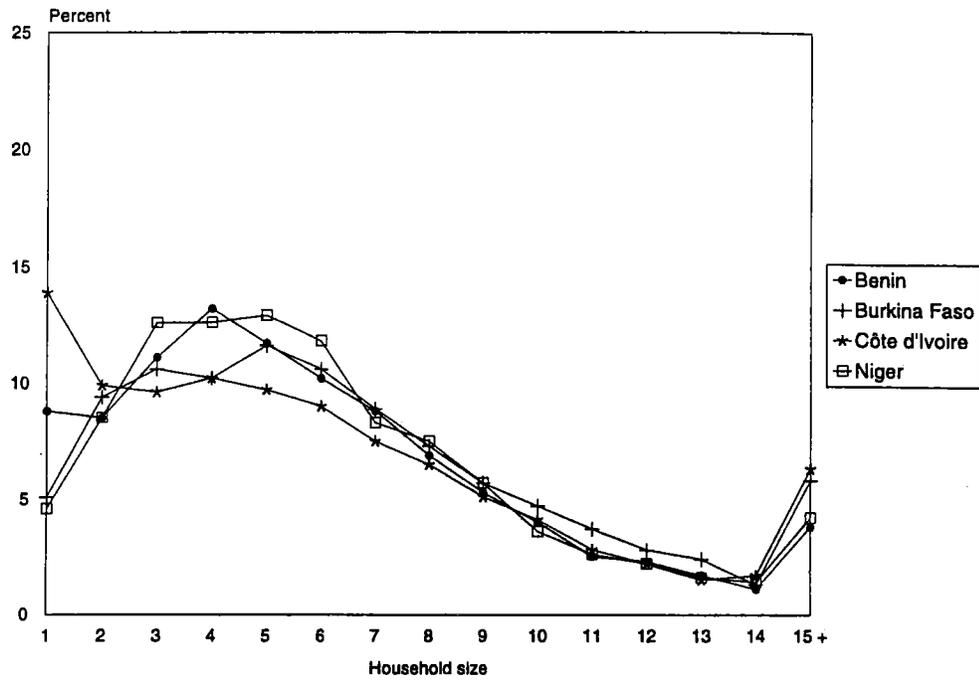
Table 4.4. Size of household

Percent distribution of households by size, and median and mean household size, according to urban-rural residence, Demographic and Health Surveys, 1990-1996

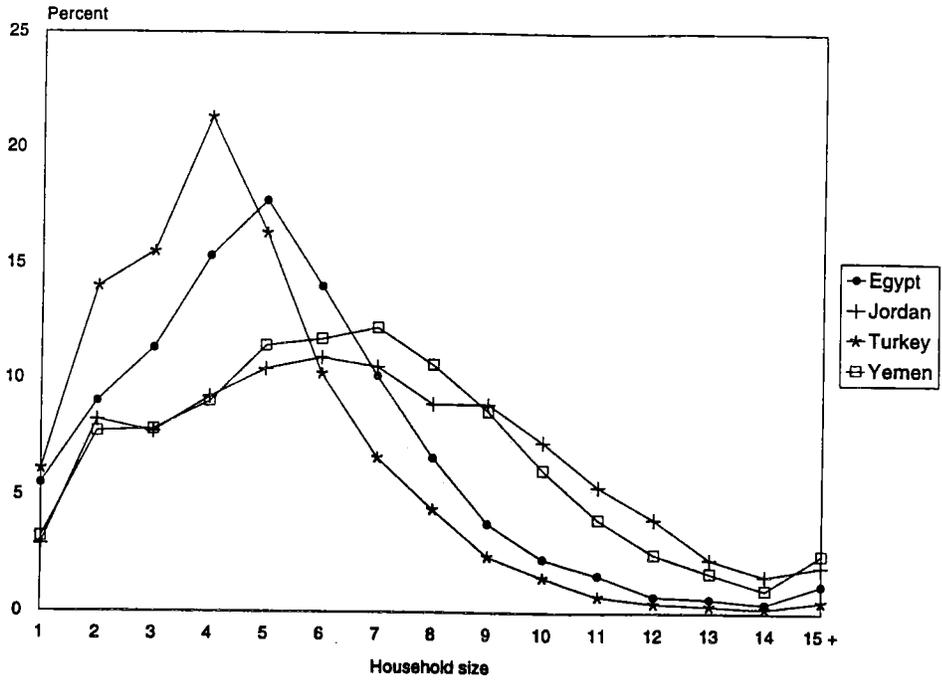
Country	Urban						Rural						Total								
	Household size			Number of house-holds	Household size			Number of house-holds	Household size			Number of house-holds	Household size			Number of house-holds					
	1-2	3-5	6+		Mean	Median	Mean		1-2	3-5	6+		Mean	Median	Mean		1-2	3-5	6+	Mean	Median
Sub-Saharan Africa																					
Benin	20.2	35.4	44.4	100.0	1,733	4.5	5.7	15.5	36.5	48.0	2,766	4.8	6.2	17.3	36.1	46.6	100.0	4,499	4.7	6.0	
Burkina Faso	21.4	30.5	48.2	100.0	986	4.8	6.1	12.8	32.8	54.4	100.0	4,157	5.4	6.8	14.5	32.4	53.2	100.0	5,143	5.3	6.7
Cameroon	23.6	28.3	48.1	100.0	1,318	4.8	5.8	25.3	32.3	42.4	100.0	2,220	4.3	5.5	24.7	30.8	44.5	100.0	3,538	4.5	5.6
Central African Rep.	24.0	32.5	43.5	100.0	1,977	4.4	5.8	31.1	39.6	29.4	100.0	3,574	3.3	4.4	28.6	37.0	34.4	100.0	5,551	3.7	4.9
Comoros	12.4	34.6	53.0	100.0	647	5.2	6.1	8.0	34.0	58.0	100.0	1,605	5.6	6.4	9.2	34.2	56.6	100.0	2,252	5.5	6.3
Côte d'Ivoire	27.2	31.5	41.3	100.0	2,418	4.1	5.7	21.5	28.1	50.3	100.0	3,517	5.0	6.6	23.8	29.5	46.6	100.0	5,935	4.7	6.2
Ghana	44.0	37.7	18.3	100.0	2,089	2.4	3.4	34.3	41.3	24.4	100.0	3,733	3.1	4.0	37.8	40.0	22.2	100.0	5,822	2.8	3.8
Kenya	47.1	35.6	17.2	100.0	1,527	2.2	3.4	20.9	37.1	42.0	100.0	6,423	4.4	5.1	25.9	36.8	37.3	100.0	7,950	4.0	4.8
Madagascar	19.0	42.6	38.4	100.0	969	4.1	5.0	16.6	43.5	39.9	100.0	4,975	4.3	5.2	17.0	43.3	39.7	100.0	5,944	4.3	5.2
Malawi	23.4	40.1	36.6	100.0	603	3.9	4.8	23.3	47.8	28.9	100.0	4,720	3.6	4.4	23.3	46.9	29.8	100.0	5,323	3.6	4.5
Mali	18.4	36.4	45.2	100.0	2,399	4.6	5.8	15.4	42.9	41.8	100.0	6,317	4.4	5.5	16.2	41.1	42.7	100.0	8,716	4.4	5.6
Namibia	28.1	38.4	33.5	100.0	1,476	3.7	4.9	16.0	30.8	53.1	100.0	2,625	5.3	6.6	20.4	33.5	46.1	100.0	4,101	4.6	6.0
Niger	17.0	32.7	50.3	100.0	838	5.0	6.7	12.4	39.1	48.6	100.0	4,404	4.9	6.2	13.1	38.1	48.8	100.0	5,242	4.9	6.3
Nigeria	28.7	36.3	35.0	100.0	2,425	3.7	4.8	18.9	37.8	43.3	100.0	6,574	4.4	5.6	21.5	37.4	41.1	100.0	8,999	4.2	5.4
Rwanda	25.7	39.8	34.5	100.0	356	3.8	4.6	15.1	45.1	39.8	100.0	5,896	4.3	5.0	15.7	44.8	39.5	100.0	6,252	4.3	5.0
Senegal	15.7	23.1	61.2	100.0	1,487	6.5	7.8	4.8	19.1	76.1	100.0	2,041	7.8	9.6	9.4	20.8	69.8	100.0	3,528	7.3	8.8
Tanzania	29.9	42.0	28.1	100.0	1,783	3.3	4.3	18.9	41.7	39.4	100.0	6,186	4.3	5.1	21.4	41.7	36.9	100.0	7,969	4.1	4.9
Uganda	32.4	41.1	26.5	100.0	1,020	3.1	4.2	21.5	41.9	36.6	100.0	6,530	4.0	4.8	23.0	41.8	35.2	100.0	7,550	3.9	4.8
Zambia	14.1	37.2	48.7	100.0	2,702	4.9	5.7	17.3	43.6	39.1	100.0	4,584	4.3	5.2	16.1	41.2	42.7	100.0	7,286	4.5	5.4
Zimbabwe	36.6	40.3	23.1	100.0	1,919	2.9	3.8	20.8	39.0	40.2	100.0	4,065	4.3	5.1	25.9	39.4	34.7	100.0	5,984	3.8	4.7
Near East/North Africa																					
Egypt	17.1	53.2	29.7	100.0	7,924	4.0	4.6	11.8	35.1	53.1	100.0	7,643	5.2	6.0	14.5	44.3	41.2	100.0	15,567	4.5	5.3
Jordan	11.0	28.8	60.1	100.0	6,206	5.9	6.7	11.1	22.7	66.2	100.0	2,127	6.7	7.3	11.0	27.3	61.7	100.0	8,333	6.1	6.9
Morocco	15.3	38.1	46.7	100.0	3,193	4.8	5.5	12.4	28.4	59.2	100.0	3,384	5.7	6.5	13.8	33.1	53.1	100.0	6,577	5.2	6.0
Turkey	19.3	59.8	20.9	100.0	5,563	3.5	4.2	21.5	41.0	37.5	100.0	3,056	4.1	5.0	20.1	53.1	26.8	100.0	8,619	3.7	4.5
Yemen	9.2	24.8	66.0	100.0	2,265	6.4	7.3	11.2	29.0	59.8	100.0	10,571	5.8	6.6	10.9	28.2	60.9	100.0	12,836	5.9	6.7
Asia																					
Bangladesh	7.4	50.6	42.0	100.0	1,038	4.6	5.5	7.7	50.1	42.2	100.0	8,136	4.6	5.4	7.7	50.2	42.2	100.0	9,174	4.6	5.4
India	10.4	48.5	41.1	100.0	24,424	4.5	5.4	9.9	43.3	46.9	100.0	64,138	4.8	5.8	10.0	44.7	45.3	100.0	88,562	4.7	5.7
Indonesia	15.6	53.2	31.1	100.0	9,998	4.0	4.7	16.0	59.2	24.9	100.0	23,740	3.7	4.4	15.9	57.4	26.7	100.0	33,738	3.8	4.5
Kazakhstan	40.1	52.2	7.7	100.0	2,368	2.5	3.1	17.1	50.7	32.3	100.0	1,810	3.9	4.7	30.1	51.5	18.3	100.0	4,178	3.1	3.8
Nepal	10.8	51.6	37.6	100.0	716	4.4	5.2	10.9	44.2	44.9	100.0	7,366	4.7	5.6	10.9	44.9	44.2	100.0	8,082	4.7	5.5
Pakistan	6.5	26.5	67.0	100.0	2,120	6.3	7.2	10.0	30.3	59.7	100.0	5,073	5.7	6.5	9.0	29.1	61.9	100.0	7,193	5.9	6.7
Philippines	9.6	47.1	43.3	100.0	6,613	4.6	5.4	10.9	46.6	42.5	100.0	6,382	4.6	5.3	10.2	46.9	42.9	100.0	12,995	4.6	5.3
Uzbekistan	22.9	45.3	31.8	100.0	1,639	3.8	4.6	6.4	43.2	50.4	100.0	2,064	5.0	5.7	13.7	44.1	42.2	100.0	3,703	4.5	5.2
Latin America/Caribbean																					
Bolivia	18.5	51.8	29.7	100.0	5,151	3.9	4.5	24.0	44.9	31.1	100.0	3,963	3.8	4.5	20.9	48.8	30.3	100.0	9,114	3.8	4.5
Brazil	20.8	62.1	17.1	100.0	10,689	3.4	4.0	19.9	54.1	26.0	100.0	2,594	3.6	4.4	20.6	60.5	18.8	100.0	13,283	3.4	4.1
Colombia	18.1	58.9	23.0	100.0	7,099	3.6	4.3	18.8	49.1	32.1	100.0	3,013	3.9	4.7	18.3	56.0	25.7	100.0	10,112	3.7	4.4
Dominican Republic	20.6	49.4	30.0	100.0	4,418	3.8	4.5	21.6	42.8	35.6	100.0	2,726	4.1	4.8	21.0	46.8	32.1	100.0	7,144	3.9	4.6
Guatemala	15.3	51.6	33.1	100.0	4,790	4.1	4.8	12.0	40.8	47.2	100.0	6,507	4.8	5.6	13.4	45.4	41.2	100.0	11,297	4.5	5.3
Haiti	21.1	43.9	35.0	100.0	1,820	4.0	4.8	18.3	40.5	41.2	100.0	2,998	4.4	5.1	19.3	41.8	38.8	100.0	4,818	4.2	5.0
Paraguay	17.5	50.2	32.3	100.0	3,054	3.9	4.7	15.2	40.1	44.7	100.0	2,630	4.6	5.4	16.5	45.5	38.0	100.0	5,683	4.2	5.1
Peru	8.6	49.7	41.7	100.0	9,623	4.5	5.3	13.6	45.2	41.2	100.0	3,856	4.5	5.2	10.0	48.4	41.5	100.0	13,479	4.5	5.3

Figure 4.5 Distribution of households by size, Demographic and Health Surveys, 1990-1996

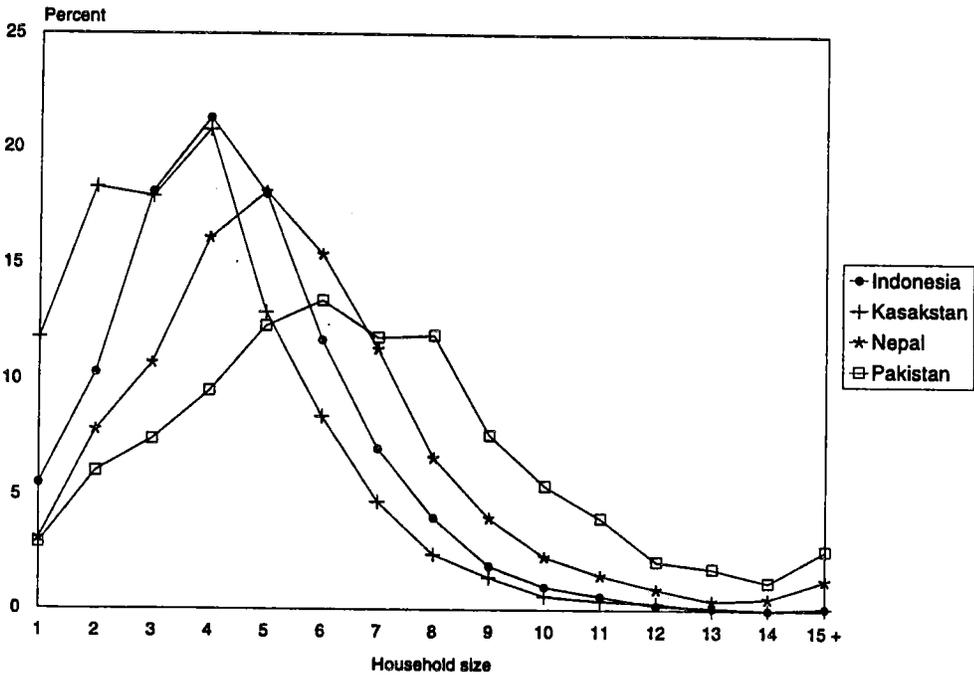
Sub-Saharan Africa



Near East/North Africa



Asia



Latin America/Caribbean

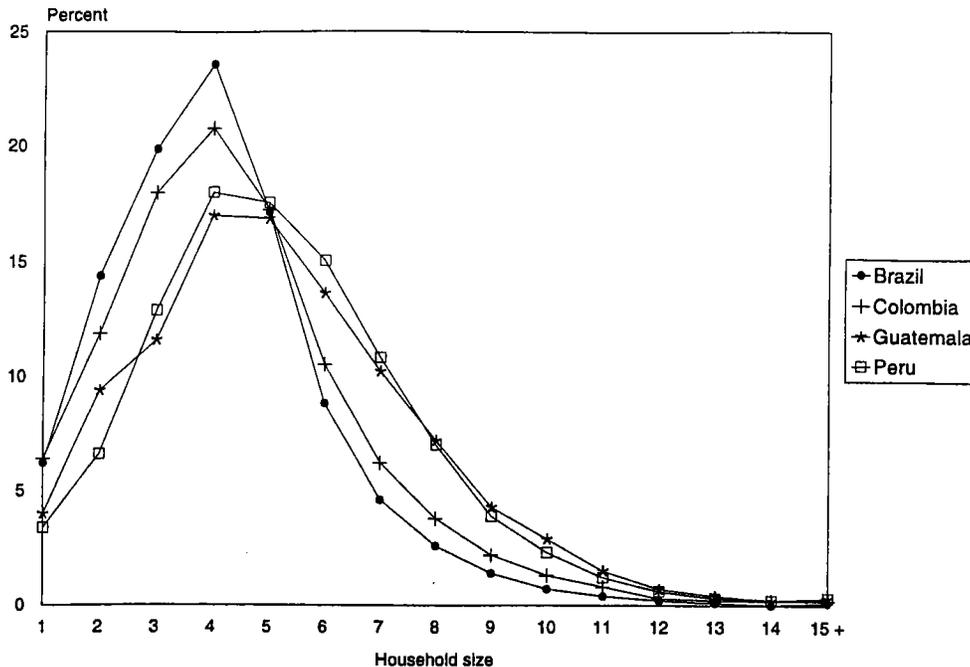


Table 4.7 and Figure 4.6 provide information on the household heads. In most countries, the majority of households are headed by men. The results suggest that the traditional pattern of male-headed households is most intact in countries in the Near East/North Africa region, Asia (with the exception of Kazakhstan and Uzbekistan), and in half of the countries of Latin America/Caribbean. The percentage of female-headed households is 20 percent or less in these countries. The smallest proportion of female-headed households was reported in a Near East country—Jordan (6 percent). Five other countries have less than 10 percent of female-headed households: three in sub-Saharan Africa (Burkina Faso: 7 percent, Mali: 8 percent, and Niger: 10 percent), and two in Asia (Pakistan: 7 percent and Bangladesh: 9 percent). It should be noted that all of the countries with the smallest proportion of female-headed households have a majority of Moslem population.

A slightly different pattern emerges in sub-Saharan Africa. Of the 20 countries in this region, 12 have more than 20 percent of households headed by females. In the cultures of this region, a higher proportion of households tend to be headed by females, with the highest proportions found in Ghana (37 percent), Kenya (33 percent) and Zimbabwe (33 percent). In Ghana, the matrilineal structure of kinship groups may account for the high level of female headship in that country (McDonald, 1985). Similar

results are observed for the Caribbean countries of Haiti and the Dominican Republic, where 39 percent and 25 percent of households, respectively, are headed by women. This confirms existing evidence from that region of a high level of common-law unions, associated with a strong mother-child bond and a secondary role for males (Charbit, 1984).

The same Table 4.7 shows the distribution of female-headed households and male-headed households by urban-rural residence. In two countries, the percentage of female-headed households in the urban areas is very high (Haiti: 48 percent and Ghana: 42 percent). In almost all of the countries, the tendency toward female-headed households is more prevalent in urban areas than in rural areas. In five African countries (Kenya, Malawi, Rwanda, Zambia, and Zimbabwe) and in Yemen, however, the opposite is true: the percentage of female-headed households is higher in rural areas than in urban areas.

Table 4.8 displays the age-specific headship rates for males and females by 10-year age groups beginning with the 15-24 year age group. In this table, the person rather than the household is the unit of analysis. Age-specific headship rates represent the proportion of men and women in each age group who are household heads. Male age-specific headship rates are expected to increase rapidly between ages 15-34, peak between the ages of

Table 4.5 Summary measures of household complexity

Average number of children per household, average number of adults per household, and mean household size, Demographic and Health Surveys, 1990-1996

Country	Average number of children per household	Average number of adults per household	Mean household size
Sub-Saharan Africa			
Benin	3.0	3.0	6.0
Burkina Faso	3.3	3.4	6.7
Cameroon	2.7	3.0	5.6
Central African Republic	2.3	2.6	4.9
Comoros	2.7	3.6	6.3
Côte d'Ivoire	2.9	3.3	6.2
Ghana	1.8	2.0	3.8
Kenya	2.4	2.5	4.8
Madagascar	2.4	2.8	5.2
Malawi	2.1	2.4	4.5
Mali	2.8	2.8	5.6
Namibia	2.6	3.4	6.0
Niger	3.0	3.2	6.3
Nigeria	2.5	2.8	5.4
Rwanda	2.4	2.6	5.0
Senegal	4.2	4.6	8.8
Tanzania	2.3	2.6	4.9
Uganda	2.4	2.3	4.8
Zambia	2.5	2.9	5.4
Zimbabwe	2.1	2.5	4.7
Near East/North Africa			
Egypt	2.1	3.3	5.3
Jordan	3.0	3.8	6.9
Morocco	2.4	3.7	6.0
Turkey	1.5	3.1	4.5
Yemen	3.5	3.2	6.7
Asia			
Bangladesh	2.3	3.2	5.4
India	2.1	3.5	5.7
Indonesia	1.6	2.9	4.5
Kazakhstan	1.2	2.6	3.8
Nepal	2.4	3.1	5.5
Pakistan	3.0	3.8	6.7
Philippines	2.1	3.2	5.3
Uzbekistan	2.0	3.3	5.2
Latin America/Caribbean			
Bolivia	1.9	2.6	4.5
Brazil	1.3	2.8	4.1
Colombia	1.5	2.9	4.4
Dominican Republic	1.7	2.9	4.6
Guatemala	2.3	2.9	5.3
Haiti	2.1	2.9	5.0
Paraguay	2.1	3.0	5.1
Peru	2.0	3.3	5.3

Table 4.6 Trends in mean household size

Mean household size by urban-rural residence, Demographic and Health Surveys, 1986-1996

Country	Mean household size
Sub-Saharan Africa	
Ghana	
DHS 1988	5.1
DHS 1993	3.8
Kenya	
DHS 1988/89	5.5
DHS 1993	4.8
Mali	
DHS 1987	5.3
DHS 1995/96	5.6
Senegal	
DHS 1986	8.2
DHS 1992/93	8.8
Tanzania	
DHS 1991/92	5.3
DHS-KAP 1994	5.3
DHS 1996	4.9
Uganda	
DHS 1988/89	4.8
DHS 1995	4.8
Zambia	
DHS 1992	5.6
DHS 1996	5.4
Zimbabwe	
DHS 1988/89	5.3
DHS 1994	4.7
Near East/North Africa	
Egypt	
DHS 1988/89	5.7
DHS 1992	5.6
DHS 1995	5.3
Morocco	
DHS 1987	6.2
DHS 1992	6.0
Asia	
Indonesia	
DHS 1987	4.8
DHS 1991	4.6
DHS 1994	4.5
Latin America/Caribbean	
Bolivia	
DHS 1989	4.6
DHS 1994	4.5
Colombia	
DHS 1986	5.2
DHS 1990	4.6
DHS 1995	4.4
Dominican Republic	
DHS 1986	4.9
DHS 1991	4.6
Guatemala	
DHS 1987	5.4
DHS 1995	5.3
Peru	
DHS 1986 ¹	5.1
DHS 1991/92	5.3

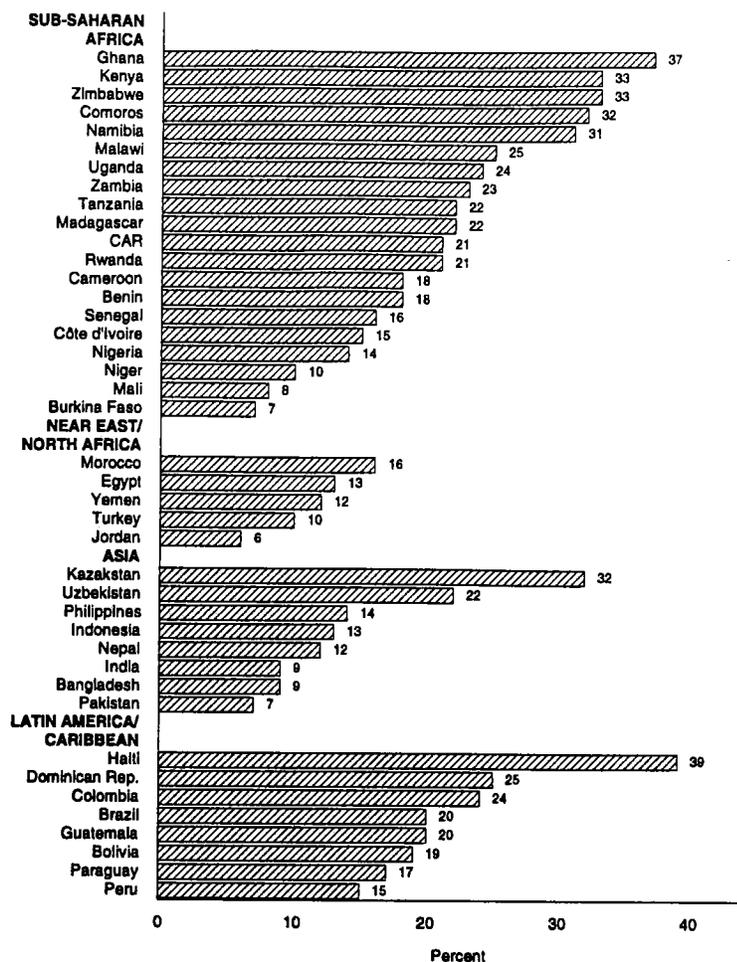
¹ Based on de facto population

Table 4.7 Female-headed households by urban-rural residence

Percentage of households headed by female by urban-rural residence, Demographic and Health Surveys, 1990-1996

Country	Urban	Rural	Total
Sub-Saharan Africa			
Benin	23.0	14.2	17.6
Burkina Faso	12.8	5.0	6.5
Cameroon	19.9	16.8	17.9
Central African Rep.	25.1	18.8	21.1
Comoros	33.1	31.9	32.2
Côte d'Ivoire	17.9	13.2	15.1
Ghana	41.7	34.6	37.1
Kenya	21.5	35.3	32.7
Madagascar	26.5	20.8	21.7
Malawi	12.6	26.1	24.6
Mali	11.6	7.0	8.3
Namibia	31.2	30.7	30.9
Niger	15.3	8.5	9.6
Nigeria	18.0	12.9	14.3
Rwanda	19.4	20.8	20.8
Senegal	23.1	10.5	15.8
Tanzania	23.3	21.3	21.8
Uganda	27.7	23.9	24.4
Zambia	20.2	24.8	23.1
Zimbabwe	18.7	39.4	32.7
Near East/North Africa			
Egypt	12.7	12.6	12.6
Jordan	6.8	5.1	6.4
Morocco	19.6	13.3	16.3
Turkey	10.7	8.6	10.0
Yemen	9.5	12.8	12.2
Asia			
Bangladesh	9.2	8.7	8.7
India	9.6	9.1	9.3
Indonesia	13.5	12.5	12.8
Kazakhstan	38.7	23.4	32.0
Nepal	12.5	12.4	12.4
Pakistan	7.9	6.8	7.1
Philippines	15.8	12.2	14.0
Uzbekistan	35.6	11.6	22.2
Latin America/Caribbean			
Bolivia	20.5	17.3	19.1
Brazil	21.6	13.7	20.0
Colombia	26.0	18.0	23.6
Dominican Republic	29.4	18.0	25.0
Guatemala	22.3	18.0	19.8
Haiti	48.2	32.9	38.7
Paraguay	20.1	13.4	17.0
Peru	16.0	13.3	15.2

Figure 4.6 Percentage of female-headed households, Demographic and Health Surveys, 1990-1996



There is no difference in the pattern of age-specific headship rates across regions. For males, however, in all regions, there are some countries where the age-specific headship rate declines before age 55. With regard to females, the age-specific headship rates decline slightly before age 65 in only four countries (Bangladesh, Comoros, Nepal, and Senegal). For the age group 65 and above, where rates usually peak, the proportion of female-headed households range from a minimum of 7 percent in Bangladesh to a maximum of 68 percent in Ghana.

45-54, and decline among men aged 65 and older. Age-specific headship rates for females are expected to increase slowly in the younger years and gradually gain some momentum after age 35. Rates usually peak in the oldest age group (65 and older), the age group when many women acquire headship following the death of their spouse. The declines in male-specific headship rates seen at ages 65 and older may be caused by a reassignment of headship to a younger household member.

Table 4.9 presents a more detailed version of Table 4.5: the summary measures of household size are shown according to the sex of the head of household. The average number of children is higher in male-headed households than in female-headed households, with the exception of Namibia and Zimbabwe. There is also in all countries, with no exception, a higher average number of adults per household in male-headed households than in female-headed households.

Table 4.8 Household headship by sex and age

Percentage of male and female household heads by 10-year age groups, Demographic and Health Surveys, 1990-1996

Country	Female age-specific headship rates							Male age-specific headship rates						
	15-24	25-34	35-44	45-54	55-64	65+	Total	15-24	25-34	35-44	45-54	55-64	65+	Total
Sub-Saharan Africa														
Benin	1.4	5.9	11.8	18.6	30.2	32.3	10.9	9.1	65.9	89.9	94.3	95.5	84.3	57.6
Burkina Faso	1.1	3.0	3.7	5.0	6.8	10.1	3.6	9.1	67.0	90.0	95.2	97.0	93.6	58.7
Cameroon	1.8	8.3	13.3	16.8	29.3	31.5	11.6	12.6	64.8	87.2	91.4	91.7	89.0	58.5
Central African Republic	3.2	9.9	18.1	26.9	41.2	41.8	15.4	24.0	68.5	84.7	92.6	91.9	89.2	62.2
Comoros	3.8	18.7	28.1	27.8	27.8	23.4	17.1	4.5	38.8	68.0	76.4	79.5	57.4	40.5
Côte d'Ivoire	1.8	6.9	12.8	14.6	22.7	30.0	9.1	9.6	49.1	77.7	87.8	89.2	87.6	51.0
Ghana	18.0	31.8	37.9	41.6	60.7	67.9	34.9	21.8	82.9	95.8	97.2	94.3	92.8	69.3
Kenya	6.6	24.1	34.8	39.9	47.2	54.2	25.6	8.3	71.3	89.3	93.5	93.2	92.1	57.5
Madagascar	3.2	10.2	20.2	26.9	41.3	42.7	15.6	12.0	67.9	88.8	93.3	92.9	84.5	56.4
Malawi	5.6	15.7	22.8	34.4	39.3	46.5	20.2	17.0	80.2	93.0	95.8	94.5	92.8	64.4
Mali	1.0	2.5	4.2	10.2	16.4	22.7	5.6	8.6	70.3	94.6	97.5	97.7	96.1	67.6
Namibia	1.9	11.0	19.9	26.6	39.2	48.7	17.2	5.5	37.3	64.7	81.4	83.0	75.1	42.3
Niger	1.4	2.8	4.1	10.1	16.6	23.2	5.7	10.0	61.6	86.8	92.7	88.5	78.7	58.1
Nigeria	2.1	5.0	11.6	15.0	24.1	33.2	9.9	8.9	61.1	88.6	94.1	95.2	94.2	60.8
Rwanda	1.3	7.7	17.7	29.8	41.9	60.0	15.7	11.7	75.1	94.1	94.5	92.6	86.8	61.8
Senegal	0.9	3.8	8.6	11.6	15.7	14.6	6.3	1.6	20.7	62.8	84.6	88.7	83.7	39.3
Tanzania	2.8	11.1	21.4	26.9	34.9	39.7	15.9	11.5	72.6	91.4	94.6	93.8	90.2	62.3
Uganda	5.4	17.8	26.0	35.3	43.1	54.8	20.4	28.1	81.2	91.0	92.8	94.1	90.4	67.7
Zambia	2.4	13.0	24.5	31.4	41.8	48.1	16.0	11.2	69.7	88.7	91.3	92.0	88.6	54.4
Zimbabwe	6.6	26.6	38.7	40.8	41.4	43.1	25.0	12.2	65.5	88.9	92.4	91.7	87.2	54.8
Near East/North Africa														
Egypt	0.3	2.5	7.7	14.4	25.1	30.9	7.9	3.9	47.7	87.1	96.7	97.9	89.4	52.7
Jordan	0.2	1.2	4.2	6.5	14.0	21.3	3.5	5.5	53.7	93.6	98.6	96.6	87.4	46.8
Morocco	0.6	3.7	9.7	16.4	23.6	25.7	8.6	2.3	34.4	78.9	93.8	95.0	86.3	47.9
Turkey	0.5	1.7	5.9	10.5	15.8	24.0	6.4	5.7	64.2	91.0	96.0	94.1	86.6	59.9
Yemen	1.9	7.9	10.3	10.4	9.9	13.2	7.4	8.8	53.2	85.0	93.8	93.9	85.7	57.0
Asia														
Bangladesh	1.6	6.3	9.8	8.4	8.6	7.4	5.6	9.5	60.3	87.3	95.7	88.8	74.8	57.3
India	0.5	3.2	7.3	10.6	11.8	12.5	5.4	6.1	43.5	77.2	89.2	86.0	74.8	50.2
Indonesia	1.5	2.7	7.2	14.8	23.8	29.7	8.6	7.6	64.2	92.2	96.2	93.8	83.1	61.6
Kazakhstan	3.2	11.3	20.9	32.0	38.8	55.5	23.2	5.7	52.6	77.2	84.6	84.5	85.4	54.7
Nepal	2.0	7.4	11.0	11.5	14.5	12.2	7.6	12.2	59.3	85.7	93.6	91.2	73.6	57.5
Pakistan	0.3	2.8	6.0	6.9	8.3	10.7	4.0	5.5	37.0	73.0	89.4	87.0	78.8	47.2
Philippines	0.7	3.7	8.2	14.6	24.1	33.3	8.7	6.7	55.1	82.9	89.4	92.0	83.8	52.9
Uzbekistan	0.7	6.1	13.3	23.0	32.0	49.3	13.5	4.1	46.4	78.2	84.6	88.4	86.4	48.0
Latin America/Caribbean														
Bolivia	3.0	8.5	14.9	23.4	30.9	38.9	14.2	18.1	75.8	91.5	94.9	94.7	87.3	65.7
Brazil	1.6	6.7	15.1	23.1	30.6	38.1	14.0	9.6	61.4	86.3	92.0	93.3	89.6	59.0
Colombia	2.2	8.2	17.2	28.1	35.1	38.5	15.4	9.9	53.4	80.2	87.7	89.1	83.4	55.0
Dominican Republic	2.5	10.2	20.6	32.4	41.1	50.7	16.8	11.0	54.8	80.4	89.1	89.7	83.1	52.7
Guatemala	2.5	9.1	17.6	22.4	25.3	30.2	12.9	12.6	67.5	85.6	90.5	91.4	80.5	57.8
Haiti	5.1	21.6	30.4	45.0	44.8	52.8	25.0	6.1	44.1	70.0	79.0	77.6	72.6	44.7
Paraguay	1.1	4.6	9.4	18.4	33.2	34.4	11.3	9.1	53.9	82.5	89.6	91.4	87.4	56.0
Peru	1.2	4.4	10.6	17.6	23.5	25.5	9.1	7.3	50.2	81.3	91.6	92.2	82.9	52.6

Table 4.9 Summary measures of household size by sex of household head

Average number of children per household, average number of adults per household, and mean household size, by sex of head of household, Demographic and Health Surveys, 1990-1996

Country	Female-headed households			Male-headed households		
	Average number of children per household	Average number of adults per household	Mean household size	Average number of children per household	Average number of adults per household	Mean household size
Sub-Saharan Africa						
Benin	2.0	2.2	4.2	3.2	3.2	6.4
Burkina Faso	2.1	2.2	4.3	3.3	3.5	6.8
Cameroon	1.6	2.1	3.7	2.9	3.1	6.0
Central African Republic	1.8	2.1	3.8	2.4	2.8	5.2
Comoros	2.6	3.2	5.8	2.8	3.7	6.6
Côte d'Ivoire	2.2	2.6	4.8	3.0	3.5	6.5
Ghana	1.7	1.6	3.3	1.9	2.2	4.1
Kenya	2.2	2.0	4.3	2.4	2.7	5.1
Madagascar	1.7	2.2	4.0	2.6	2.9	5.5
Malawi	1.9	1.8	3.7	2.2	2.6	4.7
Mali	1.7	2.0	3.8	2.8	2.9	5.8
Namibia	2.6	3.1	5.7	2.6	3.6	6.2
Niger	2.0	2.2	4.3	3.2	3.3	6.5
Nigeria	1.7	2.0	3.7	2.7	3.0	5.7
Rwanda	1.9	2.3	4.1	2.5	2.7	5.2
Senegal	3.2	3.7	6.9	4.4	4.8	9.2
Tanzania	1.8	2.1	4.0	2.4	2.8	5.2
Uganda	2.2	1.8	4.1	2.5	2.5	5.0
Zambia	2.0	2.5	4.5	2.7	3.0	5.6
Zimbabwe	2.4	2.2	4.6	2.0	2.7	4.7
Near East/North Africa						
Egypt	1.0	2.5	3.5	2.2	3.4	5.6
Jordan	1.1	2.9	4.0	3.2	3.9	7.1
Morocco	1.1	2.8	3.9	2.6	3.8	6.4
Turkey	0.7	2.2	2.9	1.5	3.1	4.7
Yemen	2.7	2.1	4.8	3.6	3.4	7.0
Asia						
Bangladesh	1.8	2.0	3.8	2.3	3.3	5.6
India	1.4	2.7	4.1	2.2	3.6	5.8
Indonesia	0.7	2.2	2.9	1.7	3.0	4.7
Kazakhstan	0.7	2.2	2.9	1.4	2.8	4.2
Nepal	1.8	2.0	3.7	2.5	3.3	5.8
Pakistan	2.5	2.9	5.4	3.0	3.8	6.8
Philippines	1.3	3.1	4.4	2.2	3.3	5.5
Uzbekistan	1.3	2.9	4.2	2.2	3.4	5.5
Latin America/Caribbean						
Bolivia	1.3	2.1	3.4	2.1	2.7	4.8
Brazil	1.0	2.4	3.4	1.4	2.9	4.3
Colombia	1.2	2.7	3.8	1.6	3.0	4.6
Dominican Republic	1.4	2.7	4.1	1.8	3.0	4.8
Guatemala	1.9	2.5	4.4	2.4	3.0	5.5
Haiti	1.9	2.8	4.7	2.2	3.0	5.2
Paraguay	1.3	2.6	4.0	2.2	3.1	5.3
Peru	1.4	2.9	4.3	2.1	3.4	5.4

Bruce and Lloyd (1992) found across many countries that female-headship was often the result of marriage dissolution. In addition, a recent study suggests that households headed by formerly married women may be worse off economically than households headed by married women (Lloyd and Gage-Brandon, 1993). Formerly married women in Ghana are less likely to receive remittance money from an absent household member or husband than married women and, consequently, are more likely to feel the adverse economic consequences often associated with female-headship.

The percent distribution of female-headed households by marital status of the household head is shown in Table 4.10 for 11 countries that included a question on marital status in the household questionnaire. In all countries, with the exception of Ghana and Yemen, formerly married women are more likely to be heads of households than currently married women. Among the total number of female-headed households, the highest percentage headed by formerly married women is found in Egypt (87 percent) and the lowest in Yemen (38 percent). The percentage of households headed by single women is relatively low in 10 of the 11 countries. It varies between less than 1 percent in Pakistan and 6 percent in Burkina Faso and Zambia. However, in Colombia, the proportion of households headed by a single female is 21 percent, almost double the proportion of households headed by a married woman (11 percent). The majority of households headed by single women are in urban areas.

Table 4.10 Female-headed households by marital status of household head

Percent distribution of female-headed households by marital status of household head, Demographic and Health Surveys, 1990-1996

Country	Marital status				Total percent	Households with female heads
	Single	Formerly married	Married	Mis-sing		
Sub-Saharan Africa						
Burkina Faso	6.0	34.9	59.1	0.0	100.0	335
Ghana	5.4	50.4	44.1	0.1	100.0	2,161
Niger	1.1	26.8	71.7	0.4	100.0	502
Zambia	6.3	20.4	72.4	1.0	100.0	1,682
Near East/ North Africa						
Egypt	2.4	10.4	87.2	0.0	100.0	1,968
Jordan	4.8	10.8	84.4	0.1	100.0	534
Turkey	3.5	12.1	84.3	0.1	100.0	858
Yemen	1.3	60.9	37.7	0.1	100.0	1,566
Asia						
India	1.8	26.1	72.0	0.0	100.0	8,201
Pakistan	0.1	40.4	59.4	0.0	100.0	514
Latin America/ Caribbean						
Colombia	21.3	11.1	67.3	0.4	100.0	2,389

Table 4.11 presents trends in female-headship rates for 16 countries for which data from more than one DHS survey are available. The percentage of female-headed households has increased in 9 of the 16 countries and decreased in the other 7 countries. The increase was most pronounced in two countries, where the percentage increased by 48 percent in Guatemala between 1987 and 1995, and by 43 percent in Zambia between 1992 and 1996. Peru experienced the largest decrease (22 percent) in female-headed households between 1986 and 1991/92. The decrease in female-headship rates in the remaining countries was minimal.

4.5 ORPHANHOOD AND FOSTERING

To measure the prevalence of child orphanhood and fostering, four questions were asked in the DHS Household Schedule on the survival status and residence of the parents of children less than 15 years of age. The level of orphanhood presented in this report, in particular, among children age 5-14 may be underestimated since the data do not include children who live in institutions and/or in the streets. In addition, the level of orphanhood may be underreported in some countries where nonbiological parents can report orphan children as their own. The first three columns of Table 4.12 show the percentage of children who are orphans. For children under the age of 5, the prevalence of orphanhood varies between 0.0 percent and 0.4 percent. The three countries with the highest proportion of orphans are in sub-Saharan Africa (Ghana, Malawi, and Uganda). For children in the age group 5-14, the proportion of orphans is much higher than for children in the age group 0-4. It ranges from less than 0.1 percent in Uzbekistan to 2.8 percent in Uganda. The level of orphanhood for children 5-14 is higher in most countries in sub-Saharan Africa and in Haiti than for countries in other regions. It is particularly high in countries with high death rates among adults due to AIDS such as Haiti, Uganda, and Zambia.

There are no marked differentials for boys and girls in the proportion of orphans within countries, except for Malawi where the proportion of girls age 0-4, who are orphans, is eight times (0.8 percent) higher than the proportion for boys (0.1 percent).

The next three columns of Table 4.12 show the proportion of children under age 15 who have neither their natural mother nor their natural father living with them (i.e., foster children). For children under age 5, the level of fostering is the highest in sub-Saharan Africa and the two Caribbean countries (the Dominican Republic and Haiti), followed by Latin America. For these regions, the level ranges from a low of less than 3 percent in Burkina Faso to a high of almost 23 percent in Namibia. In the culture of these societies, fostering of children under the age of 5 is common, especially in sub-Saharan African and the Caribbean, where children at early ages are sent to For some countries, the high level of fostering is probably also the consequence of warfare (Namibia), internal and/or international migration (Comoros, the Dominican Republic, Ghana, and Zimbabwe), high mortality among adults due to AIDS (Tanzania and Uganda) and

Table 4.11 Trends in proportion of female-headed households

Percentage of households headed by females, DHS surveys, 1986-1996

Country	Percent
Sub-Saharan Africa	
Ghana	
DHS 1988	31.5
DHS 1993	37.1
Kenya	
DHS 1988/89	26.4
DHS 1993	32.7
Mali	
DHS 1987	9.1
DHS 1995/96	8.3
Senegal	
DHS 1986	16.6
DHS 1992/93	15.8
Tanzania	
DHS 1991/92	18.6
DHS-KAP 1994	19.7
DHS 1996	21.8
Uganda	
DHS 1988/89	19.6
DHS 1995	24.4
Zambia	
DHS 1992	16.2
DHS 1996	23.1
Zimbabwe	
DHS 1988/89	32.9
DHS 1994	32.7
Near East/North Africa	
Egypt	
DHS 1988/89	11.4
DHS 1992	11.8
DHS 1995	12.6
Morocco	
DHS 1987	17.3
DHS 1992	16.3
Indonesia	
DHS 1987	13.6
DHS 1991	13.0
DHS 1994	12.8
Asia	
Bolivia	
DHS 1989	17.3
DHS 1994	19.1
Colombia	
DHS 1986	18.4
DHS 1990	22.7
DHS 1995	23.6
Dominican Republic	
DHS 1986	25.7
DHS 1991	25.0
Guatemala	
DHS 1987	13.4
DHS 1995	19.8
Peru	
DHS 1986 ¹	19.5
DHS 1991/92	15.2

¹Based on de facto population

a combination of these different elements (Haiti). The lowest levels of fostering are found in the Near East/North Africa and Asia, with the exception of the Philippines. For these two regions, unless the father and mother are dead, sending young children to live outside the parents' home or giving them up for adoption is very rare, in particular among Arab and Moslem societies.

With regard to fostering of children in the age group 5-14, the same pattern observed for children under age 5 is shown here. However, as expected, the proportions of fostering are much higher for children in the age group 5-14 than for the younger age group 0-4. In sub-Saharan Africa, the level of fostering varies between 12 percent in Mali and 36 percent in Namibia; and in 9 of the 20 countries, the level is more than 20 percent. In Latin America/Caribbean, the percentage of fostering ranges from 7 percent in Guatemala to 24 percent in Haiti. In the Near East/North Africa and Asia, the percentage of fostering is low: it varies between less than 2 percent in Turkey and less than 8 percent in the Philippines.

The percentage of foster children in the age group 5-14 includes adopted children, orphans, and children who are sent to the cities to live with relatives in order to go to school or to work. It does not include, however, children who live in institutions and homeless children.

There are striking differentials in the percentage of fostering according to the sex of the child, notably, in the age group 5-14. Girls are more likely to be living in foster homes than boys across all regions and cultures, in particular, in sub-Saharan Africa. For example, in countries like Benin and Ghana, the proportion of foster children age 5-14 among girls is 76 percent and 45 percent, respectively, higher than among boys.

The last three columns of Table 4.12 examine the percentage of children who live in a single-adult household. The interest in this type of information was guided by previous research suggesting that children from single-parent families have been found to be disadvantaged in several domains of well-being, compared with children from intact families (Gage, Sommerfelt, and Piani, 1996).

Single-adult households with children under age 15 are more common in sub-Saharan Africa than in the other regions. Five of 20 countries in sub-Saharan Africa (Ghana, Kenya, Malawi, Uganda, and Zimbabwe) have more than 10 percent of children age 0-14 living in single-adult households. In Ghana, the level is 23 percent. In the other countries of the region, the proportion ranges from 1 percent in Senegal to 7 percent in the Central African Republic. In Latin America/Caribbean, the percentage of children in age group 0-14 living in single-adult households varies between 3 percent (Paraguay and Peru) and 6 percent (Bolivia and Haiti), while in the Near East/North Africa and in Asia the proportion is the lowest; it ranges from 1 percent in Turkey to 5 percent in Nepal. The sex of the child makes little difference in the percentage of children living in single-adult households.

Table 4.12 Orphanhood and fostering

Percentage of children under 15 who are orphans, who do not live with their natural mother or father, and who live in a single-adult household, according to age and sex, Demographic and Health Surveys, 1990-1996

Country	Percentage of children who:								
	Are orphans			Do not live with parents			Live in a single-adult household		
	0-4	5-14	0-14	0-4	5-14	0-14	0-4	5-14	0-14
Sub-Saharan Africa									
Benin	0.0	0.5	0.3	4.3	20.8	14.9	3.5	5.0	4.5
Male	0.0	0.4	0.2	3.3	15.2	10.9	3.6	4.5	4.2
Female	0.0	0.6	0.4	5.3	26.8	18.9	3.4	5.5	4.7
Burkina Faso	0.2	1.5	1.0	2.7	14.8	10.4	1.5	1.9	1.8
Male	0.2	1.4	0.9	2.0	12.4	8.7	1.6	1.8	1.7
Female	0.2	1.6	1.1	3.5	17.2	12.2	1.3	2.0	1.8
Cameroon	0.0	0.6	0.4	5.4	18.6	13.7	2.5	4.0	3.5
Male	0.0	0.7	0.5	5.1	17.6	13.0	2.7	4.0	3.5
Female	0.1	0.5	0.4	5.6	19.5	14.4	2.3	4.1	3.4
Central African Republic	0.0	1.3	0.8	5.0	21.5	15.7	4.4	8.5	7.0
Male	0.0	1.1	0.7	4.9	20.7	15.1	4.6	8.6	7.2
Female	0.0	1.4	0.9	5.0	22.4	16.2	4.2	8.3	6.9
Comoros	0.1	0.2	0.2	10.2	22.8	18.7	5.1	4.7	4.9
Male	0.0	0.1	0.1	9.9	21.0	17.4	4.4	4.3	4.3
Female	0.2	0.3	0.3	10.6	24.5	20.1	5.9	5.2	5.4
Côte d'Ivoire	0.1	0.6	0.4	5.2	21.6	15.8	2.7	3.5	3.2
Male	0.1	0.5	0.4	4.8	18.3	13.4	2.9	3.1	3.0
Female	0.0	0.6	0.4	5.7	24.8	18.1	2.5	3.8	3.4
Ghana	0.3	1.3	1.0	6.0	20.1	15.1	24.1	22.3	22.9
Male	0.4	1.2	0.9	5.7	16.5	12.7	23.3	21.1	21.9
Female	0.3	1.4	1.0	6.3	24.0	17.6	25.0	23.6	24.1
Kenya	0.1	0.3	0.3	6.0	13.9	11.4	12.3	13.0	12.7
Male	0.1	0.4	0.3	5.1	12.5	10.0	12.2	12.6	12.5
Female	0.1	0.3	0.2	7.0	15.3	12.7	12.4	13.3	13.0
Madagascar	0.0	1.0	0.6	5.5	16.4	12.3	4.6	6.5	5.8
Male	0.0	0.9	0.6	5.2	15.7	11.8	4.9	5.8	5.4
Female	0.0	1.1	0.7	5.8	17.0	12.8	4.2	7.2	6.1
Malawi	0.4	1.5	1.1	4.4	19.5	14.3	9.5	11.3	10.7
Male	0.1	1.7	1.2	3.8	18.5	13.3	8.3	10.6	9.8
Female	0.8	1.2	1.1	5.1	20.4	15.3	10.8	11.9	11.6
Mali	0.1	0.6	0.4	3.7	12.3	9.1	1.7	2.8	2.4
Male	0.2	0.5	0.4	3.5	10.1	7.6	2.0	2.7	2.4
Female	0.1	0.6	0.4	4.0	14.5	10.6	1.4	2.8	2.3
Namibia	0.1	0.6	0.4	22.6	35.5	30.6	3.7	4.7	4.3
Male	0.0	0.8	0.5	23.0	33.7	29.6	3.6	4.4	4.1
Female	0.1	0.5	0.4	22.2	37.2	31.7	3.8	5.0	4.6
Niger	0.0	0.6	0.4	6.5	17.1	13.0	1.3	2.7	2.1
Male	0.0	0.6	0.3	5.0	13.2	9.9	1.2	2.6	2.0
Female	0.1	0.6	0.4	8.1	20.9	16.2	1.5	2.7	2.2
Nigeria	U	U	U	6.0	15.5	12.2	2.8	5.6	4.7
Male	U	U	U	5.5	13.6	10.8	2.7	5.5	4.6
Female	U	U	U	6.4	17.4	13.6	2.8	5.8	4.7
Rwanda	0.2	1.0	0.7	U	U	U	3.6	6.8	5.7
Male	0.2	0.8	0.6	U	U	U	3.5	6.5	5.4
Female	0.2	1.1	0.8	U	U	U	3.7	7.1	5.9

Continued

Table 4.12—Continued

Country	Percentage of children who:								
	Are orphans			Do not live with parents			Live in a single-adult household		
	0-4	5-14	0-14	0-4	5-14	0-14	0-4	5-14	0-14
Sub-Saharan Africa									
Senegal	0.2	0.5	0.4	5.6	17.8	13.3	0.8	1.4	1.2
Male	0.1	0.4	0.3	4.6	16.8	12.3	0.7	1.4	1.1
Female	0.2	0.5	0.4	6.6	18.9	14.2	0.9	1.4	1.2
Tanzania	0.1	0.9	0.6	7.2	19.4	15.0	4.8	6.5	5.9
Male	0.1	0.9	0.6	6.8	19.1	14.7	5.3	6.2	5.9
Female	0.1	0.9	0.6	7.5	19.6	15.3	4.4	6.9	6.0
Uganda	0.4	2.8	1.9	8.0	24.3	18.0	9.6	13.5	12.0
Male	0.4	2.8	1.8	8.0	23.0	17.3	9.4	13.5	11.9
Female	0.3	2.9	1.9	8.1	25.6	18.8	9.8	13.4	12.0
Zambia	0.3	2.2	1.5	5.0	21.2	15.2	2.8	5.2	4.3
Male	0.3	2.3	1.6	4.8	20.1	14.5	2.8	4.9	4.1
Female	0.2	2.1	1.4	5.2	22.2	15.9	2.9	5.5	4.6
Zimbabwe	0.2	1.0	0.7	11.9	22.0	18.9	10.9	12.3	11.8
Male	0.2	0.9	0.7	11.7	20.3	17.6	10.9	11.4	11.3
Female	0.2	1.0	0.7	12.0	23.7	20.1	10.9	13.1	12.4
Near East/North Africa									
Egypt	U	U	U	U	U	U	1.1	2.0	1.7
Male	U	U	U	U	U	U	1.1	2.1	1.8
Female	U	U	U	U	U	U	1.0	1.8	1.6
Jordan	0.0	0.1	0.1	U	U	U	a	a	a
Male	0.0	0.1	0.1	U	U	U	a	a	a
Female	0.0	0.1	0.1	U	U	U	a	a	a
Morocco	0.0	0.2	0.2	2.2	5.9	4.7	1.2	2.3	2.0
Male	0.0	0.2	0.1	2.3	5.1	4.2	1.4	2.3	2.0
Female	0.0	0.3	0.2	2.1	6.7	5.2	1.0	2.4	1.9
Turkey	0.0	0.1	0.1	0.5	1.5	1.2	0.4	1.4	1.1
Male	0.0	0.2	0.1	0.5	1.4	1.2	0.5	1.4	1.2
Female	0.0	0.1	0.1	0.5	1.5	1.2	0.4	1.3	1.1
Yemen	0.0	0.3	0.2	U	U	U	4.7	4.6	4.6
Male	0.0	0.3	0.2	U	U	U	4.7	4.7	4.7
Female	0.0	0.3	0.2	U	U	U	4.7	4.4	4.5
Asia									
Bangladesh	U	U	U	U	U	U	2.4	3.6	3.3
Male	U	U	U	U	U	U	2.4	3.2	3.0
Female	U	U	U	U	U	U	2.5	4.0	3.6
India	U	U	U	U	U	U	1.1	2.2	1.9
Male	U	U	U	U	U	U	1.1	2.2	1.8
Female	U	U	U	U	U	U	1.2	2.2	1.9
Indonesia	0.1	0.4	0.3	2.1	6.6	5.2	1.1	2.6	2.2
Male	0.1	0.4	0.3	2.1	6.3	5.0	1.1	2.7	2.2
Female	0.1	0.5	0.4	2.2	6.9	5.5	1.1	2.6	2.1
Kazakhstan	0.0	0.1	0.1	2.3	3.2	2.9	1.9	4.4	3.6
Male	0.0	0.1	0.1	1.6	2.5	2.2	2.0	4.5	3.7
Female	0.0	0.1	0.1	2.9	3.9	3.6	1.9	4.2	3.5

Continued

Table 4.12—Continued

Country	Percentage of children who:								
	Are orphans			Do not live with parents			Live in a single-adult household		
	0-4	5-14	0-14	0-4	5-14	0-14	0-4	5-14	0-14
Asia									
Nepal	U	U	U	U	U	U	4.5	5.8	5.3
Male	U	U	U	U	U	U	4.2	5.4	5.0
Female	U	U	U	U	U	U	4.7	6.3	5.7
Pakistan	U	U	U	1.0	2.2	1.8	1.2	2.1	1.8
Male	U	U	U	0.8	2.2	1.8	1.3	2.4	2.0
Female	U	U	U	1.2	2.2	1.9	1.1	1.7	1.5
Philippines	0.1	0.3	0.2	4.1	7.5	6.3	1.0	2.2	1.8
Male	0.2	0.3	0.2	4.2	6.9	6.0	1.1	2.2	1.8
Female	0.1	0.3	0.2	4.0	8.0	6.6	0.9	2.2	1.7
Uzbekistan	0.0	0.1	0.1	0.2	0.7	0.5	0.8	2.2	1.7
Male	0.0	0.1	0.1	0.1	0.5	0.4	0.9	2.4	1.9
Female	0.0	0.0	0.0	0.3	0.9	0.7	0.8	1.9	1.6
Latin America/Caribbean									
Bolivia	U	U	U	U	U	U	4.7	6.9	6.1
Male	U	U	U	U	U	U	4.9	6.8	6.1
Female	U	U	U	U	U	U	4.4	7.0	6.1
Brazil	0.3	0.4	0.4	5.3	8.8	7.8	3.4	4.9	4.5
Male	0.3	0.3	0.3	5.7	8.0	7.3	3.4	4.5	4.2
Female	0.2	0.5	0.4	4.9	9.6	8.2	3.5	5.4	4.8
Colombia	U	U	U	4.6	10.3	8.3	3.6	5.3	4.7
Male	U	U	U	4.3	9.4	7.7	3.7	5.1	4.6
Female	U	U	U	4.8	11.2	9.0	3.6	5.6	4.9
Dominican Republic	0.1	0.3	0.2	10.6	19.1	16.1	4.0	5.6	5.0
Male	0.1	0.2	0.2	10.3	17.2	14.7	3.5	5.7	4.9
Female	0.0	0.3	0.2	10.8	21.0	17.6	4.6	5.5	5.2
Guatemala	0.1	0.3	0.3	3.4	7.3	5.9	5.2	6.1	5.8
Male	0.1	0.3	0.2	3.3	6.9	5.6	5.6	6.1	5.9
Female	0.0	0.4	0.3	3.5	7.7	6.2	4.9	6.1	5.6
Haiti	0.2	1.9	1.3	7.7	23.7	18.2	4.6	6.9	6.1
Male	0.1	1.9	1.3	7.6	21.1	16.4	4.8	7.2	6.4
Female	0.3	1.8	1.3	7.8	26.1	20.0	4.3	6.6	5.8
Paraguay	U	U	U	4.4	10.6	8.4	1.5	3.1	2.5
Male	U	U	U	4.4	10.4	8.3	1.6	3.3	2.7
Female	U	U	U	4.4	10.9	8.6	1.4	2.8	2.3
Peru	U	U	U	U	U	U	2.2	3.6	3.2
Male	U	U	U	U	U	U	2.1	3.5	3.0
Female	U	U	U	U	U	U	2.3	3.8	3.3

U = Unknown, not asked

NA = Not available

^a The information on relationship to the head of household permitting the calculation of this indicator was collected in Jordan, but not coded and processed

5 Socioeconomic Characteristics of Households

The second main section of the report provides a socioeconomic profile of the households surveyed in DHS-II and DHS-III. Four topics are covered in this section:

- Education of the household population
- Housing characteristics
- Household possessions
- Standard of living index.

5.1 EDUCATION OF THE HOUSEHOLD POPULATION

The educational level of household members is among the most important characteristics of the household because it is closely associated with other socioeconomic factors as well as reproductive behavior, use of contraception, fertility, infant and child mortality, and the health status of children.

Table 5.1 presents the percentage of the household population (*de facto*) with no schooling by age and sex. In the age group 15-49, the percentage of household population with no schooling is higher in sub-Saharan Africa than in the other regions. For both sexes, the proportion varies between a minimum of 8 percent in Zimbabwe and a maximum of 84 percent in Niger. In 6 of the 20 sub-Saharan countries, more than half of the household population never attended school (Benin, Burkina Faso, Côte d'Ivoire, Mali, Niger, and Senegal). In the Near East/North Africa and Asia, the percentage of the household population with no schooling ranges from 0.3 percent in Uzbekistan to 55 percent in Nepal. Two of the 12 countries in these two regions (Yemen is not shown here) have a proportion of no schooling which is higher than 50 percent (Nepal, and Pakistan). In the three regions of sub-Saharan Africa, the Near East/North Africa, and Asia, most of the countries with the lowest levels of educational attainment have a Moslem majority. In Latin America/Caribbean, the percentage of the population age 15-49 with no schooling is smaller than in the other regions. Guatemala and Haiti are the only two countries where the percentage with no schooling is higher than 20 percent: 23 percent and 29 percent, respectively.

As Table 5.1 shows, there is a gap in educational attainment between males and females. In the age group 15-49, in all but four surveys (Brazil, Colombia, the Dominican Republic, and Namibia), there are more women who did not attend school than men. In seven countries (Benin, the Central African Republic, India, Malawi, Morocco, Nepal, and Pakistan), the gender gap in the proportion with no schooling is higher than 25 percentage points. Overall, the countries in Latin America/Caribbean have the lowest gap between the sexes.

An examination of the changes in educational attainment over successive cohorts indicates that there have been substantial decreases over the years in the percentage with no schooling for both men and women in all countries. For example, the percentage with no schooling in the age group 20-29 is lower than the percentage in the age group 30-39 and older.

By place of residence, the urban population is much more likely to have attended school than the rural population. For example, in sub-Saharan Africa, the percentage of urban residents age 15-49 who have never gone to school varies between 3 percent in Zimbabwe and 57 percent in Niger, while the proportion in rural areas ranges from 10 percent in Zimbabwe to 91 percent in Niger. In most countries, gender differences in educational attainment are less evident in urban than rural areas.

Table 5.2 presents the percentage of the household population (*de facto*) by age and sex who have completed at least primary education. The data in this table confirm the findings in Table 5.1. In sub-Saharan Africa, the level of primary schooling and above is generally low, but that region presents marked variation among countries. At least 45 percent of the household population in the age group 15-49 have completed primary school or more in Ghana, Kenya, Tanzania, Zambia, and Zimbabwe, but less than 5 percent have completed at least primary school in Niger. In the Near East/North Africa and in Asia, the percentage with at least completed primary education for both males and females ranges from 25 percent in Nepal to 95 percent in Uzbekistan. In Latin America and the Caribbean, the percentage varies from 29 percent in Haiti to 78 percent in Peru.

The results from Table 5.2 show that both gender and residential differences persist in the proportion of the population who have completed at least primary school. Considering the effect of gender, the gap in school attainment is striking, with the exception of one country in sub-Saharan Africa (Namibia), one country in Asia (the Philippines), and two countries in Latin America and the Caribbean (Colombia and the Dominican Republic); males are generally more likely than females to have attended school and completed primary education and beyond. For example, in the Near East and North Africa, while the percentage of men age 15-49 who have primary schooling and more ranges from 41 to 83 percent, the figure for women ranges from only 22 percent to 65 percent.

Table 5.1. Household population with no schooling

Percentage of the household population with no schooling by age and sex (de facto population age 5 and above), Demographic and Health Surveys, 1990-1996

Country	Household population with no schooling																							
	Urban							Rural							Total									
	5-9 ¹	10-14	15-19	20-29	30-39	40-49	50+	5-9 ¹	10-14	15-19	20-29	30-39	40-49	50+	5-9 ¹	10-14	15-19	20-29	30-39	40-49	50+	15-49		
Sub-Saharan Africa																								
Benin	46.7	31.9	30.1	34.6	44.0	53.1	74.7	38.4	72.0	56.2	60.4	67.9	75.8	82.1	91.2	71.0	63.5	46.6	46.9	53.9	63.6	72.0	85.9	57.8
Male	41.4	17.6	21.5	19.5	26.4	34.3	61.9	23.9	65.8	41.6	47.1	48.3	60.1	71.1	87.3	55.1	57.6	32.9	36.3	35.7	46.5	57.7	79.5	42.3
Female	52.3	44.9	38.9	46.6	59.4	71.3	85.0	51.3	78.4	73.7	77.0	81.7	87.6	91.3	94.8	84.3	69.7	61.3	59.0	67.4	77.2	84.7	91.5	71.2
Burkina Faso	33.6	23.1	29.9	43.3	50.5	65.7	88.1	44.0	79.7	72.1	79.0	87.5	90.0	95.0	98.5	87.3	72.7	63.5	66.7	76.4	81.5	89.8	97.4	77.3
Male	30.8	14.8	24.0	37.9	42.2	59.3	81.6	37.8	75.2	64.2	72.6	82.9	83.6	92.5	97.4	81.7	68.4	55.9	60.6	69.4	72.4	85.9	95.7	70.3
Female	36.6	30.4	36.5	49.4	59.5	73.7	93.4	51.0	84.2	80.0	86.7	90.7	93.9	97.4	99.5	91.8	77.2	70.9	73.7	82.1	87.8	93.6	98.8	83.5
Cameroon	41.2	12.9	13.7	18.3	29.1	47.2	74.6	48.7	23.4	24.8	36.4	47.3	60.6	83.4	83.4	40.8	46.0	19.7	20.0	27.7	39.4	56.2	81.1	33.3
Male	39.4	10.4	11.3	12.2	23.0	39.4	57.3	18.3	44.2	17.9	16.7	28.1	33.8	46.4	70.6	30.2	42.5	15.0	14.4	20.1	28.9	44.0	67.1	24.9
Female	42.9	15.3	16.2	24.2	35.2	56.5	88.7	28.6	53.1	30.1	32.8	42.9	58.6	75.3	93.7	50.2	49.4	24.3	25.8	34.3	48.9	69.5	92.4	41.2
Central African Rep.	40.4	15.1	14.3	18.3	25.2	45.8	75.2	22.5	59.9	36.5	42.4	43.6	49.3	62.3	87.3	48.1	51.8	26.9	28.3	32.1	40.1	55.9	83.1	36.9
Male	37.2	9.7	8.2	10.2	12.7	23.3	56.2	12.0	53.3	22.9	25.5	22.8	26.4	37.3	75.8	26.7	46.8	17.2	16.4	16.9	21.1	31.7	69.0	20.1
Female	43.6	20.5	20.2	25.7	36.7	67.5	90.7	32.3	67.1	51.4	55.9	61.4	69.6	84.1	96.3	66.3	56.9	37.2	38.8	45.4	57.1	77.8	94.4	51.8
Comoros	42.9	19.6	16.2	22.8	47.9	66.2	84.3	32.3	62.8	32.7	30.6	38.9	68.4	88.0	94.9	51.3	57.9	29.3	26.0	33.5	62.0	82.2	92.3	45.3
Male	44.4	13.5	12.8	19.4	35.6	52.0	68.5	25.7	60.5	25.9	16.5	26.4	52.8	79.6	91.9	39.5	56.6	22.8	15.2	23.9	47.1	71.8	86.2	34.8
Female	41.6	25.5	19.4	25.7	58.2	82.4	96.5	38.3	64.8	40.0	41.0	47.3	79.7	96.0	97.4	60.2	59.0	36.1	34.6	40.6	73.3	92.6	97.2	53.7
Côte d'Ivoire	38.5	28.0	27.9	34.7	45.7	57.3	82.3	38.7	58.3	45.2	45.8	57.0	64.9	77.7	94.6	59.8	51.7	38.6	37.7	47.2	56.9	70.0	91.7	50.8
Male	33.1	16.4	15.6	25.0	37.2	45.8	71.1	29.2	53.1	37.3	37.3	47.0	54.0	65.7	90.8	49.7	46.5	30.2	28.0	37.2	46.8	57.5	86.1	40.8
Female	43.5	36.9	38.0	44.0	55.0	73.2	93.9	48.2	63.6	54.2	54.2	66.0	75.2	89.8	98.1	69.5	56.6	46.7	46.5	56.5	67.2	84.1	97.2	60.5
Ghana	11.1	8.2	8.2	9.6	15.6	27.9	56.6	13.6	30.3	18.9	21.3	36.0	43.0	55.6	81.3	38.6	23.9	15.4	16.2	25.7	33.5	46.5	74.0	29.4
Male	10.5	3.7	6.3	6.9	11.5	17.2	38.6	9.7	29.6	16.5	17.4	27.8	34.0	43.0	70.6	29.6	24.7	12.8	13.7	19.6	26.4	34.1	61.5	22.5
Female	11.8	11.9	9.7	11.7	18.5	38.4	70.7	16.8	31.0	21.7	26.6	41.9	50.3	66.3	90.4	46.4	25.6	18.2	19.0	30.2	39.0	57.5	84.5	35.2
Kenya	26.3	4.5	2.7	2.5	7.8	16.0	36.1	5.7	36.6	5.0	4.2	8.3	20.8	34.0	67.6	14.1	35.6	5.0	4.0	6.9	17.9	31.1	65.2	12.4
Male	25.6	2.3	1.2	0.8	3.1	9.9	24.0	3.0	36.5	5.3	3.7	5.1	8.6	17.4	50.1	7.4	35.6	5.0	3.4	4.0	7.0	15.9	47.5	6.5
Female	27.0	6.5	3.9	4.0	15.2	28.2	53.3	8.6	36.6	4.8	4.7	10.5	30.2	49.6	81.2	19.8	35.7	5.0	4.6	9.0	27.7	47.3	79.6	17.9
Madagascar	34.1	5.9	4.0	4.1	7.0	10.0	22.6	5.7	58.5	20.0	17.8	16.9	22.7	31.8	52.0	20.8	55.1	17.8	15.2	14.4	19.6	27.6	47.7	17.8
Male	33.5	6.1	4.0	3.2	5.7	7.3	13.5	4.6	59.6	19.8	18.7	15.7	19.0	23.6	40.1	18.4	56.1	17.8	16.0	13.2	16.4	20.5	36.5	15.8
Female	34.8	5.8	4.0	4.9	8.1	12.5	29.6	6.6	57.3	20.1	16.8	18.1	26.3	39.5	62.8	23.0	54.1	17.8	14.2	15.4	22.6	34.3	57.6	19.7
Malawi	36.0	11.9	10.3	14.5	17.4	16.1	34.4	14.4	56.7	26.7	27.0	36.1	43.9	46.5	57.1	37.5	54.3	24.8	24.8	32.6	39.9	43.4	55.7	34.2
Male	38.0	6.7	8.3	8.7	7.7	9.0	19.4	8.4	58.8	24.1	21.8	24.4	22.8	25.4	37.4	23.5	56.3	22.2	19.8	21.7	20.1	23.2	36.0	21.1
Female	33.8	15.6	13.1	20.7	29.5	27.5	53.5	22.0	54.8	29.1	32.5	46.4	61.0	65.2	73.4	50.1	52.5	27.2	30.2	42.6	57.0	62.3	72.3	46.7
Mali	49.0	40.9	47.2	50.8	55.0	62.1	83.3	52.8	82.7	78.8	82.9	84.1	86.5	91.8	96.9	86.2	73.6	66.9	69.4	72.4	76.5	83.7	93.4	75.1
Male	47.0	31.8	36.3	41.3	48.0	53.0	75.0	44.0	79.6	73.0	77.5	76.3	80.0	87.9	95.7	80.3	71.1	60.4	62.8	62.4	68.7	77.8	90.6	67.5
Female	50.9	49.1	56.3	58.9	61.1	73.0	91.8	60.7	85.8	84.5	88.4	88.9	90.7	95.8	98.2	90.6	76.1	73.1	75.6	79.2	82.2	90.0	96.5	81.2
Namibia	11.8	1.6	2.9	7.1	12.8	19.2	32.6	9.7	20.2	5.2	6.5	14.2	26.7	41.3	63.8	18.4	18.2	4.3	5.5	11.3	20.2	32.5	56.8	15.0
Male	11.0	1.2	2.7	8.8	13.5	18.5	30.8	10.6	22.2	6.1	8.1	16.5	29.3	38.5	60.2	18.8	19.6	4.9	6.7	13.4	21.2	29.5	53.0	15.5
Female	12.6	1.9	3.0	5.8	12.1	19.9	34.3	9.0	18.2	4.4	4.8	12.4	24.9	43.1	66.5	18.1	16.8	3.7	4.3	9.6	19.3	34.8	59.8	14.6
Niger	59.1	40.1	40.8	51.3	66.6	81.6	92.4	56.7	89.2	81.8	82.0	89.4	94.4	98.0	98.9	90.5	84.3	73.9	73.4	81.6	89.1	95.3	98.1	83.9
Male	57.0	30.6	35.2	42.0	56.7	76.0	87.6	48.8	86.5	73.6	74.8	84.1	90.7	97.3	99.0	86.2	81.8	65.5	65.9	73.7	83.7	93.8	97.7	78.2
Female	61.0	49.0	47.0	60.1	75.7	88.3	96.5	64.7	91.9	89.7	88.5	92.8	97.1	98.8	98.8	93.9	86.7	82.0	80.5	87.0	93.4	97.1	98.5	88.7
Nigeria	31.7	14.3	11.4	15.2	29.9	40.2	73.3	22.0	58.8	32.7	32.0	48.2	66.9	74.2	89.5	54.6	52.6	28.0	26.3	39.1	57.4	66.5	86.2	46.1
Male	30.3	9.8	7.8	9.1	16.7	26.8	60.3	13.9	56.9	25.5	25.3	35.0	53.8	62.0	83.5	42.9	51.0	21.7	20.6	27.5	43.3	53.2	78.9	34.9
Female	33.1	18.3	15.9	20.4	45.3	59.2	86.2	30.8	60.9	39.6	40.5	58.2	78.5	86.8	96.0	65.6	54.4	34.1	33.6	48.1	70.8	81.3	94.0	56.9

Continued

Household population with no schooling

Country	Total														
	Urban						Rural								
	5-9 ¹	10-14	15-19	20-29	30-39	40-49	50+	5-9 ¹	10-14	15-19	20-29	30-39	40-49	50+	
Sub-Saharan Africa															
Rwanda	38.1	8.4	10.9	12.6	16.7	33.7	59.3	15.8	54.2	14.8	19.9	28.1	38.0	51.5	73.4
Male	40.9	7.4	7.7	10.3	13.3	19.3	40.8	11.9	53.3	13.8	18.3	25.2	28.6	33.5	57.1
Female	35.4	9.4	13.6	14.9	21.1	53.2	76.2	20.0	55.0	15.8	21.4	30.5	46.6	67.3	87.0
Senegal	46.0	23.3	27.1	37.4	47.4	59.4	82.0	40.3	80.7	71.8	76.0	84.7	87.5	92.8	97.5
Male	42.9	16.4	21.5	30.0	39.4	47.3	69.0	32.5	77.3	66.0	68.9	76.6	79.6	88.5	96.3
Female	49.1	30.1	32.6	44.3	54.2	72.4	93.0	47.5	84.3	77.8	83.9	90.1	92.5	95.9	98.5
Tanzania	70.5	12.6	5.7	6.2	11.4	22.0	55.7	9.4	82.6	24.6	15.1	17.6	29.4	46.5	68.5
Male	74.1	15.5	4.7	3.2	4.9	9.3	38.1	4.9	83.7	25.1	11.3	12.6	16.5	28.6	53.1
Female	66.9	9.9	6.6	8.4	17.8	37.7	72.6	13.5	81.5	24.1	19.0	21.1	40.4	62.2	82.2
Uganda	17.7	9.1	8.0	7.0	10.6	12.0	40.5	8.5	37.3	12.7	14.1	22.1	32.4	36.3	61.7
Male	17.4	7.0	6.7	3.4	5.0	6.1	18.5	4.8	35.7	9.9	7.6	10.9	17.2	19.7	41.3
Female	18.0	10.5	8.9	9.9	17.2	20.0	60.7	11.9	38.9	15.6	20.5	31.2	45.6	55.9	79.8
Zambia	41.1	4.6	3.2	3.0	2.4	8.3	28.9	3.6	61.5	17.5	11.8	14.5	15.2	26.8	52.5
Male	41.5	4.9	2.6	1.8	0.6	1.2	12.1	1.6	62.2	17.1	10.7	9.7	13.9	33.0	10.8
Female	40.7	4.2	3.7	4.2	4.3	16.1	46.8	5.5	60.9	17.9	12.8	18.0	20.3	36.7	69.2
Zimbabwe	28.3	1.3	0.7	1.9	4.7	4.5	14.6	2.8	36.8	1.4	2.0	5.5	18.8	26.2	43.9
Male	29.7	1.5	1.1	1.5	2.5	3.3	12.8	2.0	38.2	1.3	2.0	2.3	8.5	17.7	32.3
Female	26.8	1.1	0.4	2.3	7.2	6.4	17.7	3.6	35.5	1.5	2.0	8.2	25.3	31.9	54.0
Near East/North Africa²															
Egypt	5.9	3.3	4.3	9.7	17.0	26.3	46.0	14.0	19.9	17.0	19.4	32.5	43.4	56.5	73.8
Male	5.8	2.7	2.0	4.2	9.8	17.4	35.7	8.2	11.9	7.3	9.0	15.4	24.4	43.3	65.9
Female	6.0	3.9	6.0	14.6	23.4	35.0	57.1	19.5	28.5	27.3	29.9	46.4	60.8	68.4	80.7
Jordan	22.2	1.5	1.3	4.3	11.7	29.0	61.4	8.4	25.1	2.2	3.9	10.2	29.1	56.0	83.9
Male	22.0	1.5	1.1	3.7	5.5	11.3	40.4	4.4	24.7	1.3	2.2	6.2	14.4	26.6	71.1
Female	22.5	1.6	1.4	5.0	17.2	46.0	82.8	12.3	25.6	3.4	5.5	13.6	42.0	80.6	98.2
Morocco	6.6	8.7	10.7	23.8	36.1	52.9	86.3	28.7	52.4	53.4	54.0	70.8	80.5	87.4	98.1
Male	5.7	4.9	4.6	12.1	21.6	36.7	78.5	16.9	40.7	38.5	35.6	53.8	64.0	78.2	97.5
Female	7.6	12.8	16.8	34.0	49.0	69.8	93.2	39.7	65.1	68.8	69.6	85.0	94.0	95.3	98.7
Turkey	29.9	2.8	3.7	7.2	12.4	20.9	43.7	10.3	32.2	5.4	6.3	14.7	23.7	35.7	63.2
Male	28.2	1.2	1.2	2.2	4.8	7.6	27.8	3.7	30.7	3.3	2.5	4.1	5.9	15.3	47.8
Female	31.8	4.5	6.0	11.9	20.0	34.6	57.8	16.7	33.6	7.5	9.3	23.0	39.6	54.2	77.5
Asia															
Bangladesh	26.3	21.1	17.7	24.1	30.2	32.8	44.6	25.6	24.8	21.5	33.6	48.3	54.8	57.8	69.5
Male	24.7	17.1	13.9	15.8	22.5	21.2	28.0	18.2	23.4	21.3	28.2	40.1	46.2	46.1	53.9
Female	27.9	25.0	20.8	31.5	39.7	45.7	66.4	32.9	26.2	21.8	38.4	54.9	64.4	72.1	86.4
India	23.8	12.5	14.1	20.5	24.2	28.6	43.4	21.7	46.3	31.4	37.3	48.7	56.3	61.5	73.9
Male	22.5	9.5	10.3	12.7	15.0	17.0	25.9	13.7	40.2	20.9	23.0	31.0	40.1	43.7	58.9
Female	25.1	15.7	18.0	28.5	34.3	43.0	61.6	30.3	52.9	42.8	51.5	64.9	73.3	80.7	90.5
Indonesia	17.9	0.8	0.8	1.9	5.9	8.0	33.2	3.7	28.8	1.9	2.4	6.9	16.0	23.8	52.6
Male	18.1	0.8	0.4	0.9	2.5	4.6	16.8	1.9	29.4	2.0	1.8	3.9	10.4	14.5	34.8
Female	17.6	0.9	1.1	2.8	9.2	11.7	48.1	5.5	28.1	1.8	2.9	9.4	21.3	33.6	69.1

Continued

Table 5.2. Household population with completed primary education or above

Household population with completed primary education or above

Country	Urban					Rural					Total						
	15-19	20-29	30-39	40-49	50+	15-19	20-29	30-39	40-49	50+	15-19	20-29	30-39	40-49	50+		
Sub-Saharan Africa																	
Benin	31.5	34.4	34.7	23.2	11.8	28.6	11.8	8.3	8.9	4.4	6.8	20.5	19.2	18.8	10.9	4.8	15.3
Male	39.4	45.2	50.0	34.6	17.3	39.1	15.6	15.6	16.9	7.6	12.0	26.6	28.5	30.3	17.4	7.8	22.6
Female	23.4	25.8	21.3	12.1	4.8	19.3	3.2	3.2	2.8	1.7	2.4	13.6	12.4	9.6	5.2	2.1	8.9
Burkina Faso	54.5	44.3	38.1	28.3	12.3	38.8	7.0	7.0	4.9	2.3	5.2	22.9	16.3	12.1	6.9	1.4	12.0
Male	59.8	49.4	46.1	33.7	16.7	45.4	9.7	9.7	9.0	4.0	7.9	27.3	21.6	19.1	9.9	2.3	16.3
Female	48.6	38.3	29.4	21.6	7.0	31.8	5.0	5.0	2.4	0.7	3.0	17.7	12.0	7.2	4.0	0.5	8.2
Cameroon	68.4	66.6	53.2	33.9	11.6	52.4	40.1	40.1	28.4	16.6	25.1	53.6	52.8	39.2	22.3	5.6	35.8
Male	70.6	74.4	62.4	43.9	21.2	60.3	49.0	49.0	41.6	26.5	33.1	57.5	61.8	51.1	32.5	11.2	44.2
Female	66.1	59.1	44.1	21.9	3.8	44.8	33.0	33.0	17.2	6.2	18.1	49.6	45.0	28.4	11.1	1.1	28.3
Central African Rep.	35.8	48.2	42.2	22.7	6.0	34.9	5.7	13.0	13.9	7.1	8.7	20.7	29.1	24.8	13.1	2.6	19.7
Male	41.8	59.0	57.6	38.2	12.1	45.7	8.3	20.7	23.7	14.7	14.9	25.9	38.5	36.8	24.1	5.5	28.1
Female	29.9	38.3	28.2	7.7	1.0	25.1	6.4	6.4	5.2	0.5	3.6	16.2	20.7	14.0	3.2	0.3	12.4
Comoros	48.7	60.7	43.1	24.2	9.1	40.5	35.9	35.9	20.2	7.3	18.2	31.3	44.2	27.4	11.8	3.7	24.9
Male	52.8	61.6	54.3	36.6	20.0	47.4	46.4	46.4	32.4	12.9	24.0	36.3	51.9	39.6	19.7	7.4	31.4
Female	44.9	59.9	33.8	10.2	0.8	34.4	28.9	28.9	11.5	1.9	13.9	27.4	38.6	18.2	3.9	0.7	19.7
Côte d'Ivoire	46.6	46.3	40.2	31.2	11.6	39.7	23.8	21.6	20.5	10.4	16.0	34.1	32.5	28.7	18.3	4.1	25.3
Male	62.6	59.2	51.2	41.9	19.6	51.6	32.3	30.8	30.1	17.2	23.1	45.3	43.5	39.2	27.4	7.1	34.5
Female	33.5	33.9	28.2	16.6	3.3	27.8	15.6	13.4	11.3	3.5	9.3	24.0	22.2	18.0	8.0	1.2	16.5
Ghana	81.3	82.3	76.0	66.9	37.2	70.6	63.7	52.0	45.3	36.3	41.0	70.5	63.8	55.9	46.4	20.6	51.4
Male	86.5	88.1	83.4	80.3	56.0	79.9	65.1	63.4	56.3	51.0	51.0	72.3	73.1	65.4	61.1	32.3	60.8
Female	76.8	78.0	70.5	53.7	22.2	63.2	61.7	43.8	36.4	23.9	32.4	68.5	57.0	48.5	33.2	10.9	43.5
Kenya	74.3	87.3	77.6	65.5	36.7	75.6	50.7	65.4	48.8	34.4	42.0	53.7	70.6	55.3	39.4	9.8	47.8
Male	78.5	90.8	86.4	70.3	45.4	80.3	48.3	73.6	65.1	51.1	49.9	51.7	78.0	71.3	55.1	17.6	55.7
Female	70.8	84.4	63.7	55.9	24.5	70.3	53.4	59.4	36.2	18.7	35.4	56.0	65.1	40.8	22.8	3.4	40.7
Madagascar	67.0	76.2	66.4	58.4	39.4	64.5	22.0	31.5	23.3	16.9	22.2	30.6	40.3	31.8	24.8	15.1	30.0
Male	64.5	76.9	74.7	67.7	56.4	69.8	22.1	35.3	31.2	24.7	27.0	29.8	43.4	39.5	32.9	22.9	34.7
Female	69.5	75.5	59.0	49.8	26.5	59.9	21.8	28.1	15.8	9.6	17.5	31.4	37.6	24.5	17.4	8.3	25.7
Malawi	36.4	52.3	51.2	48.6	19.7	44.7	11.0	16.8	15.1	11.0	11.7	14.4	22.5	20.6	14.9	5.4	15.8
Male	37.5	61.4	62.7	64.4	31.9	53.5	13.3	24.5	26.3	20.4	18.4	17.0	30.9	32.9	26.3	10.8	23.5
Female	34.8	42.6	36.9	23.0	4.0	33.6	8.5	9.9	6.0	2.7	5.7	11.5	14.7	9.9	4.3	0.8	8.7
Mali	32.3	31.0	29.9	26.2	9.6	26.4	4.8	4.1	4.8	2.6	3.3	15.2	13.6	12.7	9.1	3.2	10.6
Male	41.6	40.2	36.8	34.5	16.0	34.2	6.7	7.1	8.8	4.2	5.2	19.1	20.3	18.7	13.0	5.0	14.6
Female	24.5	23.3	24.0	16.1	3.1	19.3	2.9	2.2	2.2	1.0	1.7	11.6	9.0	8.5	4.9	1.1	7.1

Continued

Table 5.2—Continued

Household population with completed primary education or above

Country	Urban										Rural										Total															
	15-19	20-29	30-39	40-49	50+	15-49	50+	15-19	20-29	30-39	40-49	50+	15-49	50+	15-19	20-29	30-39	40-49	50+	15-49	50+	15-49														
Near East/North Africa¹																																				
Jordan	95.7	91.4	78.2	57.7	24.1	75.1	91.6	82.5	56.5	33.0	7.8	61.7	94.6	89.4	73.0	51.6	20.0	71.8	95.7	91.4	78.2	57.7	24.1	75.1	91.6	82.5	56.5	33.0	7.8	61.7	94.6	89.4	73.0	51.6	20.0	71.8
Male	96.6	92.8	87.3	76.7	38.7	81.8	94.1	89.3	75.1	58.2	14.4	70.4	96.0	92.0	84.5	72.4	32.3	79.1	96.6	92.8	87.3	76.7	38.7	81.8	94.1	89.3	75.1	58.2	14.4	70.4	96.0	92.0	84.5	72.4	32.3	79.1
Female	94.8	90.1	70.1	39.5	9.4	68.5	89.2	76.8	40.3	12.0	0.5	53.8	93.3	86.9	63.0	32.3	7.2	64.9	94.8	90.1	70.1	39.5	9.4	68.5	89.2	76.8	40.3	12.0	0.5	53.8	93.3	86.9	63.0	32.3	7.2	64.9
Morocco	75.6	65.3	52.0	38.2	9.6	49.8	27.5	20.1	11.2	6.1	0.5	13.1	50.1	43.9	32.6	21.9	4.3	31.1	75.6	65.3	52.0	38.2	9.6	49.8	27.5	20.1	11.2	6.1	0.5	13.1	50.1	43.9	32.6	21.9	4.3	31.1
Male	81.5	76.1	66.2	54.6	17.3	60.8	42.1	33.5	21.9	12.1	0.7	21.5	61.4	56.3	45.6	34.0	7.6	41.0	81.5	76.1	66.2	54.6	17.3	60.8	42.1	33.5	21.9	12.1	0.7	21.5	61.4	56.3	45.6	34.0	7.6	41.0
Female	69.9	55.7	39.3	21.1	2.7	39.8	15.2	8.9	2.4	0.9	0.2	5.8	39.8	33.3	21.4	10.4	1.3	22.2	69.9	55.7	39.3	21.1	2.7	39.8	15.2	8.9	2.4	0.9	0.2	5.8	39.8	33.3	21.4	10.4	1.3	22.2
Turkey	94.3	90.3	84.2	73.5	48.1	78.1	91.2	82.1	70.2	53.7	25.0	60.6	93.1	87.5	79.5	66.5	37.2	71.4	94.3	90.3	84.2	73.5	48.1	78.1	91.2	82.1	70.2	53.7	25.0	60.6	93.1	87.5	79.5	66.5	37.2	71.4
Male	96.6	96.6	94.0	89.5	65.2	88.4	95.1	94.3	90.0	77.6	39.8	74.1	96.0	95.8	92.7	85.5	53.1	83.1	96.6	96.6	94.0	89.5	65.2	88.4	95.1	94.3	90.0	77.6	39.8	74.1	96.0	95.8	92.7	85.5	53.1	83.1
Female	92.1	84.4	74.4	56.9	33.0	68.3	88.1	72.5	52.5	32.1	11.2	48.9	90.4	80.1	66.9	47.8	22.9	60.7	92.1	84.4	74.4	56.9	33.0	68.3	88.1	72.5	52.5	32.1	11.2	48.9	90.4	80.1	66.9	47.8	22.9	60.7
Asia																																				
Bangladesh	69.4	63.2	59.1	56.9	40.9	59.3	44.6	34.0	28.3	25.0	17.1	30.1	47.6	38.0	32.2	28.9	19.3	33.6	69.4	63.2	59.1	56.9	40.9	59.3	44.6	34.0	28.3	25.0	17.1	30.1	47.6	38.0	32.2	28.9	19.3	33.6
Male	70.7	72.2	68.1	70.2	55.9	68.0	49.3	42.4	37.0	36.7	28.4	38.5	51.9	46.7	41.1	40.6	31.1	42.2	70.7	72.2	68.1	70.2	55.9	68.0	49.3	42.4	37.0	36.7	28.4	38.5	51.9	46.7	41.1	40.6	31.1	42.2
Female	68.3	55.1	47.9	42.1	21.3	50.2	40.4	27.3	18.6	10.6	4.8	21.8	43.9	30.9	22.1	14.6	6.2	25.2	68.3	55.1	47.9	42.1	21.3	50.2	40.4	27.3	18.6	10.6	4.8	21.8	43.9	30.9	22.1	14.6	6.2	25.2
India	80.5	73.6	68.3	62.0	43.7	65.9	55.0	43.8	34.8	28.4	15.5	35.3	62.0	52.4	44.7	38.3	22.6	43.8	80.5	73.6	68.3	62.0	43.7	65.9	55.0	43.8	34.8	28.4	15.5	35.3	62.0	52.4	44.7	38.3	22.6	43.8
Male	84.2	81.2	77.7	74.0	60.4	75.7	68.3	60.5	49.0	43.5	26.1	48.9	72.7	66.7	57.6	52.9	34.6	56.6	84.2	81.2	77.7	74.0	60.4	75.7	68.3	60.5	49.0	43.5	26.1	48.9	72.7	66.7	57.6	52.9	34.6	56.6
Female	76.7	65.9	58.0	47.2	26.3	55.5	41.7	28.6	19.8	12.2	4.2	21.5	51.2	39.0	31.0	22.0	9.8	30.8	76.7	65.9	58.0	47.2	26.3	55.5	41.7	28.6	19.8	12.2	4.2	21.5	51.2	39.0	31.0	22.0	9.8	30.8
Indonesia	91.8	89.3	74.5	71.9	42.8	75.3	78.8	69.5	45.3	37.0	15.9	47.5	83.6	76.8	54.6	47.5	23.3	56.6	91.8	89.3	74.5	71.9	42.8	75.3	78.8	69.5	45.3	37.0	15.9	47.5	83.6	76.8	54.6	47.5	23.3	56.6
Male	90.6	92.9	81.6	79.8	58.0	81.7	79.4	75.6	54.2	46.9	24.6	54.6	83.3	82.2	63.1	56.8	33.7	63.4	90.6	92.9	81.6	79.8	58.0	81.7	79.4	75.6	54.2	46.9	24.6	54.6	83.3	82.2	63.1	56.8	33.7	63.4
Female	93.0	85.9	67.4	63.7	29.0	69.3	78.2	64.3	36.8	26.6	8.0	40.8	83.8	72.0	46.4	37.8	13.8	50.1	93.0	85.9	67.4	63.7	29.0	69.3	78.2	64.3	36.8	26.6	8.0	40.8	83.8	72.0	46.4	37.8	13.8	50.1
Kazakhstan	99.8	99.8	99.4	99.5	78.4	93.5	98.9	99.4	98.6	97.8	64.0	90.3	99.3	99.6	99.0	98.8	71.7	91.9	99.8	99.8	99.4	99.5	78.4	93.5	98.9	99.4	98.6	97.8	64.0	90.3	99.3	99.6	99.0	98.8	71.7	91.9
Male	99.5	99.8	99.5	99.5	81.7	95.3	98.4	99.5	99.5	98.6	80.1	95.4	98.9	99.6	99.5	99.1	81.0	95.4	99.5	99.8	99.5	99.5	81.7	95.3	98.4	99.5	99.5	98.6	80.1	95.4	98.9	99.6	99.5	99.1	81.0	95.4
Female	100.0	99.9	99.4	99.5	76.3	92.0	99.5	99.3	97.8	97.1	53.8	85.5	99.7	99.5	98.6	98.5	66.0	88.8	100.0	99.9	99.4	99.5	76.3	92.0	99.5	99.3	97.8	97.1	53.8	85.5	99.7	99.5	98.6	98.5	66.0	88.8
Nepal	75.4	67.8	52.5	43.1	17.7	53.2	45.3	30.8	17.2	13.3	4.3	22.5	48.0	34.8	21.0	15.8	5.5	25.4	75.4	67.8	52.5	43.1	17.7	53.2	45.3	30.8	17.2	13.3	4.3	22.5	48.0	34.8	21.0	15.8	5.5	25.4
Male	79.9	79.1	68.5	59.2	28.9	64.7	62.3	50.0	33.3	25.4	7.8	35.3	64.1	53.2	37.5	28.6	9.5	38.3	79.9	79.1	68.5	59.2	28.9	64.7	62.3	50.0	33.3	25.4	7.8	35.3	64.1	53.2	37.5	28.6	9.5	38.3
Female	70.6	58.4	36.3	25.8	6.5	42.1	31.1	16.5	4.1	2.6	0.9	11.6	34.3	20.8	7.3	4.4	1.4	14.3	70.6	58.4	36.3	25.8	6.5	42.1	31.1	16.5	4.1	2.6	0.9	11.6	34.3	20.8	7.3	4.4	1.4	14.3
Pakistan	71.8	63.8	56.1	48.8	27.5	54.7	38.7	30.0	23.0	16.7	7.7	22.9	50.6	41.5	34.3	27.0	13.3	33.4	71.8	63.8	56.1	48.8	27.5	54.7	38.7	30.0	23.0	16.7	7.7	22.9	50.6	41.5	34.3	27.0	13.3	33.4
Male	75.3	70.2	68.2	63.4	40.7	63.8	54.2	47.4	38.0	27.6	13.5	35.3	61.7	55.5	48.4	39.6	21.1	44.8	75.3	70.2	68.2	63.4	40.7	63.8	54.2	47.4	38.0	27.6	13.5	35.3	61.7	55.5	48.4	39.6	21.1	44.8
Female	68.1	57.0	43.0	30.0	12.4	44.5	21.4	13.3	7.2	4.6	0.7	9.5	38.3	27.7	19.3	12.4	4.1	20.9	68.1	57.0	43.0	30.0	12.4	44.5	21.4	13.3	7.2	4.6	0.7	9.5	38.3	27.7	19.3	12.4	4.1	20.9
Philippines	92.4	92.8	89.6	83.4	66.2	85.7	81.2	80.5	73.4	64.0	41.0	67.8	87.3	87.5	82.1	74.3	53.4	77.4	92.4	92.8	89.6	83.4	66.2	85.7	81.2	80.5	73.4	64.0	41.0	67.8	87.3	87.5	82.1	74.3	53.4	77.4
Male	90.3	91.6	89.3	83.2	69.2	85.7	76.7	77.5	71.1	63.6	44.4	67.1	83.6	85.4	80.7	73.9	56.3	76.8	90.3	91.6	89.3	83.2	69.2	85.7	76.7	77.5	71.1	63.6	44.4	67.1	83.6	85.4	80.7	73.9	56.3	76.8
Female	94.4	93.9	89.8	83.5	63.8	85.7	86.9	83.6	75.7	64.4	37.9	68.5	91.3	89.6	83.4	74.6	50.9	78.0	94.4	93.9	89.8	83.5	63.8	85.7	86.9	83.6	75.7	64.4	37.9	68.5	91.3	89.6	83.4	74.6	50.9	78.0
Uzbekistan	99.3	99.5	99.2	99.5	81.4	95.0	98.8	99.4	99.8	99.2	75.5	94.8	98.9	99.4	99.6	99.3	78.3	94.9	99.3	99.5	99.2	99.5	81.4	95.0	98.8	99.4	99.8	99.2	75.5	94.8	98.9	99.4	99.6	99.3	78.3	94.9
Male	99.5	99.2	99.1	99.7	87.7	96.8	98.7	99.7	99.9	99.9	82.0	96.3	99.0	99.5	99.6	99.8	84.5	96.5	99.5	99.2	99.1	99.7	87.7	96.8	98.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
Female	99.0	99.8	99.3	99.3	76.7	93.3	98.8	99.1	99.7	98.4	69.1	93.1	98.9	99.4	99.5	98.9	73.0	93.2	99.0	99.8	99.3	99.3	76.7	93.3	98.8	99.1	99.7	98.4	69.1	93.1	98.9	99.4	99.5	98.9	73.0	93.2

Continued

Table 5.2—Continued

Percentage of the household population with completed primary education and above by age and sex (de facto population age 15 and above), Demographic and Health Surveys, 1990-1996

Country	Household population with completed primary education or above																	
	Urban					Rural					Total							
	15-19	20-29	30-39	40-49	50+	15-19	20-29	30-39	40-49	50+	15-19	20-29	30-39	40-49	50+			
Sub-Saharan Africa																		
Namibia	63.9	73.5	63.6	48.5	39.7	61.5	25.9	43.3	31.3	17.9	9.5	25.9	36.7	55.7	46.5	30.1	16.3	38.4
Male	61.8	66.8	65.1	50.9	43.0	59.8	19.5	41.2	35.6	22.6	11.4	25.5	30.5	51.5	50.7	35.4	19.2	37.9
Female	65.6	78.8	62.1	46.2	36.7	62.9	32.8	45.1	28.4	14.6	8.2	26.2	42.9	59.1	43.2	25.9	14.1	38.8
Niger	31.8	28.4	19.1	9.5	3.5	21.1	2.5	2.3	0.9	0.3	0.0	1.3	8.6	7.6	4.4	1.8	0.5	4.8
Male	36.0	35.6	28.3	15.0	6.4	27.4	4.7	4.6	1.8	0.5	0.1	2.3	11.7	12.2	7.3	2.9	0.8	7.1
Female	27.1	21.5	10.7	2.9	0.9	14.9	0.6	0.8	0.2	0.2	0.0	0.4	5.7	4.5	2.0	0.6	0.1	2.8
Nigeria	79.1	80.4	61.7	52.2	20.0	60.6	47.4	43.2	23.4	16.4	4.6	26.1	56.2	53.5	33.2	24.5	7.7	34.6
Male	81.5	87.8	77.6	67.2	31.0	70.4	50.9	57.4	36.2	27.1	8.0	34.2	59.2	66.3	47.9	37.2	12.5	43.5
Female	76.3	74.1	43.3	31.1	9.0	50.2	43.0	32.4	12.0	5.2	1.1	18.2	52.4	43.5	19.3	10.3	2.7	25.9
Rwanda	41.4	55.6	33.7	27.6	8.8	39.9	22.0	25.2	4.9	3.5	2.4	13.1	23.2	27.6	6.9	4.8	2.6	14.7
Male	44.0	54.3	34.0	36.3	15.4	41.3	22.8	27.2	5.9	5.9	4.3	14.6	24.0	29.5	8.1	7.8	4.7	16.4
Female	39.3	56.8	33.2	15.9	2.8	38.4	21.2	23.5	4.1	1.5	0.9	11.7	22.4	25.9	5.8	2.1	0.9	13.2
Senegal	54.3	50.3	42.9	31.8	12.7	41.0	13.7	9.1	8.2	4.0	0.8	7.0	31.4	28.4	23.3	14.7	4.6	20.9
Male	61.1	59.0	50.8	42.8	23.8	50.0	19.1	15.6	15.2	7.4	1.6	11.4	36.8	38.0	32.3	22.7	8.5	28.1
Female	47.7	42.2	36.1	19.9	3.4	32.7	7.8	4.7	3.8	1.5	0.2	3.5	25.8	20.9	16.9	7.9	1.2	14.9
Tanzania	64.2	85.1	73.9	54.8	14.5	64.8	41.3	67.1	53.6	21.9	5.2	39.4	46.5	71.9	58.4	28.4	6.6	45.0
Male	55.3	87.4	84.0	68.9	23.8	68.4	38.3	71.7	67.3	34.5	9.6	44.2	42.0	76.0	71.5	42.3	11.8	49.7
Female	72.3	83.3	64.2	37.2	5.8	61.5	44.4	63.8	41.9	10.8	1.4	35.2	51.1	68.9	47.0	15.3	2.0	40.9
Uganda	52.9	66.2	66.5	62.3	25.7	59.9	20.9	28.7	26.4	24.1	7.4	21.8	25.8	35.1	32.1	28.3	8.4	26.8
Male	53.4	72.5	75.6	73.8	40.6	67.2	21.8	38.6	37.3	35.7	13.5	29.4	26.0	44.4	43.4	40.2	14.9	34.4
Female	52.6	61.1	56.1	46.6	12.0	53.3	20.2	20.6	17.0	10.4	2.0	14.9	25.7	27.5	21.9	14.1	2.5	19.9
Zambia	65.4	80.3	82.2	67.2	26.6	70.8	27.4	45.3	47.2	37.3	8.7	33.3	44.7	61.4	62.7	50.6	12.8	48.9
Male	65.7	86.7	93.4	83.1	41.5	78.7	27.6	55.6	63.2	55.8	16.0	42.8	44.1	70.0	76.9	69.2	22.4	57.9
Female	65.2	74.3	70.7	49.5	10.8	63.1	27.2	35.9	32.3	23.0	2.3	24.6	45.3	53.5	48.9	33.7	4.2	40.4
Zimbabwe	94.3	93.3	78.7	65.1	41.9	80.5	72.3	75.1	41.5	28.8	12.6	49.2	78.1	81.9	56.1	41.2	18.0	59.0
Male	95.3	94.8	85.6	72.5	47.1	82.8	70.6	83.2	57.5	38.1	18.9	56.7	76.1	87.8	70.7	53.2	25.5	65.6
Female	93.5	91.9	70.9	53.9	33.3	78.0	74.4	68.3	31.4	22.7	7.0	42.8	80.1	76.8	44.5	30.7	10.6	53.0
Near East/North Africa¹																		
Egypt	83.6	77.4	64.0	54.3	36.4	63.8	65.3	51.9	32.6	20.8	8.1	37.6	73.4	63.9	48.2	38.6	21.4	50.1
Male	84.8	82.3	72.4	66.0	47.7	70.9	75.1	68.2	51.1	32.7	14.1	50.5	79.4	75.1	61.6	50.7	30.7	60.5
Female	82.4	72.9	56.3	43.0	24.3	56.9	55.3	38.5	15.6	10.1	2.7	26.0	67.3	54.3	35.9	27.2	12.3	40.5

Continued

Table 5.2.—Continued

Household population with completed primary education or above																		
Country	Urban					Rural					Total							
	15-19	20-29	30-39	40-49	50+	15-49	15-19	20-29	30-39	40-49	50+	15-49	20-29	30-39	40-49	50+	15-49	
Latin America/Caribbean																		
Bolivia	29.5	42.1	44.0	44.8	38.8	40.0	48.1	44.4	30.2	18.1	8.1	28.2	36.3	42.9	38.9	33.3	23.5	35.2
Male	29.5	42.0	49.1	53.1	50.3	44.3	48.3	50.3	39.8	28.3	12.6	34.3	36.6	45.0	45.6	42.5	31.0	40.2
Female	29.4	42.1	39.6	37.1	29.4	36.2	48.0	39.1	21.7	8.8	4.1	22.7	36.0	41.1	33.0	24.8	17.1	30.8
Brazil	85.8	84.5	81.6	70.6	46.9	73.3	61.3	60.1	49.9	36.8	19.2	44.9	80.7	80.1	76.0	64.1	41.5	67.9
Male	82.5	83.7	82.0	71.6	51.4	74.3	56.2	54.2	49.7	39.3	19.6	43.4	76.4	78.0	76.3	64.8	44.6	68.0
Female	89.2	85.3	81.2	69.6	43.3	72.5	67.7	66.3	50.0	34.1	18.7	46.6	85.1	82.0	75.7	63.5	38.9	67.9
Colombia	90.7	90.3	85.3	76.1	56.0	80.0	60.7	55.2	42.1	25.2	15.6	39.1	81.4	81.0	73.7	61.2	42.6	68.1
Male	90.8	90.1	86.9	78.9	60.1	81.8	58.8	54.1	40.9	26.2	17.5	39.3	79.2	79.5	73.7	62.3	44.2	68.0
Female	90.6	90.6	84.0	73.8	52.9	78.6	63.3	56.4	43.3	24.2	13.7	39.0	83.6	82.3	73.7	60.3	41.3	68.2
Dominican Republic	56.3	71.1	63.4	44.3	26.7	55.5	27.4	36.7	23.7	14.5	6.3	22.6	45.3	59.7	50.3	33.2	18.0	43.5
Male	49.6	68.3	68.2	52.2	32.3	56.7	20.2	35.2	24.4	19.5	9.0	22.1	36.7	56.1	52.3	39.3	20.9	42.5
Female	61.3	73.3	59.3	36.9	22.5	54.5	36.0	38.4	22.9	8.7	2.9	23.2	53.0	62.9	48.4	27.0	15.2	44.4
Guatemala	70.6	67.9	59.9	51.8	34.6	57.4	33.3	27.3	18.4	12.2	6.1	20.1	49.0	44.9	36.7	29.8	18.3	36.3
Male	72.6	74.4	66.2	57.8	36.9	62.3	38.9	32.8	24.3	16.0	7.8	24.5	52.5	51.0	42.5	34.2	19.5	40.5
Female	68.9	62.3	54.4	46.5	32.8	53.2	27.8	22.7	13.1	8.6	4.5	16.0	45.9	39.6	31.5	25.7	17.3	32.5
Haiti	50.8	65.1	50.1	36.0	28.6	50.2	22.6	29.6	14.0	7.4	4.3	15.6	34.5	46.4	28.5	16.8	11.1	29.0
Male	55.9	74.7	60.8	52.3	42.3	61.2	22.2	33.9	19.7	12.5	6.9	19.1	34.8	52.8	35.6	24.5	15.3	34.3
Female	47.2	56.9	41.5	23.3	20.3	41.8	23.1	25.6	8.8	2.5	1.9	12.4	34.3	40.7	22.3	9.7	7.7	24.5
Paraguay	85.6	84.8	80.2	65.8	44.1	71.7	59.8	54.5	43.4	24.8	9.9	38.7	72.2	71.2	64.1	46.8	28.2	56.4
Male	84.8	86.3	82.5	70.0	49.2	74.6	61.7	58.4	48.6	29.9	11.5	42.3	72.2	72.6	66.6	50.7	30.3	58.6
Female	86.3	83.5	78.1	61.8	40.1	69.3	58.1	49.8	37.3	19.4	8.3	34.6	72.2	69.9	61.5	42.8	26.3	54.3
Peru	95.5	94.9	90.1	79.8	68.9	86.6	77.1	71.6	53.5	33.9	20.3	51.8	91.1	89.6	81.6	68.7	56.2	78.3
Male	96.3	96.3	94.7	88.2	76.8	90.8	80.4	79.8	69.8	47.8	30.3	62.2	92.2	92.5	88.8	78.1	64.5	83.7
Female	94.7	93.5	86.0	72.0	61.6	82.7	73.4	63.8	37.9	19.6	10.8	41.6	90.1	86.9	75.0	59.7	48.5	73.2

ⁱ Yemen is excluded because coding categories used for education do not allow this classification.

As expected, urban residents are more likely than rural residents to have completed at least primary education. The gap is present for both sexes, but it is even more pronounced for women. For example, in the Near East and North Africa, for the male population age 15-49, the percentage that has completed primary education or more is between 61 percent and 88 percent in urban areas and between 22 percent and 74 percent in rural areas. For the female population, the percentage varies between 40 percent and 69 percent in urban areas, but between only 6 percent and 54 percent in rural areas.

Table 5.2 also shows that educational attainment is negatively associated with age; older generations are more likely to have no schooling or to leave school before completing primary education. For example, in sub-Saharan Africa, the percentage of men age 40-49 who completed at least primary education ranges from 3 percent to 69 percent, whereas for men age 20-29 the percentage is between 12 percent and 88 percent. The difference for females is even more striking: the proportion for age 40-49 varies between less than 1 percent and 34 percent compared with a proportion ranging from 5 percent to 77 percent for age 20-29.

Table 5.3 presents the percentage of heads of household who have completed primary education and above by urban-rural residence and sex. In sub-Saharan Africa, the pattern is similar to that for the household population with completed primary education and above: the level of education among heads of household is generally lower and more variable among surveys in this region than in the other three regions. The proportion of heads of households with primary education or more is between 4 percent in Niger and 52 percent in Zambia. In the Near East/North Africa and Asia, 5 of the 11 countries (Jordan, Kazakstan, the Philippines, Turkey, and Uzbekistan) have a high level of at least primary education ranging from 63 percent to 92 percent. In the six other countries, the level is between 22 percent in Morocco and 49 percent in Indonesia. In Latin America and the Caribbean, only three countries have a level of completed primary education and above which is relatively high: Brazil (60 percent), Colombia (61 percent) and Peru (74 percent). In the other five countries, the level ranges from 23 percent in Haiti to 49 percent in Paraguay.

As expected, there is a strong differential in the level of education between the sexes (Figure 5.1). For example, in the surveys in the Near East and North Africa, the proportion of male-headed households with completed primary education or more is between 25 percent and 77 percent, while the proportion for female-headed households is between only 8 percent and 36 percent. Even in Latin America and the Caribbean where the gender gap is relatively small, there is still a substantial differential in the level of education between the sexes. For males, the level ranges from 26 percent to 77 percent, and for females, it ranges from 17 percent to 57 percent.

The relationship between the level of education and the place of residence conforms to expectations. The percentage of men or women residents living in urban areas who have completed at least primary education is higher than the percentage of those living in rural areas. For example, in sub-Saharan Africa, the level for urban male-headed households is between 20 percent and 81 percent compared to only 1 percent and 47 percent for rural male-headed households. For female-headed households, the level varies from 7 percent to 60 percent in urban areas while the level ranges from 0 percent to 33 percent in rural areas.

5.2 HOUSING CHARACTERISTICS

In the Household Questionnaire, respondents were asked about certain characteristics of their households, including availability of electricity, source of drinking water, type of toilet facility used by household members, floor materials, and the number of rooms used for sleeping.¹ Information on these characteristics is useful as determinants of the health status of household members, particularly children, as well as indicators of the socioeconomic status of households. This information on housing characteristics is presented in Table 5.4 and Table 5.5.

Table 5.4 shows the percent distribution of households by number of persons per sleeping room and mean number of persons per sleeping room according to urban-rural residence. The number per sleeping room is a measure of over-crowding. Overall, in sub-Saharan Africa, the average person per sleeping room ranges from 2.0 in three countries (Cameroon, the Central African Republic, and Namibia) to 2.9 in one country (Niger). Madagascar is the only exception where the average is 3.4. In the Near East/North Africa and Asia, the mean number is larger than in sub-Saharan Africa, ranging from 2.2 in Uzbekistan to 3.9 in Pakistan, except in Kazakstan where the average is small: 1.3 persons per sleeping room. In Latin America and the Caribbean, the average ranges from 1.9 in Brazil to 3.1 in Guatemala.

The same table shows that in sub-Saharan Africa and in Latin America and the Caribbean, only two countries (Madagascar and Guatemala) have at least one-fourth of households with five persons or more per sleeping room. In the Near East/North Africa and in Asia, there are five countries (Bangladesh, Jordan, Nepal, Pakistan, and Yemen) that have more than 25 percent of households with at least five persons per sleeping room. It should be noted that information on rooms used for sleeping does not take into account the type, quality, and/or size of rooms in the households.

¹ As indicated in Table 3.2, information on housing characteristics for Nigeria, Jordan, and Paraguay was collected from the individual questionnaire.

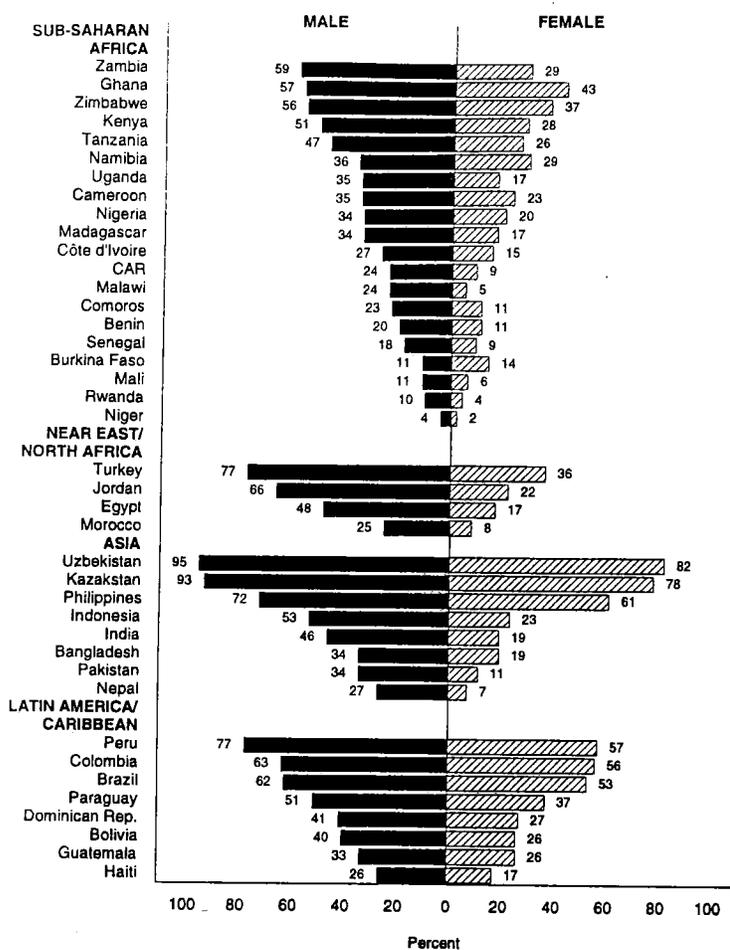
Table 5.3 Heads of household who have completed primary education or above

Percentage of heads of household who have completed primary education or above by urban-rural residence and sex, Demographic and Health Surveys, 1990-1996

Country	Urban			Rural			Total			Number of households
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Sub-Saharan Africa										
Benin	37.3	18.4	33.0	10.1	3.3	9.1	19.9	10.9	18.3	4,499
Burkina Faso	37.3	28.9	36.3	5.4	4.6	5.4	11.1	13.8	11.3	5,143
Cameroon	52.3	39.9	49.8	24.6	10.5	22.2	34.7	22.6	32.5	3,538
Central African Republic	40.7	19.0	35.3	15.7	1.7	13.0	24.1	9.1	21.0	5,551
Comoros	38.1	15.9	30.8	17.1	8.2	14.3	23.1	10.5	19.0	2,252
Côte d'Ivoire	43.1	25.6	40.0	16.1	5.8	14.7	26.7	15.4	25.0	5,935
Ghana	76.9	56.6	68.5	46.5	33.3	42.0	56.6	42.7	51.5	5,822
Kenya	79.2	60.3	75.1	43.3	23.0	36.1	51.3	27.7	43.6	7,950
Madagascar	69.4	44.3	62.7	27.5	10.0	23.8	33.9	16.8	30.2	5,944
Malawi	57.5	35.7	54.7	18.9	3.5	14.8	23.9	5.3	19.3	5,323
Mali	27.0	12.5	25.3	4.7	1.1	4.4	10.6	5.5	10.2	8,716
Namibia	64.1	54.8	61.2	20.9	14.2	18.8	36.3	29.0	34.1	4,101
Niger	20.3	6.9	18.3	1.3	0.0	1.2	4.1	1.8	3.9	5,242
Nigeria	62.2	32.9	57.0	24.1	12.6	22.6	33.9	19.5	31.9	8,999
Rwanda	37.7	21.2	34.5	8.0	2.8	7.0	9.8	3.8	8.5	6,252
Senegal	37.5	13.7	32.0	6.1	1.9	5.7	18.2	9.1	16.8	3,528
Tanzania	68.8	47.8	64.0	40.9	18.8	36.2	47.0	25.8	42.4	7,969
Uganda	69.2	49.7	63.8	30.2	11.0	25.6	35.3	16.9	30.8	7,550
Zambia	80.9	57.7	76.2	45.3	14.7	37.8	59.0	28.7	52.0	7,286
Zimbabwe	77.3	56.7	73.5	42.1	33.0	38.5	55.8	37.4	49.7	5,984
Near East/North Africa¹										
Egypt	62.5	26.9	57.9	33.1	6.3	29.7	48.0	16.8	44.1	15,567
Jordan	70.2	25.9	67.2	54.9	8.4	52.5	66.3	22.3	63.4	8,333
Morocco	43.3	13.0	37.3	9.3	1.8	8.3	25.1	8.3	22.4	6,577
Turkey	84.9	45.9	80.7	62.2	14.4	58.0	76.7	36.2	72.7	8,619
Asia										
Bangladesh	61.9	39.0	59.8	30.7	15.9	29.4	34.2	18.6	32.8	9,174
India	70.5	35.7	67.1	37.3	11.9	35.0	46.4	18.8	43.8	88,562
Indonesia	74.8	44.8	70.8	43.7	12.5	39.8	52.8	22.6	49.0	33,738
Kazakhstan	93.2	86.0	90.5	92.9	61.0	85.4	93.1	78.1	88.3	4,178
Nepal	54.2	31.1	51.4	24.0	4.9	21.6	26.7	7.2	24.3	8,082
Pakistan	56.0	18.6	53.0	24.9	7.3	23.7	34.0	11.0	32.3	7,193
Philippines	82.6	73.6	81.2	61.3	43.6	59.2	71.9	60.8	70.4	12,995
Uzbekistan	95.2	84.7	91.4	94.1	73.8	91.8	94.5	81.5	91.6	3,703
Latin America/Caribbean										
Bolivia	48.3	34.9	45.6	30.2	11.8	27.1	40.3	25.8	37.5	9,114
Brazil	69.3	56.9	66.6	36.5	24.6	34.9	62.4	52.6	60.4	13,283
Colombia	77.8	64.9	74.4	30.3	24.5	29.2	62.6	55.7	61.0	10,112
Dominican Republic	56.4	33.0	49.5	18.5	10.5	17.1	40.6	26.8	37.2	7,144
Guatemala	55.3	44.7	53.0	17.8	8.4	16.1	33.2	25.7	31.7	11,297
Haiti	54.7	31.4	43.5	13.1	4.6	10.3	26.4	17.2	22.8	4,818
Paraguay	70.0	48.6	65.7	30.6	15.5	28.6	51.0	36.5	48.5	5,683
Peru	86.2	69.3	83.5	53.3	21.1	49.0	76.5	57.3	73.6	13,479

¹ Yemen is excluded because coding categories used for education do not allow this classification.

Figure 5.1 Percentage of heads of household who have primary education and above



In sub-Saharan Africa, the mean number of persons per sleeping room in urban areas is very close to the mean in rural areas; however, in the other regions, rooms are likely to be more crowded among rural households than urban households. For example, in Latin America/Caribbean, the average per sleeping room varies between 1.8 and 2.7 in urban areas compared to 2.0 and 3.7 in rural areas.

Overall, the availability of electricity is rare in sub-Saharan Africa (Table 5.5). Nine of the 20 countries have electricity in less than 10 percent of households. In the other 11 countries, the percentage ranges from 11 percent in Kenya to a maximum of 37 percent in Côte d'Ivoire. In the other regions, the proportion of households with electricity is relatively high; it varies between 51 percent and almost 100 percent with the exception of five countries (Bangladesh: 18 percent, Nepal: 18 percent, Haiti: 31 percent, Yemen: 44 percent, and Morocco: 49 percent).

As expected, access to electricity is concentrated in urban areas, particularly among countries in sub-Saharan Africa.

For example, the percentage of urban households with electricity ranges from 8 percent in the Central African Republic to 82 percent in Nigeria, while the percentage of rural households with access to electricity is between 0.2 percent in Niger and 20 percent in Comoros. Even in the other regions, among rural households, 14 of the 20 countries have less than 50 percent access to electricity.

The source of drinking water is important since water-borne diseases, including diarrhea and dysentery, are numerous in many countries of the developing world. Sources of water expected to be relatively free of these diseases are piped water and bottled water. Other sources like wells and surface water from rivers, streams, lakes, and ponds are likely to carry one of the above diseases. In sub-Saharan Africa, access to safe drinking water is limited to a small number of households (Figure 5.2). Overall, the proportion of households with piped water ranges from 7 percent in Uganda to 47 percent in Côte d'Ivoire and Senegal, with the exception of two countries where at least half of the households have access to piped water (Comoros: 50 percent and Namibia: 57 percent). In Asia, access to piped water is also limited: most households use wells (Bangladesh, India, Indonesia, and Pakistan) or a combination of wells and surface water (Nepal). However, in two Asian countries, the access to piped water is high (Kazakhstan: 85 percent and Uzbekistan: 78 percent). In the Near East/North Africa and in Latin America and the Caribbean, the pattern is somewhat different from the two other regions. The majority of households have access to piped water, except for three countries (Haiti and Paraguay: 36 percent and Yemen: 35 percent).

As expected, urban households are more likely to have access to safe drinking water than rural households. For example, in sub-Saharan Africa, among urban households, between 43 percent (the Central African Republic) and 97 percent (Zimbabwe) have access to piped water. Among rural households, the range is between only 1 percent in Uganda and 41 percent in Comoros.

In addition to the source of drinking water, a question on the travel time to the source of water is included in the DHS questionnaire to obtain an indirect measure of the amount of water available. In 9 of 19 countries in sub-Saharan Africa (Burkina Faso, Côte d'Ivoire, Ghana, Mali, Namibia, Niger, Senegal, Zambia, and Zimbabwe), more than half of the households can draw water within 15 minutes. In the three other regions, with the exception of two countries (Haiti and Yemen) at least 60 percent of households are within 15 minutes of a source of water. By place of residence, urban areas tend to be closer to the source of water than rural areas. For example, in sub-Saharan Africa, the proportion of urban households that can get to a source of water within 15 minutes ranges from 47 percent in Uganda to 98 percent in Zimbabwe, while the proportion of rural households ranges from 9 percent in Rwanda and Uganda to 75 percent in Mali.

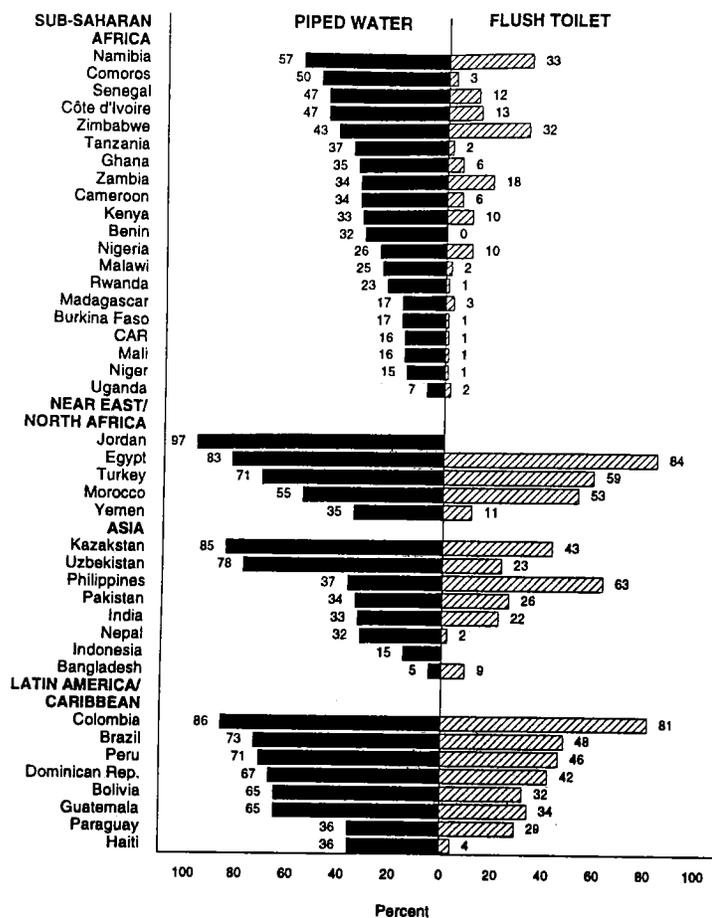
Table 5.4. Number of persons per sleeping room

Percent distribution of households by number of persons per sleeping room, and mean number of persons per sleeping room according to urban-rural residence, Demographic and Health Surveys, 1990-1996

Country	Number of persons per sleeping room																			
	Urban						Rural						Total							
	1	2	3	4	5	6+	Mean	1	2	3	4	5	6+	Mean						
Sub-Saharan Africa																				
Benin	22.8	36.3	23.0	10.6	4.7	2.6	2.2	17.6	36.8	26.0	12.6	4.2	2.8	2.3	19.6	36.6	24.9	11.8	4.4	2.7
Burkina Faso	19.8	35.9	27.7	10.2	3.8	2.6	2.3	14.0	39.1	29.2	11.2	3.1	3.3	2.4	15.1	38.5	28.9	11.0	3.2	3.2
Cameroon	25.1	36.8	24.1	9.7	2.7	1.6	2.2	32.3	36.8	19.9	6.7	2.3	2.1	2.0	29.6	36.8	21.5	7.8	2.5	1.9
Central Africa Rep.	29.8	37.5	19.6	8.0	3.3	1.8	2.0	33.3	32.4	17.4	8.8	3.9	4.1	2.0	32.1	34.2	18.2	8.5	3.7	3.3
Comoros	13.9	32.1	27.8	13.0	7.6	5.7	2.4	11.6	29.9	28.3	16.6	7.1	6.5	2.6	12.3	30.5	28.2	15.6	7.2	6.2
Côte d'Ivoire	20.4	26.5	25.3	15.5	7.4	4.8	2.7	21.1	32.4	24.8	12.5	5.4	3.7	2.4	20.9	30.0	25.0	13.8	6.2	4.1
Ghana	33.4	23.1	19.3	11.3	6.8	6.1	2.3	29.2	25.9	20.0	12.1	6.6	6.2	2.3	30.7	30.0	19.8	11.8	6.7	6.2
Kenya	35.4	25.9	17.0	10.3	6.0	5.3	2.2	20.5	26.3	21.9	13.8	8.3	9.3	2.5	23.3	26.2	11.8	13.1	7.8	8.5
Madagascar	13.7	23.1	24.2	16.6	9.3	13.1	2.9	8.0	17.1	20.9	18.0	14.0	22.0	3.5	8.9	18.1	21.5	17.8	13.2	20.5
Malawi	15.7	32.0	28.1	14.7	6.2	3.2	2.5	13.5	33.2	27.8	14.0	6.3	5.3	2.6	13.7	33.1	27.8	14.0	6.3	5.1
Mali	19.7	31.7	26.6	13.0	5.3	3.7	2.3	19.2	35.3	25.2	11.5	5.2	3.6	2.2	19.3	34.4	25.6	11.9	5.2	3.6
Namibia	36.1	28.0	15.4	9.7	5.6	5.3	2.1	27.3	38.1	20.5	7.7	2.9	3.4	2.0	30.5	34.5	18.7	8.4	3.9	4.1
Niger	14.4	28.1	27.1	15.4	7.6	7.4	2.8	8.0	26.9	28.8	16.7	9.3	10.3	2.9	9.0	27.1	28.5	16.5	9.0	9.9
Nigeria	10.3	25.3	24.1	17.8	9.9	12.7	2.8	11.0	28.5	26.1	16.2	7.8	10.5	2.7	10.8	27.6	25.5	16.7	8.3	11.1
Rwanda	22.9	37.1	26.3	9.5	3.1	1.1	2.2	10.4	32.4	34.5	16.6	4.6	1.5	2.5	11.1	32.7	34.1	16.2	4.5	1.5
Senegal	15.5	29.6	26.9	14.5	7.0	6.6	2.7	8.9	35.5	33.4	13.5	4.7	3.9	2.6	11.7	33.0	30.7	13.9	5.7	5.0
Tanzania	25.4	31.1	26.7	9.9	4.1	2.8	2.2	20.3	28.1	23.1	13.9	6.3	8.4	2.4	21.4	28.7	23.9	13.0	5.8	7.1
Uganda	19.8	23.3	22.1	15.5	9.6	9.8	2.8	18.3	26.4	23.8	15.8	7.8	8.0	2.6	18.5	26.0	23.6	15.8	8.0	8.2
Zambia	12.6	31.6	31.2	16.0	5.4	3.2	2.6	11.7	30.0	30.7	15.8	6.3	5.6	2.7	12.0	30.6	30.9	15.8	6.0	4.7
Zimbabwe	30.5	32.0	21.5	10.4	3.0	2.7	2.1	19.6	31.3	26.9	13.4	5.0	3.7	2.4	23.1	31.5	25.2	12.5	4.4	3.4
Near East/North Africa																				
Egypt	13.9	36.2	31.2	11.4	3.7	3.6	2.4	8.9	25.4	30.9	19.0	8.6	7.2	2.9	11.4	30.9	31.1	15.1	6.1	5.4
Jordan	2.0	19.2	29.7	21.3	11.9	16.0	3.5	1.3	14.0	22.0	20.0	17.7	25.0	4.1	1.8	17.8	27.7	21.0	13.4	18.3
Morocco	16.0	31.8	25.8	14.8	6.6	4.9	2.5	16.3	25.1	24.6	17.5	9.2	7.2	2.6	16.2	28.4	25.2	16.2	7.9	6.1
Turkey	12.4	49.8	25.0	8.1	2.8	2.0	2.2	8.9	40.6	24.7	13.1	6.4	6.3	2.7	11.1	46.5	24.9	9.9	4.1	3.5
Yemen	7.0	24.3	25.9	20.1	10.2	12.5	3.1	7.3	19.2	23.1	18.7	12.8	18.9	3.4	7.2	20.1	23.6	19.0	12.4	17.7
Asia¹																				
Bangladesh	5.0	24.1	29.7	17.5	12.0	11.7	3.0	4.7	20.6	28.2	21.0	12.8	12.8	3.1	4.7	21.0	28.4	20.6	12.7	12.7
Kazakhstan	61.9	30.6	5.7	1.3	0.3	0.2	1.2	51.8	34.6	10.4	2.5	0.5	0.3	1.5	57.5	32.3	7.7	1.8	0.4	0.2
Nepal	12.3	30.9	23.5	16.8	8.7	7.8	2.5	6.5	22.2	25.9	19.2	12.0	14.1	3.1	7.0	23.0	25.7	19.0	11.7	13.5
Pakistan	5.8	15.4	19.6	20.1	12.8	26.4	3.7	6.3	14.5	18.8	17.4	14.7	28.3	3.9	6.1	14.8	19.1	18.2	14.2	27.7
Philippines	11.6	26.5	25.2	16.7	8.8	11.3	2.7	9.3	23.3	24.9	17.8	10.8	13.9	3.0	10.5	24.9	25.0	17.2	9.8	12.6
Uzbekistan	21.7	49.1	21.4	5.6	1.5	0.7	2.0	8.5	40.4	32.0	12.4	4.0	2.6	2.4	14.3	44.3	27.3	9.4	2.9	1.8
Latin America/Caribbean																				
Bolivia	15.7	29.8	22.2	13.8	8.7	9.8	2.6	12.4	23.1	21.0	17.1	11.8	14.5	3.1	14.3	26.9	21.7	15.2	10.1	11.9
Brazil	24.9	46.7	18.5	6.4	2.2	1.3	1.9	21.9	43.7	22.5	8.0	2.0	1.9	2.0	24.3	46.1	19.3	6.7	2.1	1.4
Colombia	32.0	36.2	18.0	7.8	3.5	2.6	1.8	21.4	30.1	21.2	13.0	7.1	7.1	2.3	28.8	34.4	19.0	9.4	4.5	3.9
Dominican Rep.	28.6	34.0	19.2	9.3	4.2	4.7	2.0	20.6	25.3	21.6	12.5	8.7	11.3	2.6	25.6	30.7	20.1	10.5	6.0	7.2
Guatemala	19.0	31.1	18.6	12.9	7.9	10.5	2.4	6.9	17.8	17.4	16.5	14.1	27.4	3.8	12.0	23.4	17.9	15.0	11.5	20.2
Haiti	15.6	27.2	22.1	14.9	9.6	10.5	2.7	13.2	27.2	26.3	16.1	8.8	8.4	2.8	14.1	27.2	24.7	15.7	9.1	9.2
Paraguay	12.8	37.7	26.4	11.7	5.0	6.5	2.3	4.7	21.7	22.8	18.7	11.2	20.8	3.3	9.1	30.3	24.7	15.0	7.8	13.1
Peru	18.3	35.0	22.2	11.9	5.8	6.7	2.2	9.4	23.6	22.9	16.9	11.3	16.0	3.0	15.8	31.7	22.4	13.4	7.4	9.4

¹ Question not asked in India and Indonesia

Figure 5.2 Percentage of households with piped water and flush toilets



Note: No data are available on flush toilet for Jordan and Indonesia

With regard to the type of toilet, the majority of households in most sub-Saharan African countries have traditional pit toilets, and the proportion of households having a flush toilet is extremely rare, ranging from 0 percent in Benin to 33 percent in Namibia (Table 5.5 and Figure 5.2). In the Near East/North Africa and in Asia, the use of flush toilets varies widely, from a minimum of 2 percent in Nepal to a maximum of 84 percent in Egypt. In Latin America and the Caribbean, the pattern is the same as for the Near East/North Africa and Asia; the proportion of households with flush toilets ranges from 4 percent in Haiti to 81 percent in Colombia. In general, urban households have more flush toilets than rural households. For example, in Latin America and the Caribbean, the percentage of households with a flush toilet in urban areas ranges from 12 percent to 96 percent compared to 0 percent and 46 percent in rural areas.

Table 5.5 shows that in sub-Saharan Africa, the majority of households live in dwellings with no floors, i.e., the floors are made of earth, sand, or cow dung. This type of flooring may pose a health problem since it may be a breeding ground for pests and

may be a source of dust. In six countries, however, the majority of households have finished floors² (Ghana: 85 percent, Côte d'Ivoire: 74 percent, Senegal and Zimbabwe: 58 percent, Nigeria: 56 percent and Benin: 52 percent). In the Near East/North Africa and in Asia, only three countries (Bangladesh, Nepal, and Yemen) have a majority of households with no floors. In Latin America and the Caribbean, most households live in dwellings with finished floors (ranging from 52 percent in Haiti to 89 percent in the Dominican Republic); Guatemala is the only country in the region, where the percentage of households with finished floors is low: 27 percent.

There are substantial differences in the flooring materials of urban and rural dwellings. For example, in sub-Saharan Africa, among urban households, between 27 percent in the Central African Republic and 99 percent in Ghana have finished floors. This contrasts with only 3 percent in Niger and the Central African Republic, and 78 percent in Ghana for rural households.

5.3 HOUSEHOLD POSSESSIONS

The availability of durable consumer goods is a good indicator of household socioeconomic status. Although in several countries questions were asked on availability of a variety of consumer goods (ranging from a table or chair to a telephone, VCR, or washing machine), most of the countries include basic questions on ownership of a radio, television, refrigerator, and a means of transport. In addition to providing information on the socioeconomic status of households, these particular goods have specific benefits. Having access to a radio or television exposes household members to innovative ideas; a refrigerator prolongs the wholesomeness of foods; and a means of transport allows greater access to many services away from the local area. Table 5.6 shows the availability of selected goods by residence.

In almost all countries, radios are the most frequently available goods: ownership of a radio varies from 25 percent in Bangladesh to 88 percent in Brazil, Colombia, Jordan, and Paraguay. The percentage of households with a radio is lower than the percentage of households in which a television is available in only five countries (Egypt, Jordan, Kazakhstan, Turkey, and Uzbekistan). Ownership of a television, which can be dependent on the availability of electricity, presents wide variability across regions and countries. In sub-Saharan Africa, the percentage of households with a television ranges from 2 percent in Tanzania to 20 percent in Côte d'Ivoire and Nigeria; in Asia, it varies from 7 percent in Nepal and Bangladesh to 91 percent in Uzbekistan; in the Latin America/Caribbean region, only 17 percent of Haitian households own a television versus 81 percent of Colombian households. In the Near East/North Africa, a television is available in at least 49 percent of households. Ownership of a refrigerator, which also can be dependent on the

² Floors made of materials such as tiles, cement, polished wood, or carpets, are considered finished floors.

Table 5.5.2. Housing amenities: rural

Percentage of households with electricity, percent distribution of households by source of drinking water, percentage of households within 15 minutes of piped/well water, percent distribution of households by type of toilet, and percent distribution of households by type of floor, Demographic and Health Surveys, 1990-1996

Country	Percentage of households with electricity	Percentage of households within 15 minutes of piped/well water										Type of toilet			Type of floor			Number of households
		Source of water					Total	Flush	Pit latrine		None	Total	Finished	Rudimentary	No floor		Total	
		Piped	Well	Surface water	Other	Pit latrine			Rudimentary	No floor								
Sub-Saharan Africa																		
Benin	2.0	15.1	52.6	22.0	10.2	100.0	U	0.0	8.3	91.7	100.0	35.0	0.3	64.7	100.0	2,766		
Burkina Faso	0.6	4.8	89.8	4.8	0.6	100.0	52.6	0.0	13.9	86.1	100.0	16.3	0.0	83.7	100.0	4,157		
Cameroon	8.7	12.6	36.2	50.3	0.9	100.0	31.2	0.8	77.3	21.9	100.0	22.1	0.7	77.2	100.0	2,220		
Central African Rep.	0.3	1.5	38.8	59.6	0.0	100.0	30.6	0.1	52.9	47.0	100.0	3.1	0.3	96.5	100.0	3,574		
Comoros	19.6	40.9	3.6	51.9	0.3	100.0	36.4	1.6	97.0	1.4	100.0	41.3	1.6	57.1	100.0	1,605		
Côte d'Ivoire	13.7	24.7	55.9	19.1	0.3	100.0	68.8	2.3	30.0	67.7	100.0	57.1	0.1	42.9	100.0	3,517		
Ghana	6.0	12.8	40.3	45.8	1.1	100.0	36.1	0.9	66.7	32.4	100.0	77.7	0.1	22.2	100.0	3,733		
Kenya	3.4	19.6	25.4	49.9	5.1	100.0	30.9	1.6	77.3	21.1	100.0	19.5	0.2	80.2	100.0	6,423		
Madagascar	1.9	5.2	17.1	75.1	2.7	100.0	17.2	0.2	29.4	70.3	100.0	6.6	33.7	59.7	100.0	4,975		
Malawi	1.1	18.0	64.3	17.6	0.1	100.0	40.9	0.6	68.5	30.9	100.0	7.4	0.0	92.6	100.0	4,720		
Mali	0.4	2.7	90.6	6.3	0.3	100.0	75.4	0.1	60.1	39.8	100.0	4.9	0.1	95.0	100.0	6,317		
Namibia	4.2	34.7	37.2	25.2	2.9	100.0	43.2	5.7	10.0	84.3	100.0	19.5	2.0	78.5	100.0	2,625		
Niger	0.2	6.5	89.4	3.1	1.1	100.0	63.6	0.2	4.2	95.7	100.0	3.4	0.0	96.6	100.0	4,404		
Nigeria	8.3	11.5	35.0	52.0	1.5	100.0	32.3	2.0	62.3	35.7	100.0	48.2	0.1	51.7	100.0	6,574		
Rwanda	0.5	19.7	1.0	78.7	0.7	100.0	8.9	0.2	92.1	7.7	100.0	8.2	0.0	91.8	100.0	5,896		
Senegal	2.2	19.7	73.6	4.7	2.0	100.0	62.2	1.7	38.3	60.0	100.0	33.0	0.0	67.0	100.0	2,041		
Tanzania	1.8	25.1	32.9	41.1	0.9	100.0	28.0	0.8	82.3	16.9	100.0	8.5	0.1	91.3	100.0	6,186		
Uganda	1.5	1.1	40.4	57.8	0.7	100.0	9.0	0.3	77.2	22.5	100.0	6.9	0.0	93.1	100.0	6,530		
Zambia	1.5	7.0	66.9	25.6	0.5	100.0	36.3	1.2	55.4	43.4	100.0	11.3	0.1	88.6	100.0	4,584		
Zimbabwe	3.4	17.6	68.6	13.5	0.3	100.0	42.4	2.5	46.3	51.2	100.0	41.3	0.0	58.7	100.0	4,065		
Near East/North Africa																		
Egypt	91.9	69.4	25.6	0.3	4.7	100.0	85.5	70.9	17.8	11.3	100.0	45.9	0.0	54.1	100.0	7,643		
Jordan	90.0	91.3	4.1	1.1	3.5	100.0	U	a	13.8	67.8	100.0	46.1	0.5	53.4	100.0	2,128 ^b		
Morocco	15.6	17.5	45.1	29.3	8.1	100.0	40.8	18.4	85.0	3.4	100.0	42.4	37.2	20.4	100.0	3,384		
Turkey	U	58.3	7.8	28.7	5.2	100.0	U	11.6	27.4	70.5	100.0	28.9	0.0	71.1	100.0	3,056		
Yemen	33.9	23.7	49.3	24.2	2.9	100.0	38.8	2.1	27.4	70.5	100.0	28.9	0.0	71.1	100.0	10,571		
Asia																		
Bangladesh	10.4	0.5	95.4	3.9	0.2	100.0	86.7	4.2	62.0	33.8	100.0	3.7	0.2	96.1	100.0	8,136		
India	38.7	19.3	73.7	5.1	2.0	100.0	72.1	6.9	5.9	87.1	100.0	U	U	U	100.0	64,138		
Indonesia	49.4	6.0	62.2	28.8	3.0	100.0	63.8	a	a	a	100.0	42.1	24.0	33.9	100.0	23,740		
Kazakhstan	99.9	69.4	23.0	4.5	3.1	100.0	78.3	2.4	95.9	1.7	100.0	4.0	94.0	2.0	100.0	1,810		
Nepal	12.1	29.1	39.3	29.9	1.7	100.0	58.7	0.2	14.1	85.6	100.0	1.7	2.5	95.8	100.0	7,366		
Pakistan	44.7	14.4	68.3	13.8	3.4	100.0	69.2	5.8	11.5	82.7	100.0	U	U	U	100.0	5,073		
Philippines	46.4	20.5	46.8	15.8	16.9	100.0	63.3	50.4	29.2	20.4	100.0	34.0	57.3	8.7	100.0	6,382		
Uzbekistan	99.3	65.5	22.9	6.8	4.8	100.0	75.0	2.5	97.4	0.1	100.0	2.8	71.8	25.4	100.0	2,064		
Latin America/Caribbean																		
Bolivia	26.5	33.0	33.3	32.6	1.1	100.0	58.7	4.1	33.0	63.0	100.0	23.6	4.0	72.4	100.0	3,963		
Brazil	72.4	25.0	66.7	0.0	8.3	100.0	91.7	16.1	46.1	37.8	100.0	73.0	7.8	19.2	100.0	2,594		
Colombia	73.6	56.8	20.8	14.6	7.9	100.0	74.4	46.1	10.7	43.2	100.0	58.6	10.3	31.0	100.0	3,013		
Dominican Republic	48.4	44.3	9.1	25.0	21.5	100.0	44.7	8.8	67.9	23.3	100.0	76.4	0.0	23.6	100.0	2,726		
Guatemala	40.1	60.5	19.9	14.7	4.9	100.0	78.1	11.1	63.3	25.6	100.0	23.6	9.2	67.1	100.0	6,507		
Haiti	3.9	28.3	9.8	60.3	1.6	100.0	23.1	0.1	39.7	60.3	100.0	31.5	0.5	68.0	100.0	2,998		
Paraguay	17.1	3.3	82.3	9.9	4.4	100.0	82.4	5.3	91.3	3.5	100.0	35.0	6.8	58.2	100.0	2,630		
Peru	19.6	28.8	14.6	47.8	8.9	100.0	41.1	3.3	24.0	72.7	100.0	13.4	8.5	78.1	100.0	3,856		

U = Unknown (not asked)

a In Indonesia, and Jordan coding categories do not allow this classification.

b These numbers are slightly different from the other tables due to the adjustment for the household weights, since the information on housing characteristics was collected on the individual questionnaire.

Percentage of households that own selected consumer goods by urban-rural residence, Demographic and Health Surveys, 1990-1996

Country	Urban						Rural						Total						
	Radio	TV	Refrigerator	Bicycle	Motor-cycle	Car	Radio	TV	Refrigerator	Bicycle	Motor-cycle	Car	Radio	TV	Refrigerator	Bicycle	Motor-cycle	Car	
	Sub-Saharan Africa																		
Benin	66.6	23.8	10.4	26.8	33.2	7.3	46.2	2.1	0.7	52.5	15.4	54.1	10.5	4.4	42.6	22.3	3.6		
Burkina Faso	74.2	23.8	13.2	48.3	57.9	8.7	40.4	0.3	0.2	71.2	17.4	46.9	4.8	2.7	66.8	25.2	1.9		
Cameroon	69.9	31.7	24.3	11.8	10.5	11.1	44.6	3.9	1.8	18.0	5.9	54.0	14.2	10.2	15.7	7.6	5.1		
Central African Rep.	60.6	6.9	4.6	9.7	8.8	3.6	35.6	0.2	0.1	12.4	2.1	44.5	2.6	1.7	11.5	4.5	1.4		
Comoros	67.4	22.3	17.3	4.8	1.5	7.1	43.6	4.9	5.2	1.6	0.4	3.7	50.4	9.9	8.7	2.5	0.7	4.7	
Côte d'Ivoire	63.8	38.5	21.3	9.5	7.6	6.9	44.4	7.8	3.9	37.8	11.3	52.3	20.3	11.0	26.2	9.8	3.6		
Ghana	54.3	30.0	23.4	10.3	1.6	a	33.5	3.5	1.2	19.4	0.9	40.9	13.0	9.1	16.1	1.1	a		
Kenya	67.7	22.0	12.0	16.9	U	U	48.1	2.4	0.6	23.3	U	51.9	6.1	2.8	22.1	U	U		
Madagascar	66.0	19.9	8.3	6.7	2.4	6.0	30.4	0.8	0.4	2.9	0.7	36.2	3.9	1.7	3.5	1.0	1.4		
Malawi	65.1	U	U	17.0	2.6	6.1	28.6	U	U	21.8	0.7	32.8	U	U	21.2	0.9	1.1		
Mali	72.8	25.9	10.6	16.4	28.0	8.6	49.9	1.8	0.2	45.1	12.9	56.2	8.4	3.0	37.2	17.0	2.7		
Namibia	78.4	46.5	56.8	17.3	2.9	39.6	58.7	2.7	5.0	21.1	0.8	13.4	65.8	18.5	23.6	19.7	1.5	22.8	
Niger	60.4	21.8	12.4	12.7	11.6	8.5	28.2	0.5	0.1	3.2	0.5	33.4	3.9	2.0	4.7	2.3	1.6		
Nigeria	79.6	53.6	32.9	16.6	17.4	16.6	46.4	6.8	3.0	36.9	16.3	55.4	19.5	11.0	31.4	16.6	7.6		
Rwanda	62.0	U	10.6	8.2	2.6	5.3	30.5	U	0.2	6.3	0.6	32.3	U	0.8	6.4	0.7	0.5		
Senegal	78.7	34.2	20.8	4.3	3.7	7.7	64.4	3.4	1.6	7.6	2.1	70.4	16.4	9.7	6.2	2.8	4.0		
Tanzania	65.4	6.0	7.5	25.0	1.7	4.3	33.8	0.4	0.4	33.8	0.6	40.9	1.6	2.0	31.9	0.8	1.4		
Uganda	67.2	17.3	4.8	24.5	1.7	a	32.8	0.6	0.1	35.7	0.6	37.5	2.9	0.7	34.2	0.7	a		
Zambia	64.9	43.4	16.7	14.7	0.9	5.7	31.0	2.1	0.5	30.5	0.5	43.5	17.4	6.5	24.6	0.6	2.7		
Zimbabwe	65.4	39.0	24.0	21.2	1.3	13.7	31.9	3.6	1.7	16.4	0.5	42.6	15.0	8.9	18.0	0.8	5.7		
Near East/North Africa																			
Egypt	73.4	88.5	77.9	13.5	a	a	54.6	68.8	33.1	16.0	a	64.2	78.8	55.9	14.7	a	a		
Jordan	90.4	93.6	87.1	0.6	0.2	26.9	81.4	84.3	66.2	0.8	0.9	13.9	91.3	81.8	0.7	0.4	23.6		
Morocco	89.2	85.6	56.9	9.5	14.8	15.7	80.1	32.9	5.2	10.3	9.0	84.5	58.5	30.3	9.9	11.8	10.2		
Turkey	79.2	92.8	94.7	U	U	23.8	72.2	75.5	74.1	U	U	12.7	86.7	87.4	U	U	19.9		
Yemen	81.8	86.5	62.8	10.6	3.2	24.2	62.6	41.0	7.2	2.2	1.8	13.8	66.0	17.0	3.7	2.1	15.6		
Asia																			
Bangladesh	42.3	37.6	U	15.7	U	U	22.3	3.4	U	16.0	U	24.6	7.2	U	15.9	U	U		
India	59.4	51.7	20.1	47.5	19.2	3.2	31.6	8.9	1.7	39.7	3.8	39.3	20.7	6.8	41.8	8.1	1.1		
Indonesia	74.0	67.1	21.1	48.2	25.6	9.4	54.3	24.5	1.4	44.2	10.9	60.2	37.1	7.2	45.4	15.3	3.7		
Kazakhstan	62.0	92.7	92.4	17.7	7.0	24.0	36.9	85.6	69.3	16.7	15.9	21.3	89.6	82.4	17.3	10.9	22.9		
Nepal	59.7	42.6	U	38.9	U	U	34.2	3.1	U	17.6	U	36.5	6.6	U	19.5	U	U		
Pakistan	50.7	60.7	35.3	39.4	16.0	a	27.0	10.0	3.5	30.2	3.2	34.0	25.0	12.9	32.9	7.0	a		
Philippines	U	61.5	41.9	24.1	7.3	9.9	U	23.8	13.0	18.5	4.7	2.1	43.0	27.7	21.4	6.0	6.1		
Uzbekistan	67.6	95.7	88.1	16.7	4.7	23.4	57.6	86.8	52.2	22.5	14.6	19.4	90.7	68.1	20.0	10.2	21.2		
Latin America/Caribbean																			
Bolivia	92.2	82.5	41.4	U	U	U	68.6	14.9	7.3	U	U	81.9	53.1	26.6	U	U	U		
Brazil	89.8	76.0	85.2	U	U	33.7	77.7	35.2	47.5	U	U	15.8	68.1	77.8	U	U	30.2		
Colombia	91.4	91.2	72.1	45.3	8.9	16.9	79.5	57.6	29.0	32.5	3.6	87.8	81.2	59.3	41.5	7.3	13.0		
Dominican Republic	64.1	72.2	58.9	4.8	15.5	15.7	50.8	32.2	18.2	2.2	15.6	1.9	59.0	43.3	3.8	15.5	10.5		
Guatemala	88.8	78.6	47.7	23.1	6.5	25.2	71.1	29.6	11.4	22.7	2.2	78.6	50.4	26.8	22.8	4.0	14.6		
Haiti	65.3	42.3	20.9	12.4	1.4	8.3	24.2	1.6	0.7	7.3	0.8	39.7	17.0	8.3	9.2	1.0	3.3		
Paraguay	92.4	85.6	74.9	42.2	9.0	22.2	82.1	31.5	18.4	26.6	11.5	5.7	87.7	60.6	48.8	10.2	14.6		
Peru	91.7	83.0	54.7	21.3	4.3	17.3	68.2	18.1	4.5	10.3	1.6	2.0	64.4	40.3	18.2	3.5	12.9		

U = Unknown, not asked

a Coding categories do not allow this classification.

availability of electricity, presents as much variability across regions and countries as ownership of a television. Households in sub-Saharan African countries are less likely to own a refrigerator (maximum of 24 percent in Namibia) while households in the Near East/North Africa are more likely to have one (from 17 percent in Yemen to 87 percent in Turkey).

Availability of a means of transportation varies widely across regions and countries. In most countries, a bicycle is the most frequently available means of transportation: ownership of a bicycle varies from less than 1 percent in Jordan to 67 percent in Burkina Faso. In a few countries (Comoros, Jordan, Namibia, Kazakstan, Uzbekistan, and Yemen), households are more likely to own a car than a bicycle or a motorcycle (e.g., in Jordan 24 percent of households own a car while less than 1 percent own a bicycle or a motorcycle). Overall, ownership of a car is more frequent in the Near East/North Africa and Latin America/Caribbean regions than in Asia and sub-Saharan Africa.

As expected, urban-rural differentials in availability of consumer goods are very significant. For example, in most sub-Saharan African countries, ownership of a radio is 50 to 100 percent higher in urban areas compared to rural areas while ownership of a television or refrigerator shows large variations; in Nigeria, for instance, 54 percent of urban households own a television and 33 percent a refrigerator versus only 7 and 3 percent of rural households, respectively. In four countries (Jordan, Kazakstan, Turkey, and Uzbekistan) the differentials are more limited; in Turkey, for instance, 93 percent of urban households own a television and 95 percent a refrigerator versus 76 percent and 74 percent of rural households, respectively. These same patterns are found for a means of transport and for cars in particular: very high urban-rural differentials are found when the availability of a car is low at the national level (in Burkina Faso, for instance, 9 percent of urban households own a

car versus 0.3 percent in rural areas); however, more limited differentials are noted when ownership of a car is more common (in Kazakstan, for instance, 24 percent of urban households own a car versus 21 percent in rural areas).

5.4 STANDARD OF LIVING INDEX

Ownership of a radio, television, refrigerator, and a means of transportation, as well as availability of electricity, type of water and sanitation facilities used by household members, and quality of the house's flooring provide valuable information on welfare and the socioeconomic status of the population. In addition, they are important determinants of the health status of household members. Such information is considered more useful than direct questions on income for evaluating socioeconomic status. Data on housing characteristics and possession of goods are much easier to collect than data on household income (Shryock, and Siegel, 1976); the household income itself can also be misleading in determining the socioeconomic status of a household.

A standard of living index (SLI) has been developed based on household access to basic amenities and ownership of selected consumer goods. In this section, distributions of households across values of this index are examined to compare the socioeconomic status of the population across the countries and across urban-rural residence in each individual country.

The SLI defined here is based on household access to basic amenities: floor materials, toilet facilities, drinking water, and electricity, and ownership of durable consumer goods. Specifically, individual households are assigned the following values:

Standard of living index (SLI) for DHS surveys

Amenities/goods	Value		
	2	1	0
Source of drinking water	Piped/bottled water	Any source other than piped/bottled	Surface water
Toilet facilities	Flush toilet	Any type other than flush	None/nature
Material of floor	Finished (tiles, cement, polished)	Rudimentary (planks, bamboo, etc.)	Earth/sand/dung
Availability of electricity	NA	Yes	No
Ownership of a radio	NA	Yes	No
Ownership of a television	NA	Yes	No
Ownership of a refrigerator	NA	Yes	No
Means of transportation	At least a car	At least a motorcycle	Neither car nor motorcycle

NA = Not applicable

Each household can be ranked from a minimum score of 0 (the household uses surface water, has no toilet facility, has a natural floor, has no electricity, no radio, no television, no refrigerator, no car, and no motorcycle) to a maximum score of 12 (the household uses piped/bottled water, has a flush toilet, a finished floor, and electricity, and owns a radio, a television, a refrigerator, and at least a car). For countries where information on some of the selected items was not available, this information has been deduced from other information, and/or other sources of information, and/or by comparison to other similar countries. For instance, information on availability of electricity is not available for Turkey; however, since 87 percent of Turkish households have a refrigerator, 87 percent a television, 58 percent a telephone, 53 percent a washing machine, and 50 percent a vacuum cleaner, it is assumed that electricity is available for about 95 percent of households: this percentage is just below the percentage for Egypt and Jordan (99 percent in both cases).

The selection of amenities/goods used in this index and the values assigned to each amenity/durable good can be criticized in terms of their economic value. Is ownership of a car as important as access to piped water? Does ownership of a refrigerator have the same economic value as having access to latrines? In addition, do these amenities/goods have the same value across regions and countries? It is important to consider that the particular selected amenities/goods not only have an economic value, but also have specific benefits. As previously stated, having access to a radio or television exposes household members to innovative ideas; a refrigerator prolongs the wholesomeness of foods; and source of drinking water, type of toilet facilities, and floor material are important determinants of health status. Thus, even though some of these amenities/goods can be considered as nonessential to the definition of an universal high economic status, they are essential to ensure the population's welfare.

Using this index raises another problem when availability of one item at the household level depends on its availability at the country level. For instance, some households without electricity could have it if electricity were available in their area of residence. In this case, these households got a value of 0 for electricity, which underestimates the socioeconomic level of these particular households, but reflects the general level of development of the country.

Households in each country have been classified in five categories according to the score on the Standard of Living Index (SLI):

Low SLI	Score <3
Medium Low SLI	Score = 3 to <6
Medium SLI	Score = 6 to <8
Medium High SLI	Score = 8 to <10
High SLI	Score = 10 +

Using the average household SLI, each country can be scored as shown in Table 5.7 and Figure 5.3. The SLI score

ranges from a minimum of 2.0 in Nepal, Niger, and Rwanda to a maximum of 9.3 in Jordan. No country reaches the High SLI category and only six countries fall into the Medium High SLI: three of them are in the Near East (Jordan, Turkey, and Egypt), two in Latin America (Brazil and Colombia) and one in Asia (Kazakhstan). The Medium SLI category includes five Latin American/Caribbean countries, two Asian countries, and one North African country; none of the 20 sub-Saharan African countries fall into either of these two categories. All of them belong to the Medium Low SLI (12) or Low SLI categories (8). In addition to the sub-Saharan African countries, three Asian countries (Indonesia, Pakistan, and India), one Near East country (Yemen) and one country from the Caribbean (Haiti) fall into the Medium Low SLI category. In the Low SLI category, there are only two countries that are not in sub-Saharan Africa: Nepal (2.0) and Bangladesh (2.5).

As shown in Table 5.7 and Figure 5.4, the percent distribution of households according to the SLI score varies widely across regions and countries. In countries with Medium High SLI, a very large percentage of households have a score above 8 (e.g., 89 percent in Jordan and 77 percent in Colombia) while a very low percentage of households have a score below 3 (less than 1 percent in Jordan and Kazakhstan). Similarly, in countries with Low SLI, the majority of households have a score below 3 (e.g., 82 percent in Niger and 73 percent in Nepal) while a very low percentage of households have a score above 8 (only 1 percent in Nepal and Rwanda).

In addition, Table 5.7 and Figure 5.4 show the percent distribution of households according to SLI score by urban-rural residence. In all countries, urban households have higher scores than rural households. However, according to the country, the percent distribution of urban and rural households follows very different patterns. In some countries with a Medium High SLI, such as Jordan and Kazakhstan, distributions of urban and rural households are very close and both are concentrated in the highest score ranges (8 and above); however in Brazil, also with a Medium High SLI, urban households are concentrated in the highest score ranges (85 percent with a score of 8 and above) while rural households are found in each category: 37 percent in the Medium High and High SLI category, 25 percent with Medium SLI, 26 percent in the Medium Low SLI category, and 13 percent with Low SLI. The pattern for Brazil is also the most common among countries with a Medium SLI. However, in some countries with a Medium SLI, such as Peru, urban households are concentrated in the highest score ranges (69 percent with a score of 8 and above) while rural households are concentrated in the lowest score ranges (55 percent with a score below 3). In countries with the lowest SLI, rural households are usually concentrated in the lowest score ranges (in Niger, for instance, 93 percent of rural households have a score below 3) while urban households are found in each category. In Niger, for example, 19 percent of the urban households belong to the Medium High and High SLI category, 22 percent to the Medium, 39 percent to the Medium Low, and 20 percent to the Low SLI category.

Table 5.7 Household standard of living index (SLI)

Percent distribution of households by standard of living index and standard of living index mean score according to urban-rural residence, Demographic and Health Surveys, 1990-1996

Country	Standard of living index				Total	Mean Score
	Low (<3)	Med-ium		Med-ium high/High (8+)		
		low (3 to <6)	ium (6 to <8)			
Sub-Saharan Africa						
Benin	42.4	35.7	11.7	10.2	100.0	3.6
Urban	15.9	35.6	23.9	24.6	100.0	5.5
Rural	58.9	35.8	4.0	1.3	100.0	2.4
Burkina Faso	60.1	24.7	9.6	5.7	100.0	2.9
Urban	6.8	28.7	35.9	28.6	100.0	6.4
Rural	72.7	23.7	3.3	0.3	100.0	2.1
Cameroon	41.1	29.8	14.8	14.3	100.0	4.0
Urban	8.1	28.9	28.5	34.5	100.0	6.5
Rural	60.7	30.3	6.6	2.3	100.0	2.5
Central African Rep.	66.9	26.0	4.7	2.4	100.0	2.2
Urban	34.4	46.8	12.2	6.7	100.0	3.7
Rural	84.8	14.5	0.6	0.1	100.0	1.4
Comoros	14.8	56.5	17.8	10.9	100.0	4.5
Urban	4.5	41.4	29.1	25.0	100.0	5.8
Rural	19.0	62.6	13.3	5.2	100.0	4.0
Côte d'Ivoire	23.9	36.7	19.2	20.2	100.0	4.9
Urban	1.2	23.8	33.5	41.6	100.0	7.1
Rural	39.6	45.7	9.3	5.5	100.0	3.4
Ghana	17.5	52.5	17.1	12.9	100.0	4.6
Urban	1.2	28.0	38.0	32.9	100.0	6.7
Rural	26.6	66.3	5.5	1.7	100.0	3.4
Kenya	48.9	32.7	11.6	6.9	100.0	3.2
Urban	3.7	32.0	33.4	30.9	100.0	6.4
Rural	59.6	32.8	6.4	1.2	100.0	2.5
Madagascar	72.4	17.9	6.4	3.3	100.0	2.1
Urban	13.5	37.2	30.9	18.3	100.0	5.4
Rural	83.9	14.1	1.6	0.4	100.0	1.4
Malawi	62.1	30.0	6.0	1.8	100.0	2.5
Urban	10.6	44.3	31.9	13.2	100.0	5.1
Rural	68.7	28.2	2.7	0.4	100.0	2.2
Mali	47.0	38.8	8.3	5.9	100.0	3.2
Urban	12.9	40.4	25.9	20.8	100.0	5.4
Rural	59.9	38.1	1.7	0.3	100.0	2.3
Namibia	40.8	20.7	11.6	26.9	100.0	4.9
Urban	4.1	9.0	20.5	66.4	100.0	8.7
Rural	61.4	27.2	6.6	4.7	100.0	2.7
Niger	81.6	11.2	4.1	3.1	100.0	2.0
Urban	20.3	38.8	22.1	18.8	100.0	5.2
Rural	93.3	5.9	0.6	0.2	100.0	1.4
Nigeria	34.5	34.6	13.8	17.0	100.0	4.3
Urban	3.5	15.7	29.9	50.9	100.0	7.5
Rural	45.9	41.6	7.9	4.5	100.0	3.1
Rwanda	72.1	23.4	3.5	1.0	100.0	2.0
Urban	21.0	37.3	26.9	14.9	100.0	5.0
Rural	75.2	22.6	2.0	0.1	100.0	1.8

Continued

Table 5.7—Continued

Country	Standard of living index				Total	Mean Score
	Low (<3)	Med-ium		Med-ium high/High (8+)		
		low (3 to <6)	ium (6 to <8)			
Sub-Saharan Africa						
Senegal	30.6	33.5	17.8	18.0	100.0	4.6
Urban	4.0	23.5	32.5	40.0	100.0	6.9
Rural	50.1	40.8	7.2	2.0	100.0	3.0
Tanzania	51.4	34.7	10.9	3.0	100.0	2.9
Urban	11.4	38.5	39.1	11.0	100.0	5.3
Rural	63.0	33.6	2.8	0.7	100.0	2.2
Uganda	73.3	19.4	5.2	2.2	100.0	2.2
Urban	18.0	38.3	29.0	14.7	100.0	5.0
Rural	81.9	16.4	1.5	0.2	100.0	1.7
Zambia	50.1	23.2	11.4	15.3	100.0	3.7
Urban	6.6	27.4	26.2	39.8	100.0	6.7
Rural	75.7	20.8	2.6	0.9	100.0	2.0
Zimbabwe	34.6	30.3	13.8	21.3	100.0	4.5
Urban	0.6	5.8	31.6	62.0	100.0	8.2
Rural	50.7	41.8	5.3	2.2	100.0	2.8
Near East/North Africa						
Egypt	2.9	14.2	16.8	66.1	100.0	8.1
Urban	0.3	2.6	7.4	89.8	100.0	9.4
Rural	5.7	26.3	26.6	41.4	100.0	6.8
Jordan	0.1	1.5	9.1	89.3	100.0	9.3
Urban	0.0	0.4	6.3	93.3	100.0	9.5
Rural	0.4	4.9	17.4	77.3	100.0	8.5
Morocco	21.2	19.1	12.7	47.0	100.0	6.5
Urban	0.8	3.0	12.5	83.7	100.0	9.3
Rural	40.5	34.3	12.8	12.4	100.0	3.8
Turkey	1.5	14.4	22.3	61.9	100.0	8.7
Urban	0.3	2.9	15.1	81.7	100.0	9.6
Rural	3.7	35.4	35.3	25.7	100.0	7.0
Yemen	33.4	32.0	15.8	18.8	100.0	4.5
Urban	4.0	11.4	16.2	68.4	100.0	8.4
Rural	39.7	36.4	15.7	8.2	100.0	3.7
Asia						
Bangladesh	69.0	22.9	4.3	3.8	100.0	2.5
Urban	16.5	33.1	20.9	29.6	100.0	5.7
Rural	75.7	21.6	2.2	0.5	100.0	2.1
India	51.3	27.2	11.0	10.5	100.0	3.8
Urban	5.1	28.9	30.7	35.3	100.0	6.8
Rural	68.9	26.6	3.5	1.0	100.0	2.7
Indonesia	28.6	37.1	20.9	13.3	100.0	5.2
Urban	1.4	18.2	39.9	40.5	100.0	7.5
Rural	40.1	45.1	12.9	1.9	100.0	4.2
Kazakstan	0.0	6.7	29.5	63.8	100.0	8.2
Urban	0.0	1.5	15.3	83.2	100.0	9.1
Rural	0.0	13.6	48.1	38.3	100.0	7.1

Continued

Table 5.7—Continued

Country	Standard of living index				Total	Mean Score
	Low (<3)	Medium low (3 to <6)	Medium (6 to <8)	Medium high/High (8+)		
Asia						
Nepal	72.5	22.4	3.9	1.2	100.0	2.0
Urban	23.0	33.4	30.7	12.9	100.0	5.3
Rural	77.3	21.3	1.3	0.1	100.0	1.7
Pakistan	30.5	36.8	12.3	20.3	100.0	4.5
Urban	1.7	14.3	24.1	59.9	100.0	7.8
Rural	42.5	46.3	7.4	3.8	100.0	3.2
Philippines	12.7	34.3	24.5	28.4	100.0	6.3
Urban	4.2	23.1	28.7	43.9	100.0	7.6
Rural	21.6	45.9	20.1	12.4	100.0	5.1
Uzbekistan	0.7	12.5	31.8	55.0	100.0	7.6
Urban	0.0	2.1	20.1	77.8	100.0	8.6
Rural	1.2	20.9	41.1	36.8	100.0	6.8
Latin America/Caribbean						
Bolivia	22.3	23.2	17.3	37.2	100.0	6.1
Urban	1.9	14.4	22.1	61.6	100.0	8.3
Rural	48.9	34.5	11.0	5.6	100.0	3.2
Brazil	2.8	7.9	13.8	75.6	100.0	8.8
Urban	0.3	3.5	11.2	85.0	100.0	9.4
Rural	12.9	25.8	24.8	36.5	100.0	6.2
Colombia	4.3	9.4	9.5	76.9	100.0	8.7
Urban	0.3	1.8	4.9	93.1	100.0	9.8
Rural	13.7	27.3	20.3	38.7	100.0	6.2
Dominican Republic	6.8	16.3	22.7	54.1	100.0	7.5
Urban	0.4	4.7	20.8	74.2	100.0	8.8
Rural	17.2	35.2	25.9	21.6	100.0	5.3
Guatemala	15.7	30.7	15.0	38.6	100.0	6.1
Urban	3.5	13.4	16.0	67.1	100.0	8.1
Rural	24.6	43.4	14.3	17.6	100.0	4.6
Haiti	42.7	28.2	16.5	12.5	100.0	3.7
Urban	6.3	28.4	33.5	31.8	100.0	6.4
Rural	64.8	28.1	6.2	0.8	100.0	2.0
Paraguay	8.7	29.5	14.2	47.5	100.0	6.8
Urban	1.1	8.4	13.0	77.5	100.0	8.9
Rural	17.7	54.0	15.6	12.7	100.0	4.4
Peru	17.2	19.2	12.8	50.7	100.0	6.8
Urban	2.3	13.7	15.0	69.1	100.0	8.5
Rural	54.6	33.0	7.4	5.0	100.0	2.7

Figure 5.3 Household standard of living index (SLI)

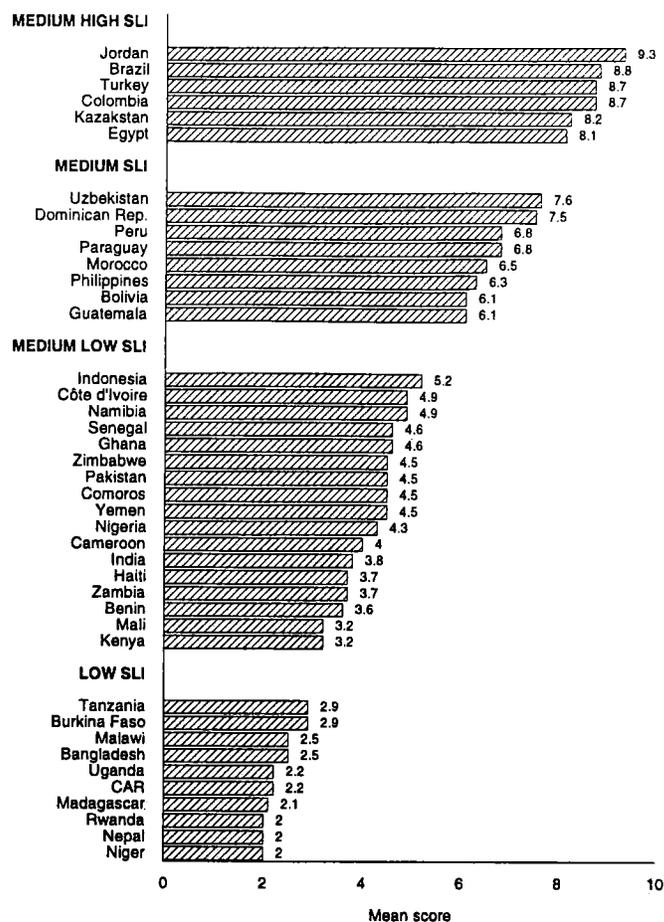
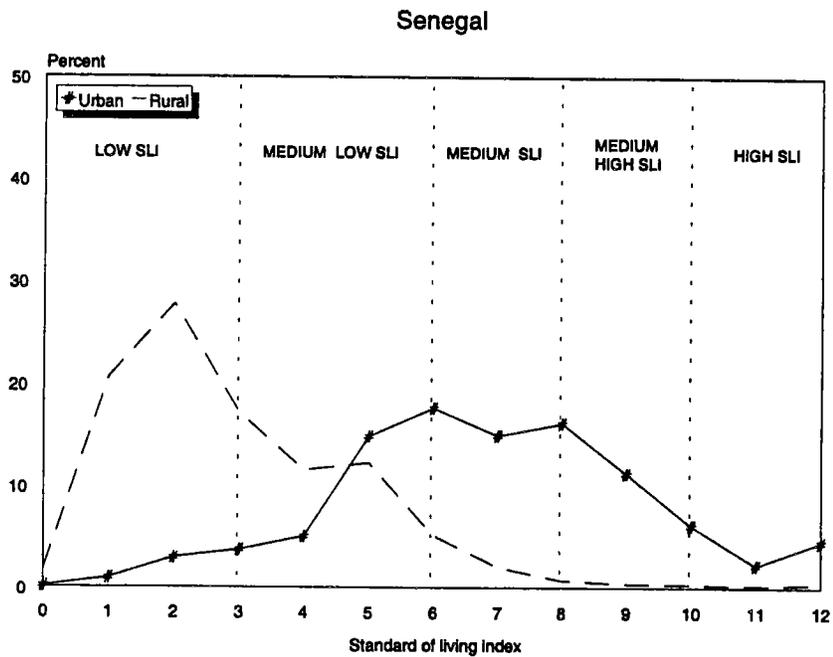
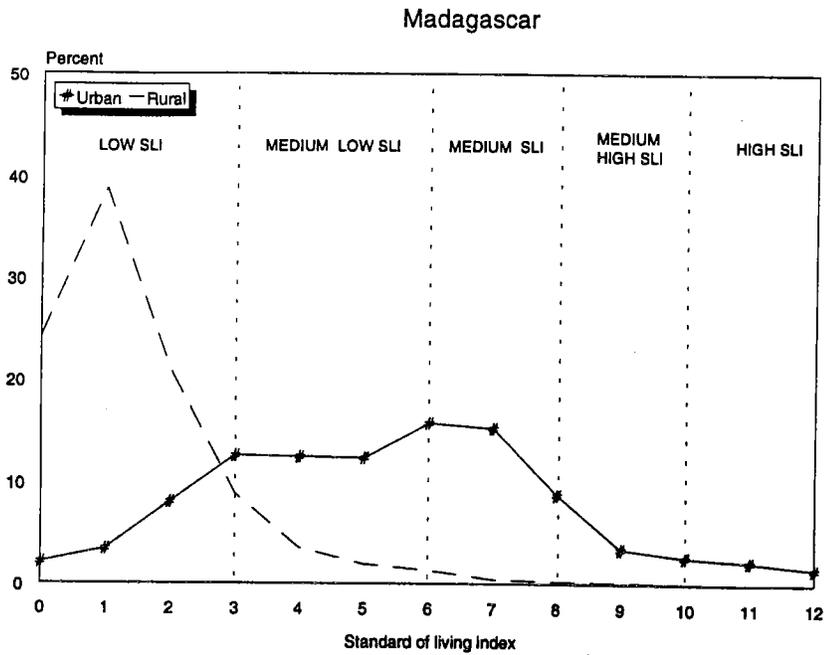


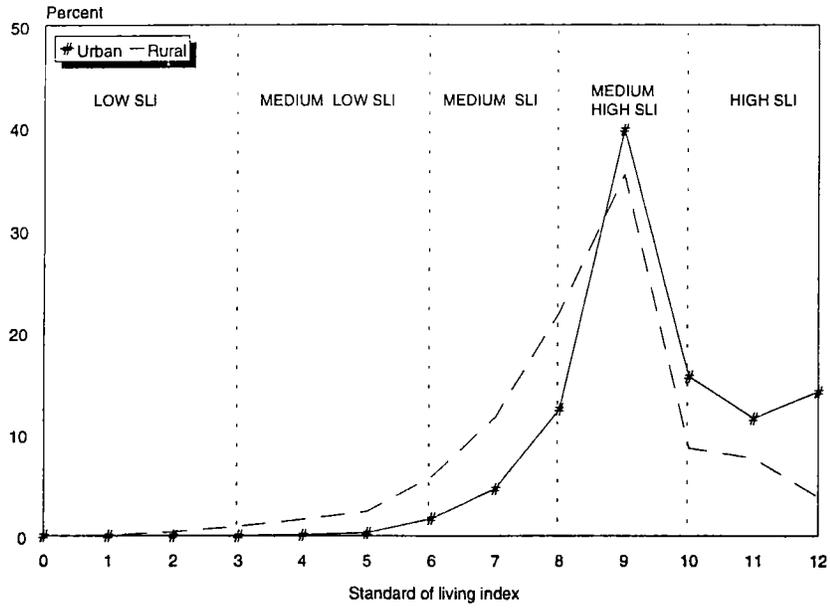
Figure 5.4 Standard of living index, Demographic and Health Surveys, 1990-1995

Sub-Saharan Africa

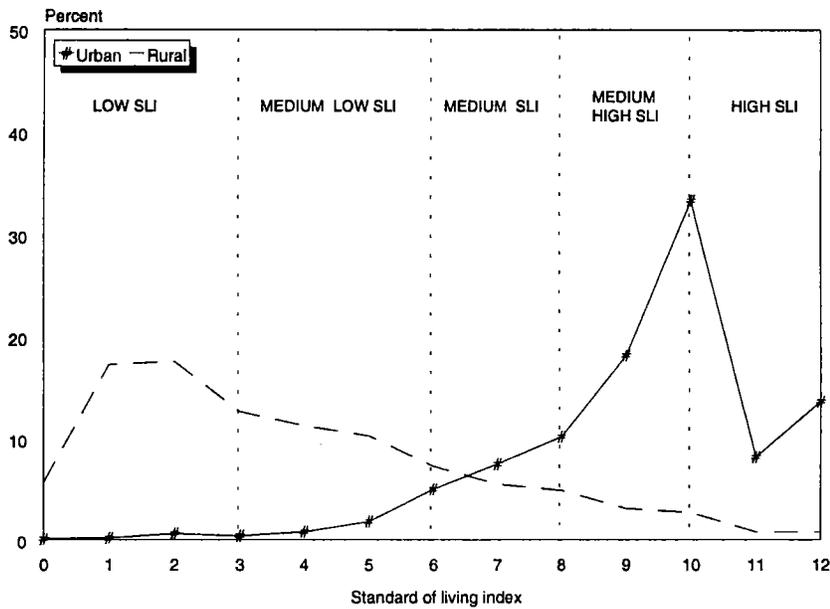


Near East/North Africa

Jordan

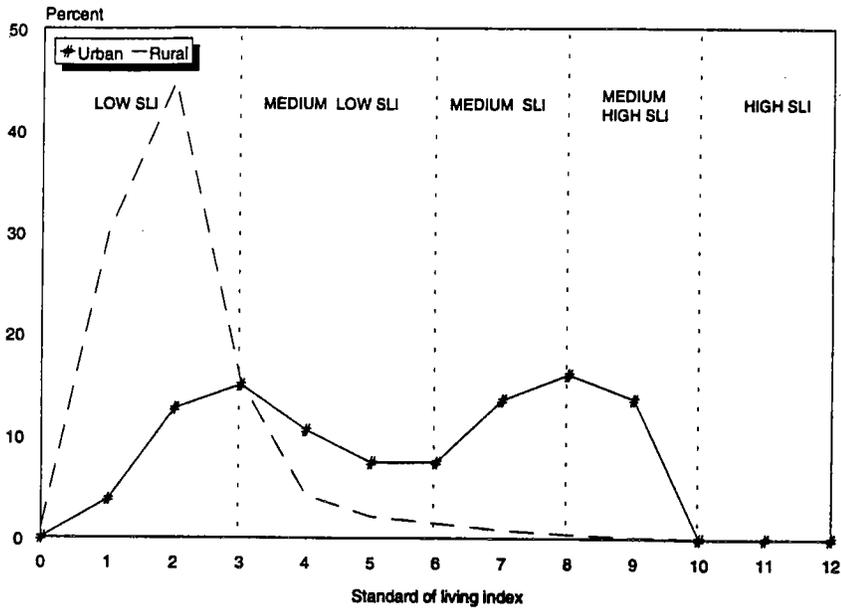


Morocco

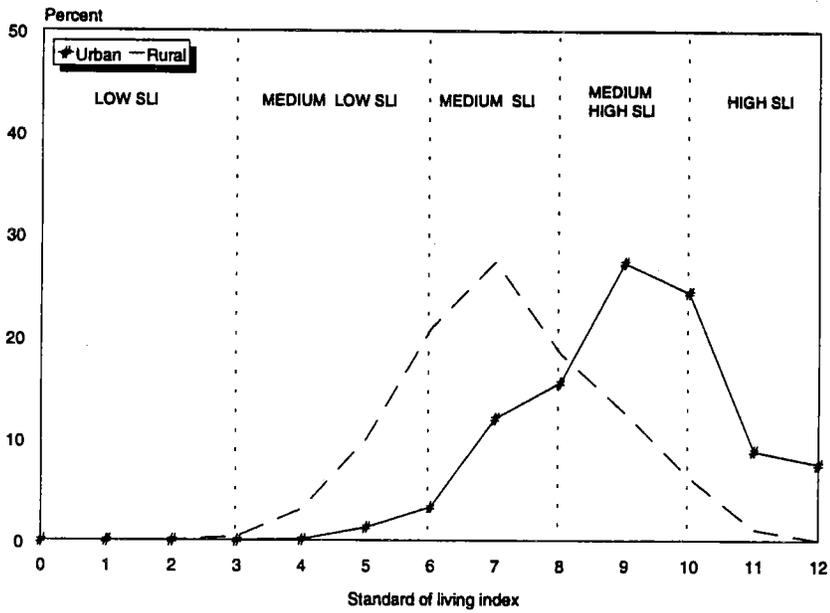


Asia

Bangladesh

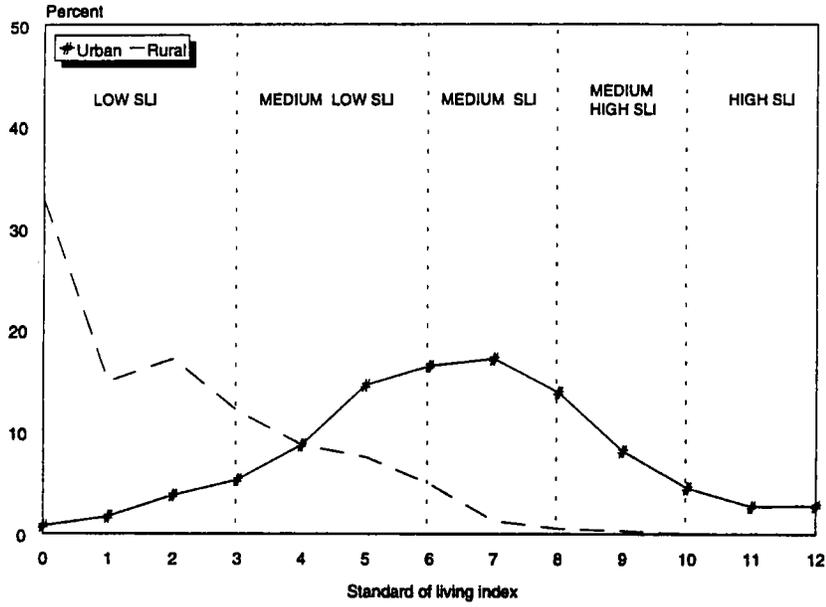


Kazakhstan

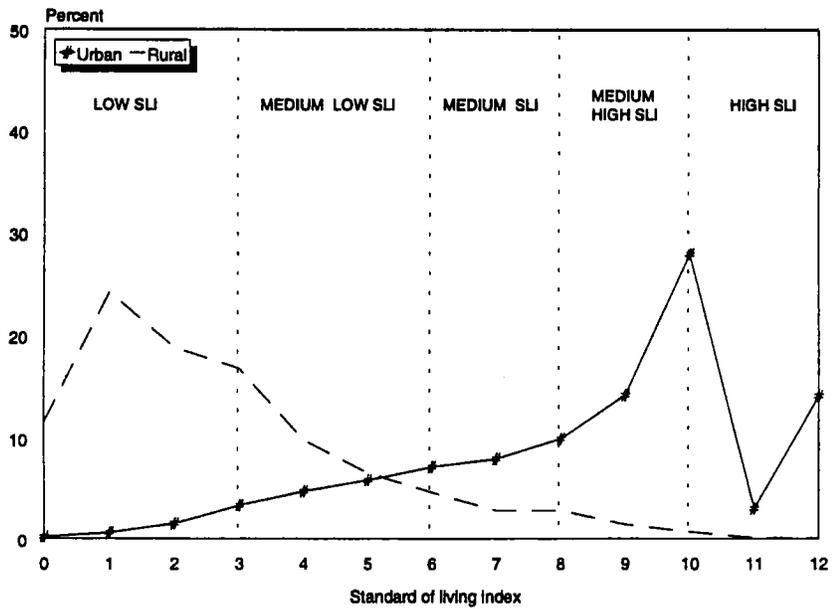


Latin America/Caribbean

Haiti



Peru



6 Conclusions

This report has presented an update of the demographic characteristics of households as well as a new chapter on socioeconomic characteristics of households for the 41 countries that participated in the DHS-II and DHS-III projects. Household information under the second and third phase of the DHS project is more comprehensive than the data collected under the first phase. The core Household Schedule of DHS-II and DHS-III included additional questions on educational attainment of the adult members of the household, and the current enrollment and educational attainment of children. One question in DHS-I on fostering was expanded in DHS-II and DHS-III to four questions on parental survivorship and residence. This information can be used to measure the prevalence of child fostering and orphanhood. The questions on dwelling characteristics and household possessions, which were part of the individual questionnaire in DHS-I, were removed and put in the Household Schedule of DHS-II and DHS-III.

The survey results with regard to age structure are not surprising. The distribution of the household population in most countries in sub-Saharan Africa conforms to the pattern characteristic of high-fertility populations, with the largest proportion of the population in the 0-4 age group, at the base of the population pyramid. Some sub-Saharan African countries such as Kenya and Zimbabwe and most countries in the other regions which have begun their fertility transition, have smaller population bases.

The trends in age structure using DHS data from 16 countries with more than one survey indicate that in most countries, there is a slight decline in the population under the ages of 5 and 15. The decline has been more substantial in countries where fertility is in transition, among them the Dominican Republic, Egypt, Indonesia, Kenya, Morocco, Peru, and Zimbabwe.

Medium-size households (three to five members) predominate in Latin America and some Asian Countries, due in part to low fertility. Large households with six or more members are most common in the Near East and North Africa and parts of sub-Saharan Africa. Small households with one or two members are most prevalent in sub-Saharan Africa where they are more common than was previously thought.

The data on household headship indicate that the traditional image of the male-headed household is largely intact in most countries of the Near East, North Africa, Asia, and Latin America, where the percentage of male-headed households is more than 80 percent. A different pattern emerges, however, in

sub-Saharan Africa and the Caribbean, where in 14 of 22 countries, the percentage of female-headed households is quite high, ranging from 21 percent to 39 percent. The trends in female-headship rates for 16 countries indicate that there has been an increase in the proportion of female-headed households in half of the countries and a decrease in the other half. The increase was most pronounced in Guatemala and Zambia, and Peru experienced the largest decrease.

Results also show that the level of orphanhood for children under age 15 is uniformly low, but it is higher in sub-Saharan Africa and the Caribbean than in the other regions. It is particularly high in countries with high death rates among adults due to AIDS such as Haiti, Uganda and Zambia. The same pattern applies to the level of fostering for young children under age 5 and children between the ages of 5 and 14. The lowest levels of fostering are found in the Near East, North Africa, and Asia, with the exception of the Philippines.

This report also discusses the socioeconomic profile of households, ranging from education to the standard of living. For example, most countries with the lowest levels of educational attainment have a Moslem majority. In addition, there is a gender gap in the proportion with no schooling. Overall, across all regions, there are more women who did not attend school than men. Latin America has the lowest gap between the sexes.

With regard to housing characteristics, household possessions, and the standard of living index (SLI), most countries in sub-Saharan Africa have lower scores than most countries in the other regions. For example, using the average household SLI, we found that 8 of the 20 countries in sub-Saharan Africa have a low SLI, while the rest of the countries fall into the medium low SLI range. Only seven countries from the other regions fall into these two categories (Bangladesh and Nepal have a low SLI, and Haiti, India, Indonesia, Pakistan, and Yemen have a medium low SLI).

The potential use of DHS household data for further analysis is substantial. These data can be used in conjunction with the individual data to examine relationships between household structure and fertility behavior (Caldwell, Immerwahr, and Ruzicka, 1982), and changes in household structure between surveys at different periods can be explored in selected countries. Analysis of the status of women or the determinants of child health can also benefit from the integration of household data, as recently demonstrated by two studies (Gage, Sommerfelt, and Piani, 1996; Kishor and Neitzel, 1996).

References

- Ayad, Mohamed, Andrea L. Piani, Bernard Barrère, Koffi Ekouevi, and James Otto. 1994. *Demographic characteristics of households*. DHS Comparative Studies, No. 14. Calverton, Maryland: Macro International Inc.
- Bruce, Judith and Cynthia B. Lloyd. 1992. *Finding the ties that bind: Beyond headship and household*. Working Papers, No. 41. New York: The Population Council.
- Burch, Thomas K. 1980. The Index of Overall Headship: A simple measure of household complexity standardized for age and sex. *Demography* 17(1):25-37.
- Caldwell, John C., George Immerwahr, and Lado T. Ruzicka. 1982. *Illustrative analysis: Family structure and fertility*. WFS Scientific Reports, No. 39. Voorburg, Netherlands: International Statistical Institute.
- Charbit, Yves. 1984. *Caribbean family structure: Past research and recent evidence from the WFS on matrifocality*. WFS Scientific Reports, No. 65. Voorburg, Netherlands: International Statistical Institute.
- De Vos, Susan. 1987. Latin American households in comparative perspective. *Population Studies* 41(3):501-517.
- Ekouevi, Koffi., Mohamed Ayad, Bernard Barrère, and David C. Cantor. 1991. Household structure from a comparative perspective. In *Proceedings of the Demographic and Health Surveys World Conference, Washington D.C., 1991*. Vol. 3. Columbia Maryland: IRD/Macro International Inc. 1547-1576.
- Gage, Anastasia J., A. Elisabeth Sommerfelt, and Andrea L. Piani. 1996. *Household structure, socioeconomic level, and child health in sub-Saharan Africa*. DHS Analytical Reports, No. 1. Calverton, Maryland: Macro International Inc.
- Institute for Resource Development. 1987a. *Interviewer's Manual for Use With Model "B" Questionnaire for Low Contraceptive Prevalence Countries*. DHS-I Basic Documentation, No. 6. Columbia, Maryland.
- Institute for Resource Development. 1987b. *Sampling Manual*. DHS-I Basic Documentation, No. 8. Columbia, Maryland.
- Institute for Resource Development. 1990a. *An Assessment of DHS-I Data Quality*. DHS Methodological Reports, No. 1. Columbia, Maryland: Institute for Resource Development/ Macro Systems Inc.
- Institute for Resource Development. 1990b. *Interviewer's Manual for Use With Model "B" Questionnaire for Low Contraceptive Prevalence Countries*. DHS-II Basic Documentation, No. 4. Columbia, Maryland: Institute for Resource Development/Macro International Inc.
- Kabir, Mohammad. 1980. *The demographic characteristics of household populations*. WFS Comparative Studies, No. 6. Voorburg, Netherlands: International Statistical Institute.
- Kishor, Sunita and Katherine Neitzel. 1996. *The status of women: Indicators for twenty-five countries*. DHS Comparative Studies, No. 21. Calverton, Maryland: Macro International Inc.
- Lloyd, Cynthia B. and Anastasia J. Gage-Brandon. 1993. Women's role in maintaining households: Family welfare and sexual inequality in Ghana. *Population Studies* 47:115-131.
- Macro International Inc. 1996. *Sampling Manual*. DHS-III Basic Documentation, No. 6. Calverton, Maryland.
- Macro International Inc. 1997. *Interviewer's Manual for Use With Model "B" Questionnaire for Low Contraceptive Prevalence Countries*. DHS-III Basic Documentation, No. 4. Calverton, Maryland.
- McDonald, Peter. 1985. Social organization and nuptiality in developing societies. In *Reproductive Change in Developing Countries: Insights from the World Fertility Survey*, ed. John Cleland and John Hobcraft. Oxford: Oxford University Press. 87-114.
- National Institute of Population Studies [Pakistan] and IRD/Macro International Inc. 1992. *Pakistan Demographic and Health Survey, 1990/1991*. Columbia, Maryland: National Institute of Population Studies and IRD/Macro International Inc.
- Rutstein, Shea Oscar and George T. Bicego. 1990. Assessment of the quality of data used to ascertain eligibility and age in the demographic and health surveys. In *An Assessment of DHS-I Data Quality*. DHS Methodological Reports, No.1. Columbia, Maryland: Institute for Resource Development/Macro Systems, Inc.
- Shryock, Henry S. and Jacob S. Siegel. 1976. *The Methods and Material of Demography*. Condensed edition ed. by Edward G. Stockwell. Studies in Population. San Diego, California: Academic Press.
- United Nations. 1973. *The Determinants and Consequences of Population Trends*. New York: United Nations.
- Zoughlami, Younès and Diana Allsopp. 1985. *The demographic characteristics of household populations*. Revised edition. WFS Comparative Studies, No. 45. Voorburg, Netherlands: International Statistical Institute.

Appendix A
Household Tables

Table A.1. Distribution of the household population by age and sex

Percent distribution of the household population by age group, according to sex, and sex ratio, Demographic and Health Surveys, 1990-1996

Country	Age group													Total percent ¹	De facto population			
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59			60-64	65-69	70+
Sub-Saharan Africa																		
Benin																		
Male	3.9	14.6	18.2	14.9	10.1	6.4	5.8	4.9	4.4	3.5	3.1	2.1	1.8	1.8	1.5	3.0	100.0	12,871
Female	4.0	13.4	16.5	13.1	8.4	7.8	7.7	5.8	5.1	4.0	3.1	2.9	2.2	1.8	1.7	2.3	100.0	13,574
Sex ratio	91.8	103.4	104.9	107.6	114.5	77.6	70.9	78.7	81.1	83.8	94.2	69.0	75.9	93.6	85.7	120.5	-	94.8
Burkina Faso																		
Male	3.9	14.7	18.5	14.4	10.6	6.7	5.6	4.2	3.5	3.3	2.8	2.7	2.1	2.4	1.8	2.8	100.0	16,229
Female	3.7	13.4	16.8	13.9	8.5	7.4	7.1	5.8	4.7	3.3	2.5	4.6	2.8	2.2	1.2	2.2	100.0	17,190
Sex ratio	99.8	103.8	104.3	97.6	116.9	85.2	75.3	69.0	71.1	94.1	104.6	54.7	72.8	105.2	135.3	120.6	-	94.4
Cameroon																		
Male	3.7	14.4	17.1	14.0	10.3	7.3	5.7	5.4	4.5	3.9	2.9	3.3	2.2	2.1	1.3	1.9	100.0	9,424
Female	3.6	13.9	16.6	13.3	9.6	8.0	6.2	6.0	4.4	3.5	2.4	3.9	2.8	2.4	1.4	2.2	100.0	9,991
Sex ratio	95.5	98.3	97.0	99.6	101.2	86.3	86.5	85.6	96.8	105.4	115.1	78.2	74.8	82.4	92.1	84.5	-	94.3
Central African Rep.																		
Male	3.8	13.7	18.4	13.4	9.2	7.9	7.2	6.1	4.9	3.4	2.9	2.4	2.2	2.1	1.2	1.4	100.0	12,998
Female	3.4	12.5	16.7	12.1	9.9	8.6	7.6	6.5	5.1	3.5	3.1	3.4	2.7	2.3	1.4	1.2	100.0	13,707
Sex ratio	106.9	103.8	104.5	104.5	88.0	87.0	89.3	88.3	90.9	92.3	89.1	66.7	77.7	84.1	80.2	111.5	-	94.8
Comoros																		
Male	3.1	12.7	16.5	15.5	11.2	6.9	5.6	4.6	4.2	3.7	3.0	2.9	2.2	2.1	1.9	3.8	100.0	6,421
Female	2.7	10.6	15.4	13.2	12.3	8.2	7.0	5.1	5.3	2.9	3.0	4.3	2.4	2.4	1.2	3.8	100.0	7,231
Sex ratio	100.5	107.1	95.3	104.0	80.4	74.7	71.8	79.6	71.6	112.3	88.6	60.4	80.3	75.9	136.0	88.5	-	88.8
Côte d'Ivoire																		
Male	3.6	13.5	16.8	13.1	9.8	8.1	7.5	6.2	5.2	4.1	2.9	2.5	2.0	2.0	1.2	1.6	100.0	18,313
Female	3.5	12.8	16.7	13.3	10.7	8.6	8.0	6.7	4.4	3.4	2.6	3.1	2.1	1.7	1.0	1.5	100.0	18,617
Sex ratio	102.9	103.4	99.1	97.0	90.7	92.7	92.0	90.9	116.4	117.5	108.3	80.5	92.4	116.1	112.8	105.3	-	98.4
Ghana																		
Male	3.8	14.4	17.6	15.2	9.2	6.2	6.0	5.2	5.0	3.6	3.1	2.8	1.9	2.3	1.3	2.4	100.0	10,335
Female	3.4	13.1	15.7	13.4	7.6	7.8	7.9	6.8	5.4	3.9	3.0	4.0	2.3	2.0	1.3	2.3	100.0	11,078
Sex ratio	104.5	102.3	104.6	106.3	112.8	74.2	71.6	71.8	85.7	85.2	94.4	65.3	76.3	106.6	93.8	94.9	-	93.3
Kenya																		
Male	3.1	13.6	17.3	15.9	11.1	7.0	5.6	5.6	3.9	3.6	2.9	2.2	2.1	1.9	1.3	2.7	100.0	18,296
Female	3.0	12.2	17.4	15.8	9.4	8.7	6.8	5.6	4.1	3.4	2.2	3.6	2.1	2.2	1.3	2.3	100.0	19,941
Sex ratio	94.2	102.7	91.2	92.5	108.1	74.0	76.3	91.9	88.2	97.7	118.2	55.9	92.5	82.9	91.0	109.2	-	91.8
Madagascar																		
Male	3.9	14.2	15.7	14.3	10.8	8.0	6.2	5.8	5.1	3.5	2.3	2.5	1.8	1.9	1.1	2.9	100.0	14,297
Female	4.0	13.1	14.5	14.2	9.8	8.8	7.1	6.4	5.1	3.7	2.4	3.2	2.1	2.2	1.0	2.2	100.0	14,425
Sex ratio	97.5	107.3	107.6	100.1	108.3	89.3	86.2	90.2	98.7	92.5	93.0	76.6	83.8	83.6	112.4	133.1	-	99.1
Malawi																		
Male	4.5	12.5	16.2	14.7	11.0	7.8	6.3	5.1	4.0	4.3	2.7	2.7	2.0	2.2	1.3	2.7	100.0	11,235
Female	4.0	11.7	15.5	15.5	9.4	8.0	6.6	5.4	4.5	4.2	2.9	3.5	2.4	2.1	1.3	2.8	100.0	11,853
Sex ratio	105.9	101.7	98.8	89.9	110.0	92.1	90.2	88.4	84.7	98.1	88.4	72.6	78.3	97.8	94.9	91.5	-	94.8

Continued

Table A.1—Continued

Country	Age group													Total percent ¹	De facto population			
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59			60-64	65-69	70+
Sub-Saharan Africa																		
Mali																		
Male	4.4	15.0	18.6	13.9	8.2	5.2	5.1	4.4	5.0	4.2	3.7	3.0	2.5	2.5	1.8	2.8	100.0	22,556
Female	4.2	13.6	17.2	13.6	8.1	6.7	7.2	6.4	5.6	3.7	3.1	3.4	2.5	1.9	1.2	1.5	100.0	24,301
Sex ratio	96.4	101.8	100.4	94.6	93.7	71.8	65.4	63.0	81.8	104.3	110.7	82.3	93.3	122.3	139.7	169.3	-	92.8
Namibia																		
Male	3.7	13.6	15.0	12.4	11.8	8.5	6.6	4.9	4.1	3.4	2.7	2.6	1.8	2.3	1.4	4.9	100.0	11,502
Female	3.1	12.2	13.7	12.3	10.6	9.3	7.3	5.8	4.7	4.1	2.9	3.2	2.1	2.6	2.1	3.9	100.0	12,758
Sex ratio	105.7	100.6	98.5	91.0	100.6	82.4	80.7	76.2	80.0	75.5	84.3	73.7	77.1	79.9	62.3	112.1	-	90.2
Niger																		
Male	4.7	16.1	17.8	13.2	9.0	5.7	5.7	5.1	4.2	3.9	3.1	2.8	2.1	2.3	1.2	3.1	100.0	15,310
Female	4.2	13.4	17.0	13.0	8.9	7.5	8.3	6.2	4.9	3.5	2.2	3.5	2.1	2.0	1.1	2.2	100.0	16,317
Sex ratio	105.2	112.9	98.0	95.4	94.7	71.5	64.8	76.5	80.9	106.5	131.4	76.2	91.1	104.9	98.3	132.4	-	93.8
Nigeria																		
Male	3.6	12.8	18.3	13.3	9.4	5.8	6.0	5.6	4.4	4.1	3.3	3.1	1.9	2.6	1.8	4.0	100.0	23,455
Female	3.5	13.3	17.0	14.0	7.4	7.5	7.6	6.3	4.2	3.8	2.8	4.5	2.6	2.4	1.0	2.0	100.0	23,579
Sex ratio	102.3	95.6	107.0	94.5	126.4	76.7	79.1	88.6	105.4	107.3	117.8	68.0	72.3	108.3	173.2	193.6	-	99.5
Rwanda																		
Male	3.7	13.8	17.2	13.9	10.0	7.4	6.3	6.3	5.1	4.0	2.3	2.3	1.7	1.6	1.2	3.1	100.0	14,976
Female	3.4	12.9	16.8	13.8	9.9	8.2	6.8	6.7	4.8	4.0	2.5	2.8	2.1	2.1	1.0	2.3	100.0	16,063
Sex ratio	103.2	99.8	95.5	94.1	94.2	83.8	87.4	88.9	99.3	93.9	82.8	75.4	78.5	71.2	112.5	123.4	-	93.2
Senegal																		
Male	4.1	14.3	17.4	14.4	10.9	7.3	5.3	4.5	4.2	3.4	2.6	2.4	2.4	2.2	1.5	2.9	100.0	14,422
Female	3.8	13.7	15.8	12.8	9.5	7.8	6.9	5.8	5.3	3.9	2.5	3.4	2.4	2.2	1.4	2.8	100.0	15,915
Sex ratio	98.2	94.9	99.6	102.1	103.6	84.4	69.8	71.4	71.4	79.8	95.2	65.0	87.9	91.9	102.3	95.7	-	90.6
Tanzania																		
Male	3.8	14.0	16.7	14.8	10.1	6.6	6.2	5.5	4.4	3.5	3.2	2.2	2.1	2.3	2.0	2.7	100.0	18,477
Female	3.6	12.9	15.4	13.4	9.3	9.0	7.6	5.8	4.8	3.5	3.1	3.2	2.7	2.0	1.5	2.3	100.0	19,820
Sex ratio	100.2	101.1	100.8	102.8	100.9	68.6	75.8	89.2	85.9	93.1	95.6	63.6	72.0	110.0	125.8	106.1	-	93.2
Uganda																		
Male	4.5	15.6	17.7	14.6	9.2	7.3	6.7	5.1	4.5	3.2	2.3	2.2	1.8	1.6	1.4	2.4	100.0	17,270
Female	4.2	15.4	17.3	13.8	9.2	8.9	7.2	5.5	4.4	2.6	1.7	3.0	1.8	1.8	1.1	2.0	100.0	18,364
Sex ratio	99.5	95.3	96.2	99.4	93.9	77.5	87.3	86.3	96.9	117.4	122.6	66.5	94.9	86.1	116.0	112.4	-	94.0
Zambia																		
Male	4.0	13.7	15.9	14.5	11.0	9.4	7.2	5.8	4.6	3.1	2.4	2.0	1.7	1.9	1.3	1.8	100.0	18,586
Female	3.7	13.8	15.1	14.2	11.0	10.1	7.1	6.0	4.2	3.1	2.7	2.8	2.3	1.6	1.2	1.1	100.0	19,414
Sex ratio	104.0	95.1	100.3	97.9	96.1	88.5	96.8	92.7	104.4	95.8	84.3	67.4	69.8	110.2	102.3	150.6	-	95.7
Zimbabwe																		
Male	2.9	11.8	16.4	16.3	12.2	8.4	6.1	5.1	4.1	3.4	2.7	2.5	2.1	2.0	1.4	2.5	100.0	13,665
Female	2.8	11.3	15.6	15.3	10.8	9.4	6.6	6.3	4.8	3.7	3.0	2.8	2.0	1.9	1.1	2.5	100.0	14,235
Sex ratio	98.8	100.2	101.1	102.5	107.9	85.2	88.2	78.1	81.9	88.0	88.0	84.8	102.1	104.5	120.2	96.8	-	96.0

Continued

Table A.1—Continued

Country	Age group													Total percent ¹	De facto population			
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59			60-64	65-69	70+
Near East/North Africa																		
Egypt																		
Male	2.7	10.8	14.3	13.7	11.6	7.4	6.7	6.3	5.6	5.0	4.2	2.9	2.7	2.3	1.7	2.1	100.0	40,360
Female	2.5	9.5	13.0	13.4	11.2	8.7	7.5	6.5	6.3	4.9	4.7	2.9	2.7	2.5	1.6	2.0	100.0	41,162
Sex ratio	105.2	111.3	108.3	100.3	101.7	83.4	87.6	95.2	87.0	99.3	88.2	98.8	95.3	87.1	102.3	104.9	-	98.1
Jordan																		
Male	3.1	12.6	15.6	16.0	13.0	9.3	7.0	4.5	3.4	3.1	3.1	2.9	2.0	1.7	1.0	1.7	100.0	27,762
Female	3.0	12.2	14.7	14.3	13.1	10.3	7.3	5.3	3.9	3.5	3.2	3.0	2.0	1.6	0.9	1.7	100.0	27,289
Sex ratio	105.1	104.6	108.0	113.9	100.7	91.9	98.6	86.1	90.0	87.8	97.9	99.0	103.7	107.8	115.6	101.3	-	101.7
Morocco																		
Male	2.6	10.9	14.3	13.9	10.8	8.0	6.9	6.5	5.3	4.2	3.0	2.9	2.9	2.8	1.9	3.1	100.0	18,924
Female	2.4	9.9	13.0	12.7	11.3	9.0	7.6	7.1	6.1	3.8	3.5	3.6	3.0	2.9	1.6	2.7	100.0	19,861
Sex ratio	104.9	105.1	104.7	104.2	91.0	84.9	86.8	87.8	83.3	104.4	83.6	77.6	90.4	91.9	115.2	110.4	-	95.3
Turkey																		
Male	2.1	7.5	11.6	13.3	11.2	8.0	7.7	6.6	6.5	5.1	4.0	3.8	3.7	3.5	2.6	2.9	100.0	18,711
Female	1.9	6.7	10.6	12.2	12.1	9.6	7.5	7.1	5.9	5.1	3.7	4.6	3.7	3.5	2.7	3.0	100.0	19,574
Sex ratio	106.0	105.9	104.2	103.5	88.9	80.1	98.0	88.2	104.7	96.0	102.0	78.4	94.1	97.4	92.2	93.3	-	95.6
Yemen																		
Male	3.7	13.8	20.0	16.2	9.1	5.2	5.1	4.2	4.1	3.6	2.8	2.7	1.8	2.7	1.2	3.5	100.0	42,719
Female	3.6	13.3	19.2	14.4	9.0	5.9	6.8	5.2	5.0	3.4	2.8	2.1	2.9	2.4	1.0	2.8	100.0	43,117
Sex ratio	102.3	103.3	102.9	111.3	100.0	86.7	74.7	80.2	81.9	106.2	100.5	127.8	60.9	113.7	121.4	124.1	-	99.1
Asia																		
Bangladesh																		
Male	2.6	11.2	15.4	13.9	9.5	8.1	6.9	6.6	6.1	4.2	3.7	2.8	2.2	2.1	1.7	3.2	100.0	24,438
Female	2.4	10.8	15.2	13.8	10.8	10.0	8.6	6.2	5.1	3.7	2.8	3.1	2.3	2.3	1.2	2.0	100.0	24,428
Sex ratio	106.0	104.2	100.9	101.1	87.9	81.1	80.5	107.2	119.5	113.3	132.5	92.6	94.2	89.9	147.7	161.4	-	100.0
India																		
Male	2.6	9.9	13.7	12.3	9.9	8.5	7.8	6.4	6.1	4.7	4.0	3.3	2.7	2.9	2.0	3.1	100.0	252,965
Female	2.7	9.7	13.2	11.9	10.2	9.7	8.4	6.6	5.7	4.3	3.8	2.9	3.4	3.0	1.8	2.7	100.0	242,120
Sex ratio	101.6	106.5	108.4	108.4	100.9	91.1	97.4	101.8	112.1	113.8	110.4	118.3	83.4	103.5	116.4	120.8	-	104.5
Indonesia																		
Male	2.3	8.8	12.1	13.4	10.2	7.8	7.5	7.5	6.7	5.7	3.9	4.0	2.9	2.8	1.7	2.7	100.0	75,193
Female	2.0	8.4	11.2	12.0	10.2	8.7	8.4	7.9	6.7	5.0	4.1	4.3	3.2	3.0	2.0	2.8	100.0	75,657
Sex ratio	113.8	103.1	107.0	110.6	99.0	88.9	88.9	95.2	99.3	112.9	94.5	93.3	91.3	90.4	84.6	98.2	-	99.4
Kazakhstan																		
Male	1.7	8.6	11.6	11.2	9.6	8.4	7.9	8.0	7.3	6.3	5.0	3.0	4.6	2.4	2.3	2.2	100.0	7,495
Female	1.9	7.3	10.7	10.7	8.7	7.3	6.7	7.1	7.2	6.3	4.5	3.9	5.3	3.2	3.5	5.6	100.0	8,141
Sex ratio	81.0	108.0	100.0	95.8	101.3	105.7	109.3	103.3	93.8	91.2	101.4	71.2	80.7	68.4	59.1	36.0	-	92.1
Nepal																		
Male	3.6	13.0	15.8	13.9	9.4	7.1	6.5	5.5	4.8	4.0	3.8	3.4	2.9	2.4	1.7	2.3	100.0	20,661
Female	3.2	12.1	14.4	12.1	10.2	9.0	7.8	6.1	5.3	4.3	3.8	3.2	2.6	2.2	1.6	2.0	100.0	22,208
Sex ratio	102.1	99.9	102.2	107.1	85.5	73.9	77.7	83.3	83.9	87.0	93.0	96.5	102.2	100.3	100.8	105.5	-	93.0
Pakistan																		
Male	3.0	10.2	17.3	13.7	10.3	7.9	6.6	5.3	4.6	4.0	3.2	2.9	2.1	3.0	1.8	4.1	100.0	23,783
Female	2.9	10.7	17.5	13.7	10.1	8.2	7.6	5.5	4.5	4.0	2.7	3.7	2.7	2.4	1.5	2.3	100.0	21,968
Sex ratio	111.1	103.2	106.9	109.0	110.7	104.8	93.6	105.1	108.6	109.4	127.1	84.5	84.8	134.0	128.2	190.5	-	108.3

Continued

Table A.1—Continued

Country	Age group													Total percent ¹	De facto population	
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59			60-64
Asia																
Philippines																
Male	2.9	11.5	14.0	12.9	10.8	8.7	7.3	6.3	5.8	4.7	3.7	3.1	2.6	2.1	1.4	2.2
Female	2.5	10.9	13.0	13.1	10.0	8.3	7.7	6.8	5.9	4.9	3.6	3.8	2.9	2.2	1.7	2.7
Sex ratio	114.7	105.2	107.4	98.9	108.5	104.7	95.6	92.1	97.4	96.0	104.6	80.8	92.1	96.0	81.9	82.0
Uzbekistan																
Male	2.5	10.2	13.5	11.9	11.1	8.9	8.3	7.2	5.9	4.5	3.8	2.4	2.8	2.5	1.9	2.5
Female	2.1	10.5	12.9	12.9	10.4	8.8	7.6	6.7	6.1	4.6	3.4	2.6	3.1	2.8	2.2	3.4
Sex ratio	119.0	98.2	104.9	92.8	106.9	102.1	109.7	108.0	97.8	96.9	111.6	93.3	91.6	88.7	86.4	73.8
Latin America/Caribbean																
Bolivia																
Male	3.5	12.6	15.3	14.1	9.4	7.7	6.4	5.8	5.2	4.3	3.9	3.3	2.3	2.2	1.3	2.7
Female	2.7	11.8	14.0	13.2	9.8	8.2	6.9	6.4	5.6	4.6	3.8	3.8	2.6	2.3	1.7	2.8
Sex ratio	123.4	101.3	102.9	101.1	91.3	89.2	87.3	86.5	87.4	88.7	97.4	83.3	83.3	90.8	75.2	89.0
Brazil																
Male	1.8	8.0	11.4	12.1	11.6	9.0	7.2	7.3	6.5	5.5	4.9	3.8	3.3	2.6	2.1	3.0
Female	2.0	7.2	10.5	11.5	10.5	8.4	7.9	7.6	7.0	6.0	4.8	4.6	3.4	2.8	2.3	3.6
Sex ratio	87.7	104.0	102.3	98.9	104.5	101.2	85.9	89.9	87.2	87.1	96.3	78.0	91.4	87.5	87.7	78.0
Colombia																
Male	2.6	10.0	11.9	11.6	10.0	8.8	8.4	7.3	6.1	5.1	4.2	3.5	3.0	2.6	1.8	3.1
Female	2.2	9.1	10.9	10.6	9.9	9.5	8.5	7.4	6.9	5.5	4.4	3.9	3.2	2.8	1.9	3.4
Sex ratio	112.0	101.7	100.5	100.8	93.3	84.4	90.5	90.6	81.4	85.1	88.4	83.1	84.4	84.8	87.8	84.4
Dominican Republic																
Male	2.6	11.2	12.1	12.2	11.1	10.0	7.7	6.7	5.8	4.6	3.2	3.4	2.3	2.6	1.3	3.2
Female	2.7	9.3	12.2	11.5	12.0	10.5	8.4	6.9	5.7	4.2	3.2	3.5	2.4	2.6	1.3	3.3
Sex ratio	90.2	116.3	96.0	102.6	89.4	92.3	88.2	93.2	97.2	106.2	95.8	92.7	90.7	96.2	98.8	94.2
Guatemala																
Male	3.6	13.1	15.3	14.2	10.6	7.7	5.6	5.6	4.9	4.1	3.8	2.7	2.3	2.0	1.7	2.6
Female	3.3	12.1	14.3	13.3	10.9	8.4	6.4	5.7	5.5	4.5	3.6	3.3	2.4	2.2	1.7	2.6
Sex ratio	103.7	102.7	101.7	101.3	92.2	87.3	83.3	93.7	83.8	86.1	101.2	76.7	92.5	85.7	95.5	93.7
Haiti																
Male	3.3	12.2	14.4	14.2	10.3	8.7	6.7	5.5	5.3	4.0	3.1	3.0	2.1	2.3	1.6	3.2
Female	2.8	10.8	13.9	13.2	10.8	9.1	6.8	6.1	5.4	3.9	3.2	3.2	2.6	2.4	1.8	3.9
Sex ratio	107.5	103.6	95.5	98.4	88.2	87.8	90.4	82.9	89.6	92.2	89.2	86.3	73.5	89.7	83.6	76.4
Paraguay																
Male	2.9	11.9	15.5	12.1	8.7	8.2	7.3	6.7	5.5	4.3	3.8	3.3	2.4	2.4	1.8	3.2
Female	3.0	11.5	13.9	12.1	9.6	8.0	7.5	6.4	5.3	4.4	3.6	3.7	2.7	2.8	1.7	3.7
Sex ratio	99.3	104.3	112.4	100.9	91.1	103.2	98.1	105.3	103.7	97.5	106.5	88.8	91.5	85.6	102.8	86.1
Peru																
Male	2.7	10.6	12.9	13.1	10.8	9.1	7.6	6.4	5.4	4.6	3.8	3.4	2.7	2.4	1.6	3.0
Female	2.5	9.7	12.5	12.2	11.0	9.6	7.9	6.6	5.9	4.8	3.7	3.7	2.9	2.4	1.6	3.1
Sex ratio	102.2	106.1	100.3	103.6	95.5	92.0	92.6	94.1	89.5	94.4	97.8	89.4	89.8	97.4	96.8	95.7

¹ Including missing age

Table A.2. Household size by urban-rural residence

Percent distribution of households by household size, according to urban-rural residence, Demographic and Health Surveys, 1990-1996

Country	Household size															Total percent	Number of households
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+		
Sub-Saharan Africa																	
Benin	8.8	8.5	11.1	13.2	11.7	10.2	8.8	6.9	5.3	4.0	2.5	2.3	1.7	1.1	3.8	100.0	4,499
Urban	10.4	9.7	11.5	12.2	11.8	8.7	9.2	7.1	5.5	4.3	2.3	2.3	1.1	0.9	3.0	100.0	1,733
Rural	7.8	7.8	10.9	13.9	11.7	11.2	8.6	6.7	5.1	3.8	2.5	2.3	2.0	1.3	4.4	100.0	2,766
Burkina Faso	5.1	9.4	10.6	10.2	11.6	10.6	8.9	7.3	5.7	4.7	3.7	2.8	2.4	1.3	5.8	100.0	5,143
Urban	12.1	9.3	10.7	9.8	10.0	9.3	8.4	7.2	5.5	4.2	3.3	2.0	2.0	1.4	4.8	100.0	986
Rural	3.4	9.4	10.6	10.3	11.9	10.9	9.0	7.3	5.7	4.8	3.8	3.0	2.4	1.3	6.0	100.0	4,157
Cameroon	14.3	10.4	10.2	10.3	10.3	10.1	8.2	7.4	4.9	3.8	2.7	2.0	1.3	1.1	3.1	100.0	3,538
Urban	13.5	10.1	9.9	8.4	9.9	10.4	8.8	7.9	5.5	4.2	3.2	1.8	1.4	1.6	3.1	100.0	1,318
Rural	14.8	10.5	10.4	11.5	10.4	9.9	7.8	7.2	4.5	3.6	2.4	2.0	1.3	0.8	3.0	100.0	2,220
Central African Rep.	13.7	14.9	13.1	12.1	11.8	9.4	7.0	5.0	3.7	2.5	1.8	1.1	1.0	0.8	2.2	100.0	5,551
Urban	10.4	13.7	10.7	11.1	10.7	8.7	7.0	6.3	5.3	3.7	3.3	1.9	1.5	1.0	4.8	100.0	1,977
Rural	15.5	15.6	14.5	12.7	12.4	9.8	6.9	4.2	2.9	1.9	1.0	0.7	0.6	0.7	0.8	100.0	3,574
Comoros	2.4	6.8	9.7	11.4	13.1	12.6	11.5	10.4	8.0	6.3	2.4	2.0	1.1	0.7	1.6	100.0	2,252
Urban	4.5	7.9	10.5	10.7	13.4	12.4	9.7	9.1	8.2	6.0	2.2	2.0	1.2	0.8	1.4	100.0	647
Rural	1.6	6.4	9.4	11.7	13.0	12.6	12.3	10.9	7.9	6.5	2.4	2.1	1.1	0.6	1.6	100.0	1,605
Côte d'Ivoire	13.9	9.9	9.6	10.2	9.7	9.0	7.5	6.5	5.1	4.1	2.8	2.2	1.5	1.7	6.3	100.0	5,935
Urban	15.2	12.0	11.4	10.5	9.6	7.8	7.1	5.7	4.1	4.3	2.8	1.8	1.2	1.6	5.0	100.0	2,418
Rural	13.0	8.5	8.4	9.9	9.8	9.8	7.7	7.0	5.7	4.1	2.8	2.4	1.8	1.8	7.2	100.0	3,517
Ghana	24.4	13.4	14.5	14.0	11.5	8.8	5.5	2.9	2.0	1.0	0.8	0.4	0.3	0.3	0.3	100.0	5,822
Urban	28.2	15.8	14.9	12.1	10.7	7.9	4.7	2.5	1.3	0.9	0.4	0.2	0.1	0.2	0.0	100.0	2,089
Rural	22.3	12.1	14.2	15.1	12.0	9.3	5.9	3.1	2.3	1.1	1.1	0.5	0.4	0.3	0.4	100.0	3,733
Kenya	14.6	11.3	11.7	12.0	13.2	11.1	9.0	6.5	4.4	2.7	1.4	0.7	0.5	0.3	0.6	100.0	7,950
Urban	29.2	17.9	13.6	11.7	10.3	6.1	4.4	2.8	1.7	0.9	0.3	0.3	0.2	0.2	0.4	100.0	1,527
Rural	11.2	9.7	11.2	12.1	13.8	12.3	10.1	7.4	5.0	3.1	1.7	0.8	0.6	0.4	0.7	100.0	6,423
Madagascar	6.9	10.1	14.1	15.1	14.2	11.6	9.4	6.5	4.5	2.9	1.8	1.3	0.6	0.4	0.6	100.0	5,944
Urban	9.2	9.8	14.0	15.1	13.5	12.3	8.8	6.1	3.9	3.0	1.3	1.0	0.3	0.4	1.1	100.0	969
Rural	6.4	10.2	14.1	15.1	14.3	11.4	9.6	6.6	4.6	2.9	1.9	1.4	0.7	0.4	0.5	100.0	4,975
Malawi	8.0	15.3	16.8	16.4	13.8	11.0	7.3	4.9	3.1	1.6	0.7	0.6	0.2	0.2	0.2	100.0	5,323
Urban	8.9	14.5	13.6	14.3	12.2	11.1	8.3	6.6	4.9	2.7	0.8	0.7	0.5	0.2	0.8	100.0	603
Rural	7.8	15.4	17.2	16.6	14.0	11.0	7.1	4.7	2.9	1.5	0.7	0.6	0.1	0.2	0.1	100.0	4,720
Mali	5.6	10.6	14.0	14.0	13.1	11.0	8.6	6.4	4.6	3.6	2.4	1.8	1.2	0.9	2.2	100.0	8,716
Urban	8.3	10.1	12.5	12.5	11.4	10.5	8.6	6.7	5.3	3.6	2.7	1.9	1.2	0.9	3.8	100.0	2,399
Rural	4.6	10.8	14.5	14.6	13.8	11.2	8.6	6.3	4.4	3.6	2.3	1.8	1.2	0.8	1.6	100.0	6,317

Continued

Table A.2—Continued

Country	Household size															Total percent	Number of house-holds
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+		
Sub-Saharan Africa																	
Namibia	8.6	11.8	10.5	12.0	11.0	10.0	8.2	7.0	5.0	3.7	2.9	2.1	1.6	1.0	4.6	100.0	4,101
Urban	11.0	17.1	10.9	14.9	12.5	9.3	7.1	4.3	3.0	2.3	2.2	1.1	1.3	0.8	2.1	100.0	1,476
Rural	7.2	8.8	10.3	10.4	10.1	10.4	8.9	8.5	6.1	4.4	3.3	2.7	1.8	1.2	6.0	100.0	2,625
Niger	4.6	8.5	12.6	12.6	12.9	11.8	8.3	7.5	5.7	3.6	2.6	2.2	1.6	1.4	4.2	100.0	5,242
Urban	8.8	8.2	11.5	10.3	10.8	9.6	7.8	6.8	6.3	4.3	2.6	2.7	1.7	1.4	7.1	100.0	838
Rural	3.8	8.6	12.9	13.0	13.2	12.2	8.4	7.6	5.6	3.5	2.6	2.1	1.6	1.3	3.7	100.0	4,404
Nigeria	11.0	10.5	12.8	12.9	11.7	11.0	8.6	6.2	3.7	3.3	2.2	1.6	1.0	0.9	2.4	100.0	8,999
Urban	16.1	12.6	13.1	12.1	11.1	10.4	8.1	5.4	2.9	2.1	1.5	1.2	0.8	0.5	2.1	100.0	2,425
Rural	9.1	9.7	12.7	13.2	11.9	11.2	8.8	6.5	4.0	3.8	2.5	1.8	1.1	1.0	2.6	100.0	6,574
Rwanda	5.4	10.3	14.4	15.9	14.5	14.1	10.8	6.5	4.3	2.3	0.9	0.3	0.1	0.0	0.1	100.0	6,252
Urban	11.8	13.9	14.0	12.9	12.8	11.6	8.4	5.9	3.7	2.5	1.4	0.7	0.1	0.0	0.3	100.0	356
Rural	5.0	10.1	14.4	16.0	14.6	14.3	10.9	6.6	4.3	2.3	0.9	0.3	0.2	0.0	0.1	100.0	5,896
Senegal	5.2	4.3	5.7	6.1	9.0	8.8	8.9	8.2	7.4	6.2	5.6	4.5	3.7	2.9	13.7	100.0	3,528
Urban	9.2	6.5	7.6	6.7	8.7	7.2	7.8	7.8	6.5	5.6	5.9	3.9	2.6	2.5	11.5	100.0	1,487
Rural	2.2	2.6	4.3	5.6	9.2	9.9	9.7	8.6	8.1	6.5	5.3	4.9	4.5	3.3	15.3	100.0	2,041
Tanzania	9.0	12.4	13.8	14.0	13.9	12.4	9.4	5.8	3.2	2.0	1.5	0.9	0.5	0.3	0.9	100.0	7,969
Urban	14.6	15.3	16.8	12.4	12.8	9.1	6.4	4.8	2.4	1.8	1.2	0.8	0.8	0.5	0.5	100.0	1,783
Rural	7.4	11.5	12.9	14.5	14.2	13.3	10.2	6.1	3.5	2.0	1.6	1.0	0.4	0.2	1.0	100.0	6,186
Uganda	10.7	12.3	14.5	14.6	12.7	11.4	8.7	5.7	3.8	2.4	1.3	0.5	0.5	0.4	0.5	100.0	7,550
Urban	16.2	16.2	15.8	12.9	12.4	8.3	6.5	4.4	3.0	1.6	1.0	0.6	0.2	0.2	0.6	100.0	1,020
Rural	9.9	11.6	14.3	14.8	12.8	11.8	9.0	5.9	3.9	2.6	1.3	0.5	0.5	0.5	0.5	100.0	6,530
Zambia	6.1	10.1	13.2	13.8	14.2	11.6	10.6	7.1	4.9	3.0	2.1	1.4	0.6	0.5	0.9	100.0	7,286
Urban	4.9	9.2	11.5	12.4	13.3	11.4	11.8	8.6	5.9	3.7	2.8	2.0	0.8	0.5	1.1	100.0	2,702
Rural	6.8	10.6	14.3	14.6	14.7	11.6	9.8	6.1	4.4	2.6	1.7	1.0	0.5	0.5	0.8	100.0	4,584
Zimbabwe	13.5	12.4	12.8	13.6	13.0	11.0	8.8	5.7	3.5	2.3	1.3	0.7	0.5	0.4	0.5	100.0	5,984
Urban	19.3	17.3	15.5	13.9	10.8	9.4	6.1	3.2	1.7	1.4	0.8	0.2	0.2	0.0	0.0	100.0	1,919
Rural	10.7	10.1	11.5	13.5	14.0	11.8	10.0	6.9	4.3	2.8	1.6	0.9	0.7	0.5	0.8	100.0	4,065
Near East/North Africa																	
Egypt	5.5	9.0	11.3	15.3	17.7	14.0	10.1	6.6	3.8	2.3	1.6	0.7	0.6	0.4	1.2	100.0	15,567
Urban	6.3	10.8	13.0	19.9	20.2	13.3	7.6	4.2	1.9	1.0	0.7	0.4	0.2	0.1	0.3	100.0	7,924
Rural	4.7	7.1	9.5	10.5	15.2	14.6	12.6	9.1	5.7	3.7	2.5	1.1	0.9	0.6	2.2	100.0	7,643

Continued

Table A.2—Continued

Country	Household size															Total percent	Number of house-holds
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+		
Near East/North Africa																	
Jordan	2.9	8.2	7.7	9.2	10.4	10.9	10.5	8.9	8.9	7.3	5.4	4.0	2.3	1.6	2.0	100.0	8,333
Urban	2.8	8.2	8.3	9.8	10.8	11.5	10.4	9.2	8.5	6.4	4.9	3.7	1.9	1.6	1.9	100.0	6,206
Rural	3.1	8.1	6.2	7.5	9.0	8.9	10.5	8.1	10.0	9.9	6.9	4.8	3.3	1.5	2.3	100.0	2,127
Morocco	5.3	8.5	8.6	11.6	12.9	12.9	11.9	9.4	7.0	4.1	2.5	1.7	1.2	0.7	1.7	100.0	6,577
Urban	5.7	9.6	10.5	13.4	14.1	13.4	11.8	7.7	6.1	3.2	1.4	1.2	0.8	0.4	0.6	100.0	3,193
Rural	5.0	7.4	6.8	9.9	11.7	12.5	12.1	10.9	7.8	5.0	3.5	2.1	1.7	0.9	2.8	100.0	3,384
Turkey	6.1	14.0	15.5	21.3	16.3	10.2	6.6	4.0	2.4	1.5	0.7	0.4	0.3	0.2	0.5	100.0	8,619
Urban	5.7	13.6	18.0	24.5	17.3	9.6	5.5	2.6	1.5	0.8	0.4	0.2	0.1	0.1	0.2	100.0	5,563
Rural	6.8	14.7	10.9	15.5	14.5	11.1	8.6	6.7	4.2	2.8	1.3	0.7	0.7	0.3	1.1	100.0	3,056
Yemen	3.2	7.7	7.8	9.0	11.4	11.7	12.2	10.6	8.6	6.1	4.0	2.5	1.7	1.0	2.5	100.0	12,836
Urban	3.4	5.9	6.2	9.0	9.5	11.5	11.6	10.7	8.3	6.3	5.2	4.0	2.4	1.7	4.3	100.0	2,265
Rural	3.1	8.1	8.2	9.0	11.8	11.8	12.4	10.5	8.6	6.1	3.7	2.2	1.6	0.9	2.1	100.0	10,571
Asia																	
Bangladesh	1.2	6.5	13.4	18.8	18.0	15.6	10.1	6.3	4.0	2.4	1.1	0.9	0.4	0.4	0.8	100.0	9,174
Urban	0.8	6.6	12.3	18.4	19.9	15.2	10.5	5.2	4.8	2.4	1.0	0.8	0.3	0.5	1.2	100.0	1,038
Rural	1.2	6.5	13.5	18.8	17.8	15.7	10.0	6.4	4.0	2.4	1.1	0.9	0.4	0.4	0.8	100.0	8,136
India	2.8	7.2	10.5	16.0	18.2	15.3	10.7	6.8	4.0	2.7	1.8	1.1	0.8	0.5	1.5	100.0	88,562
Urban	3.3	7.1	11.2	18.6	18.7	14.7	9.8	6.1	3.4	2.5	1.4	1.1	0.6	0.4	1.1	100.0	24,424
Rural	2.6	7.3	10.2	15.1	17.9	15.5	11.1	7.0	4.2	2.8	1.9	1.2	0.9	0.5	1.7	100.0	64,138
Indonesia	5.5	10.3	18.1	21.3	18.0	11.7	7.0	4.0	1.9	1.0	0.6	0.2	0.1	0.0	0.1	100.0	33,738
Urban	7.3	8.3	15.5	19.4	18.3	12.9	8.0	4.8	2.3	1.4	0.9	0.3	0.2	0.1	0.1	100.0	9,998
Rural	4.8	11.2	19.2	22.1	17.9	11.2	6.6	3.6	1.7	0.9	0.4	0.2	0.1	0.0	0.0	100.0	23,740
Kazakhstan	11.8	18.3	17.9	20.8	12.9	8.4	4.7	2.4	1.4	0.6	0.4	0.3	0.0	0.0	0.1	100.0	4,178
Urban	16.6	23.6	20.8	21.5	10.0	4.6	1.5	0.6	0.5	0.1	0.3	0.0	0.0	0.0	0.0	100.0	2,368
Rural	5.6	11.4	14.1	19.9	16.7	13.5	8.8	4.8	2.6	1.2	0.5	0.6	0.1	0.1	0.2	100.0	1,810
Nepal	3.1	7.8	10.7	16.1	18.1	15.4	11.3	6.6	4.0	2.3	1.5	0.9	0.4	0.5	1.3	100.0	8,082
Urban	3.3	7.6	12.0	20.4	19.2	14.6	8.5	5.6	2.3	2.6	1.0	1.3	0.7	0.1	0.9	100.0	716
Rural	3.1	7.8	10.6	15.7	18.0	15.5	11.6	6.7	4.2	2.3	1.6	0.9	0.4	0.5	1.3	100.0	7,366
Pakistan	2.9	6.0	7.4	9.5	12.3	13.4	11.8	11.9	7.6	5.4	4.0	2.1	1.8	1.2	2.6	100.0	7,193
Urban	1.9	4.6	6.4	8.5	11.6	13.5	12.4	12.6	8.1	5.7	4.7	2.6	2.2	1.9	3.3	100.0	2,120
Rural	3.4	6.6	7.8	9.9	12.6	13.3	11.6	11.6	7.5	5.3	3.8	1.9	1.6	0.8	2.3	100.0	5,073

Continued

Table A.2—Continued

Country	Household size															Number of house-holds	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+	Total percent	of house-holds
Asia																	
Philippines	2.8	7.4	12.5	16.9	17.5	15.1	11.4	6.7	4.3	2.5	1.3	0.7	0.4	0.2	0.2	100.0	12,995
Urban	2.6	7.0	12.1	17.6	17.5	15.3	11.2	6.8	4.3	2.6	1.3	1.0	0.5	0.2	0.3	100.0	6,613
Rural	3.0	7.9	13.0	16.2	17.4	15.0	11.7	6.7	4.3	2.4	1.3	0.5	0.4	0.2	0.1	100.0	6,382
Uzbekistan	5.4	8.4	10.5	16.5	17.1	15.0	11.3	6.9	3.3	2.4	1.4	1.0	0.5	0.2	0.3	100.0	3,703
Urban	9.7	13.3	13.3	17.3	14.7	12.3	8.1	4.8	2.0	1.7	0.9	0.8	0.3	0.2	0.6	100.0	1,639
Rural	2.0	4.5	8.3	15.8	19.0	17.1	13.8	8.5	4.3	2.9	1.7	1.2	0.6	0.2	0.1	100.0	2,064
Latin America/Caribbean																	
Bolivia	8.7	12.2	14.9	17.2	16.7	12.0	8.2	5.1	2.5	1.3	0.6	0.4	0.1	0.1	0.0	100.0	9,114
Urban	7.5	10.9	15.4	18.7	17.7	12.9	7.4	4.8	2.2	1.2	0.5	0.3	0.2	0.2	0.1	100.0	5,151
Rural	10.1	13.9	14.3	15.2	15.4	10.8	9.2	5.6	2.8	1.4	0.7	0.4	0.1	0.1	0.0	100.0	3,963
Brazil	6.2	14.4	19.9	23.6	17.1	8.8	4.6	2.6	1.4	0.7	0.4	0.2	0.1	0.0	0.1	100.0	13,283
Urban	6.1	14.7	20.5	24.6	17.0	8.4	4.1	2.2	1.3	0.5	0.3	0.1	0.1	0.0	0.1	100.0	10,689
Rural	6.7	13.2	17.6	19.3	17.2	10.5	6.7	4.3	1.6	1.6	0.7	0.3	0.2	0.0	0.1	100.0	2,594
Colombia	6.4	11.9	18.0	20.8	17.2	10.5	6.2	3.8	2.2	1.3	0.8	0.3	0.2	0.2	0.2	100.0	10,112
Urban	6.2	11.9	19.1	22.2	17.6	10.3	5.5	3.1	1.9	1.0	0.6	0.2	0.1	0.1	0.2	100.0	7,099
Rural	6.9	11.9	15.6	17.3	16.2	11.1	7.9	5.5	2.9	2.0	1.2	0.6	0.4	0.4	0.2	100.0	3,013
Dominican Republic	8.6	12.5	14.3	16.4	16.2	12.6	8.2	4.9	2.9	1.6	1.0	0.4	0.3	0.1	0.1	100.0	7,144
Urban	7.4	13.3	15.4	17.7	16.3	13.0	7.5	4.3	2.6	1.0	0.9	0.2	0.3	0.1	0.2	100.0	4,418
Rural	10.5	11.1	12.6	14.2	16.0	12.1	9.3	6.0	3.5	2.5	1.2	0.7	0.3	0.1	0.1	100.0	2,726
Guatemala	4.0	9.4	11.6	17.0	16.8	13.6	10.2	7.2	4.3	2.9	1.5	0.7	0.4	0.2	0.3	100.0	11,297
Urban	4.2	11.0	13.4	20.3	17.9	13.0	8.2	5.0	2.6	2.2	1.2	0.4	0.3	0.1	0.2	100.0	4,790
Rural	3.8	8.2	10.3	14.5	16.0	14.0	11.6	8.8	5.5	3.4	1.8	1.0	0.5	0.3	0.3	100.0	6,507
Haiti	8.2	11.1	13.4	13.8	14.6	12.0	9.6	6.8	4.0	2.9	1.9	0.6	0.5	0.3	0.3	100.0	4,818
Urban	8.6	12.5	14.7	14.5	14.7	11.5	8.2	5.7	3.5	2.8	1.7	0.5	0.5	0.3	0.3	100.0	1,820
Rural	8.0	10.3	12.5	13.4	14.6	12.3	10.5	7.4	4.3	2.9	2.0	0.7	0.6	0.2	0.3	100.0	2,998
Paraguay	5.8	10.7	13.9	17.3	14.3	12.3	9.0	6.4	4.3	2.4	1.6	0.9	0.6	0.2	0.4	100.0	5,683
Urban	6.4	11.1	15.8	18.8	15.6	12.7	7.8	5.1	2.8	1.5	0.9	0.4	0.4	0.3	0.4	100.0	3,054
Rural	5.0	10.2	11.8	15.6	12.7	11.8	10.3	7.9	6.0	3.4	2.5	1.4	0.8	0.2	0.4	100.0	2,630
Peru	3.4	6.6	12.9	18.0	17.5	15.0	10.8	7.0	3.9	2.3	1.2	0.6	0.3	0.2	0.3	100.0	13,479
Urban	3.0	5.6	12.9	18.7	18.1	15.3	10.9	7.1	3.6	2.2	1.1	0.7	0.3	0.2	0.3	100.0	9,623
Rural	4.4	9.2	13.0	16.2	16.1	14.4	10.6	6.6	4.6	2.5	1.4	0.5	0.3	0.1	0.2	100.0	3,856

Appendix B

Summary of DHS-I, DHS-II, and DHS-III Surveys, 1985-1996

Region and Country	Date of Fieldwork	Implementing Organization	Respondents	Sample Size	Male/Husband Survey	Supplemental Studies, Modules, and Additional Questions
SUB-SAHARAN AFRICA						
DHS-I						
Botswana	Aug-Dec 1988	Central Statistics Office	AW 15-49	4,368		AIDS, PC, adolescent fertility
Burundi	Apr-Jul 1987	Département de la Population, Ministère de l'Intérieur	AW 15-49	3,970	542 Husbands	CA, SAI, adult mortality
Ghana	Feb-May 1988	Ghana Statistical Service	AW 15-49	4,488	943 Husbands	CA, SM, WE
Kenya	Dec-May 1988/89	National Council for Population and Development	AW 15-49	7,150	1,133 Husbands	
Liberia	Feb-Jul 1986	Bureau of Statistics, Ministry of Planning and Economic Affairs	AW 15-49	5,239		TBH, employment status
Mali	Mar-Aug 1987	Institut du Sahel, USED/CERPOD	AW 15-49	3,200	970 Men 20-55	CA, VC, childhood physical handicaps
Ondo State, Nigeria	Sep-Jan 1986/87	Ministry of Health, Ondo State	AW 15-49	4,213		CA, TBH
Senegal	Apr-Jul 1986	Direction de la Statistique, Ministère de l'Economie et des Finances	AW 15-49	4,415		CA, CD
Sudan	Nov-May 1989/90	Department of Statistics, Ministry of Economic and National Planning	EMW 15-49	5,860		FC, M, MM
Togo	Jun-Nov 1988	Unité de Recherche Démographique, Université du Bénin	AW 15-49	3,360		CA, SAI, marriage history
Uganda	Sep-Feb 1988/89	Ministry of Health	AW 15-49	4,730		CA, SAI
Zimbabwe	Sep-Jan 1988/89	Central Statistical Office	AW 15-49	4,201		AIDS, CA, PC, SAI, WE
DHS-II						
Burkina Faso	Dec-Mar 1992/93	Institut National de la Statistique et de la Démographie	AW 15-49	6,354	1,845 Men 18+	AIDS, CA, MA, SAI
Cameroon	Apr-Sep 1991	Direction Nationale du Deuxième Recensement Général de la Population et de l'Habitat	AW 15-49	3,871	814 Husbands	CA, CD, SAI
Madagascar	May-Nov 1992	Centre National de Recherches sur l'Environnement	AW 15-49	6,260		CA, MM, SAI
Malawi	Sep-Nov 1992	National Statistical Office	AW 15-49	4,850	1,151 Men 20-54	AIDS, CA, MA, MM, SAI
Namibia	Jul-Nov 1992	Ministry of Health and Social Services, Central Statistical Office	AW 15-49	5,421		CA, CD, MA, MM
Niger	Mar-Jun 1992	Direction de la Statistique et des Comptes Nationaux	AW 15-49	6,503	1,570 Husbands	CA, MA, MM, SAI
Nigeria	Apr-Oct 1990	Federal Office of Statistics	AW 15-49	8,781		CA, SAI
Rwanda	Jun-Oct 1992	Office National de la Population	AW 15-49	6,551	598 Husbands	CA
Senegal	Nov-Aug 1992/93	Direction de la Prévision et de la Statistique	AW 15-49	6,310	1,436 Men 20+	AIDS, CA, MA, MM, SAI
Tanzania	Oct-Mar 1991/92	Bureau of Statistics, Planning Commission	AW 15-49	9,238	2,114 Men 15-60	AIDS, CA, MA, SAI
Zambia	Jan-May 1992	University of Zambia	AW 15-49	7,060		AIDS, CA, MA

DHS-III						
Benin	Jun-Aug 1996	Institut National de la Statistique	AW 15-49	5,491	1,535 Men 20-64	AIDS, CA, MA, MM, SAI
Central African Republic	Sep-Mar 1994/95	Direction des Statistiques Démographiques et Sociales	AW 15-49	5,884	1,729 Men 15-59	AIDS, CA, CD, MA, MM, SAI
Comoros	Mar-May 1996	Centre National de Documentation et de la Recherche Scientifique	AW 15-49	3,050	795 Men 15-64	CA, MA
Côte d'Ivoire	Jun-Nov 1994	Institut National de la Statistique	AW 15-49	8,099	2,552 Men 12-49	CA, MA, SAI
Eritrea	Sep-Jan 1995/96	National Statistics Office	AW 15-49	5,054	1,114 Men 15-59	AIDS, CA, MA, MM, SAI
Ghana	Sep-Dec 1993	Ghana Statistical Service	AW 15-49	4,562	1,302 Men 15-59	CA, MA
Kenya	Feb-Aug 1993	National Council for Population and Development	AW 15-49	7,540	2,336 Men 15-54	AIDS, CA, MA, SAI
Malawi (KAP) ^a	Jun-Oct 1996	National Statistical Office	AW 15-49	2,683	2,658 Men 15-54	AIDS
Mali	Nov-Apr 1995/96	CPS/MSSPA et DNSI	AW 15-49	9,704	2,474 Men 15-59	AIDS, CA, MA, MM, SAI
Tanzania (KAP) ^a	Jul-Sep 1994	Bureau of Statistics, Planning Commission	AW 15-49	4,225	2,097 Men 15-59	AIDS, PC
Tanzania (In-depth)	Jun-Oct 1995	Bureau of Statistics, Planning Commission	AW 15-49	2,130		Adult and childhood mortality estimation
Tanzania	Jul-Nov 1996	Bureau of Statistics, Planning Commission	AW 15-49	8,120	2,256 Men 15-59	AIDS, CA, MA, MM
Uganda	Mar-Aug 1995	Statistics Department, Ministry of Finance and Economic Planning	AW 15-49	7,070	1,996 Men 15-59	AIDS, CA, MA, MM, SAI
Uganda (In-depth)	Oct-Jan 1995/96	Institute of Statistics and Applied Economics, Makerere University	AW 20-44	1,750	1,356 Partners	Negotiating reproductive outcomes
Zambia	Jul-Jan 1996/97	Central Statistics Office	AW 15-49	8,021	1,849 Men 15-59	AIDS, CA, MA, MM
Zimbabwe	Jul-Nov 1994	Central Statistical Office	AW 15-49	6,128	2,141 Men 15-54	AIDS, CA, MA, MM, PC, SAI
NEAR EAST/NORTH AFRICA						
DHS-I						
Egypt	Oct-Jan 1988/89	National Population Council	EMW 15-49	8,911		CA, CD, MM, PC, SAI, WE, WS
Morocco	May-Jul 1987	Ministère de la Santé Publique	EMW 15-49	5,982		CA, CD, S
Tunisia	Jun-Oct 1988	Office National de la Famille et de la Population	EMW 15-49	4,184		CA, S, SAI
DHS-II						
Egypt	Nov-Dec 1992	National Population Council	EMW 15-49	9,864	2,466 Husbands	CA, MA, PC, SM
Jordan	Oct-Dec 1990	Department of Statistics, Ministry of Health	EMW 15-49	6,461		CA, SAI
Morocco	Jan-Apr 1992	Ministère de la Santé Publique	AW 15-49	9,256	1,336 Men 20-70	CA, MA, MM, SAI
Yemen	Nov-Jan 1991/92	Central Statistical Organization	EMW 15-49	5,687		CA, CD, SAI
DHS-III						
Egypt	Nov-Jan 1995/96	National Population Council	EMW 15-49	14,779		CA, FC, MA, WS
Morocco (Panel)	Apr-May 1995	Ministère de la Santé Publique	AW 15-49	4,753		

ASIA

DHS-I

Indonesia	Sep-Dec 1987	Central Bureau of Statistics, National Family Planning Coordinating Board	EMW 15-49	11,884		PC, SM
Nepal (In-depth)	Feb-Apr 1987	New Era	CMW 15-49	1,623		KAP-gap survey
Sri Lanka	Jan-Mar 1987	Department of Census and Statistics, Ministry of Plan Implementation	EMW 15-49	5,865		CA, NFP
Thailand	Mar-Jun 1987	Institute of Population Studies Chulalongkorn University	EMW 15-49	6,775		CA, S, SAI

DHS-II

Indonesia	May-Jul 1991	Central Bureau of Statistics, NFPCB/MOH	EMW 15-49	22,909		PC, SM
Pakistan	Dec-May 1990/91	National Institute of Population Studies	EMW 15-49	6,611	1,354 Husbands	CA

DHS-III

Bangladesh	Nov-Mar 1993/94	Mitra & Associates/NIPORT	EMW 10-49	9,640	3,284 Husbands	PC, SAI, SM
Bangladesh	Nov-Mar 1996/97	Mitra & Associates/NIPORT	EMW 10-49	9,127	3,346 EMM	CA, MA, SM
Indonesia	Jul-Nov 1994	Central Bureau of Statistics/ NFPCB/MOH	EMW 15-49	28,168		MM, PC, SAI, SM
Kazakstan	May-Aug 1995	Institute of Nutrition, National Academy of Sciences	AW 15-49	3,771		CA, MA
Nepal	Jan-Jun 1996	Ministry of Health/New ERA	EMW 15-49	8,429		CA, MA, MM
Philippines	Apr-Jun 1993	National Statistics Office	AW 15-49	15,029		MM, SAI
Turkey	Aug-Oct 1993	General Directorate of MCH/FP Ministry of Health	EMW <50	6,519		CA, MA
Uzbekistan	Jun-Oct 1996	Research Institute of Obstetrics and Gynecology	AW 15-49	4,415		CA, MA

LATIN AMERICA/CARIBBEAN

DHS-I

Bolivia	Feb-Jul 1989	Instituto Nacional de Estadística	AW 15-49	7,923		CA, CD, MM, PC, S, WE
Bolivia (In-depth)	Feb-Jul 1989	Instituto Nacional de Estadística	AW 15-49	7,923		Health
Brazil	May-Aug 1986	Sociedade Civil Bem-Estar Familiar no Brasil	AW 15-44	5,892		CA, S, SM, abortion, young adult use of contraception
Colombia	Oct-Dec 1986	Corporación Centro Regional de Población, Ministerio de Salud	AW 15-49	5,329		CA, PC, S, SAI, SM
Dominican Republic	Sep-Dec 1986	Consejo Nacional de Población y Familia	AW 15-49	7,649		CA, NFP, S, SAI, family planning communication
Dominican Republic (Experimental)	Sep-Dec 1986	Consejo Nacional de Población y Familia	AW 15-49	3,885		S, SAI
Ecuador	Jan-Mar 1987	Centro de Estudios de Población y Paternidad Responsable	AW 15-49	4,713		CD, SAI, employment
El Salvador	May-Jun 1985	Asociación Demográfica Salvadoreña	AW 15-49	5,207		CA, S, TBH
Guatemala	Oct-Dec 1987	Instituto de Nutrición de Centro América y Panamá	AW 15-44	5,160		CA, S, SAI
Mexico	Feb-May 1987	Dirección General de Planificación Familiar, Secretaría de Salud	AW 15-49	9,310		NFP, S, employment

Peru	Sep-Dec 1986	Instituto Nacional de Estadística	AW 15-49	4,999		NFP, employment, cost of family planning
Peru (Experimental)	Sep-Dec 1986	Instituto Nacional de Estadística	AW 15-49	2,534		
Trinidad and Tobago	May-Aug 1987	Family Planning Association of Trinidad and Tobago	AW 15-49	3,806		CA, NFP, breastfeeding

DHS-II

Brazil (NE)	Sep-Dec 1991	Sociedade Civil Bem-Estar Familiar no Brasil	AW 15-49	6,222	1,266 Husbands	AIDS, PC
Colombia	May-Aug 1990	PROFAMILIA	AW 15-49	8,644		AIDS
Dominican Republic	Jul-Nov 1991	Instituto de Estudios de Población y Desarrollo (PROFAMILIA), Oficina Nacional de Planificación	AW 15-49	7,320		CA, MA, S, SAI
Paraguay	May-Aug 1990	Centro Paraguayo de Estudios de Población	AW 15-49	5,827		CA, SAI
Peru	Oct-Mar 1991/92	Instituto Nacional de Estadística e Informática	AW 15-49	15,882		CA, MA, MM, SAI

DHS-III

Bolivia	Nov-May 1993/94	Instituto Nacional de Estadística	AW 15-49	8,603 ^b		AIDS, CA, CD, MA, MM, S, SAI
Brazil	Mar-Jun 1996	Sociedade Civil Bem-Estar Familiar no Brasil	AW 15-49	12,612	2,949 Men 15-59	AIDS, CA, MA, MM, PC, S
Colombia	Mar-Jun 1995	PROFAMILIA	AW 15-49	11,140		AIDS, CA, MA, PC
Dominican Republic	Aug-Dec 1996	CESEM/PROFAMILIA	AW 15-49	8,422	2,279 Men 15-64	CA, MA
Guatemala	Jun-Dec 1995	Instituto Nacional de Estadística	AW 15-49	12,403		AIDS, CA, MA, MM, S
Haiti	Jul-Jan 1994/95	Institut Haitien de l'Enfance	AW 15-49	5,356	1,610 Men 15-59	AIDS, CA, CD, MA, SAI
Peru	Aug-Nov 1996	Instituto Nacional de Estadística e Informática	AW 15-49	28,951	2,487 Men 15-59	CA, MA, MM

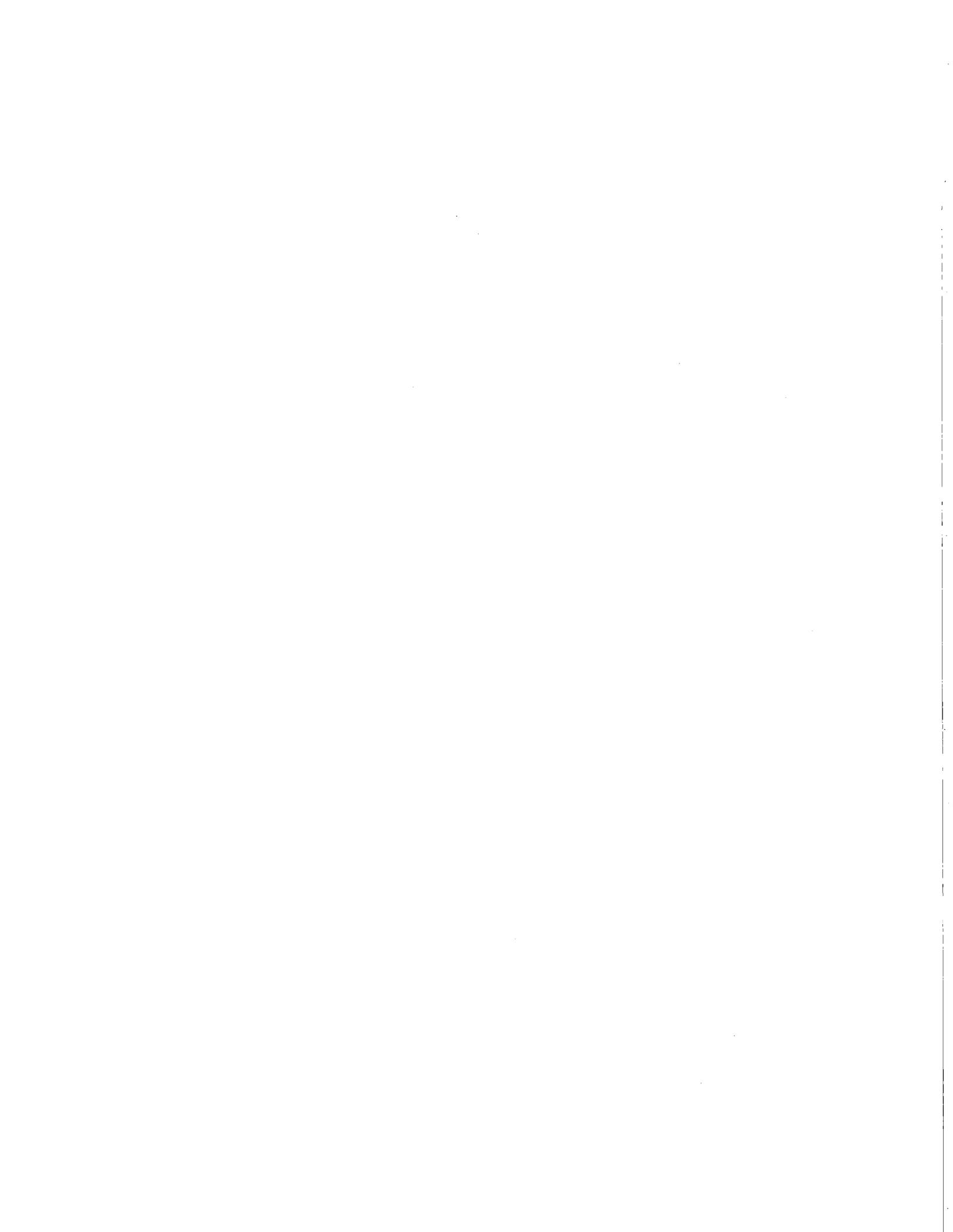
^a No health or birth history section in questionnaire.

^b Household questionnaire was administered in 26,144 households.

AIDS acquired immune deficiency syndrome
 AW all women
 CA child anthropometry
 CD causes of death (verbal reports of symptoms)
 CMW currently married women
 EMW ever-married women

FC female circumcision
 M migration
 MA maternal anthropometry
 MM maternal mortality
 NFP natural family planning
 PC pill compliance

S sterilization
 SAI service availability information
 SM social marketing
 TBH truncated birth history
 VC value of children
 WE women's employment
 WS women's status



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