

CHAPTER 1

THE SETTING

This chapter presents a short review of the geography, history, natural resources, and population of the Republic of Yemen, and the socioeconomic and political conditions prevailing in the Republic. The purpose is to provide the reader with a comprehensive background on the country and the condition of the Yemeni community. The chapter also includes a description of the organization of the Yemen Demographic and Maternal and Child Health Survey (YDMCHS) and the implementation of the different phases of the survey.

1.1 GEOGRAPHY

The Republic of Yemen is located in the southern part of the Arabian Peninsula between 12° and 20° north latitude and 41° and 54° east longitude. The total area, excluding Al-Rub Al-Khali desert, is 555,000 square kilometers.

The boundaries of the Republic of Yemen are the Kingdom of Saudi Arabia in the north, the Arabian Sea and Gulf of Aden in the south, the Sultanate of Oman in the east, and the Red Sea in the west. The Bab Al-Mandab strait lies off the southwestern tip of Yemen. Mayoun, a Yemeni island in the middle of the strait, controls passage into and out of the Red Sea.

There are about 112 Yemeni islands in the Red Sea and Arabian Sea. The largest is Socatra, which has an area of 3650 square kilometers and lies 510 kilometers southeast of the Yemeni seaport of Mukalla. The other major islands, in order of size, are Kamaran, Hunaish Al-Kubra, Hunaish Al-Sughra, Zaqar Al-Zubair, and Al-Tair (Central Statistical Organization, 1991a).

1.2 HISTORY

In ancient times, geographical location and favorable natural conditions played an important role in population settlement and the development of civilizations in the territory now occupied by the Republic of Yemen. This was particularly true regarding the valleys toward the Al-Rub al-Khali desert in the east, the Arabian Sea in the south, and the Red Sea in the west.

The eras of Mac'en Hadramout and Saba'a (Sheba) are considered to be the first organized political entities in Yemen before the birth of Christ. The Hemyar era flourished later and ended with the Ethiopian invasion in 525 A.D.

The most important activities of these regimes were agriculture and trade. They invented agricultural terracing on the mountains and established dams, the most famous of which was Ma'areb dam. They also controlled caravans, which transported commodities from India and East Africa across the Arabian Peninsula to areas around the Mediterranean Sea (Al-Zoabi, 1990).

Yemeni Civilization flourished in those years, and Yemen was called *Arabia Felix* (Arabia the "happy") by the Greeks. By the end of the Hamiarite era, however, Yemen was dominated first by the Ethiopians and then by the Persians. This lasted until the emergence of Islam, when the Yemenis embraced the Islamic religion and Yemen became part of the central Islamic state. This period lasted from 628 A.D. until 824 A.D. Thereafter, small independent states emerged, leaving Yemen weak and divided. The Turks

occupied Yemen from the sixteenth century until the beginning of the seventeenth century, while the British occupied Aden in 1839. The Turks invaded the northern part of Yemen again in 1872, and continued their occupation until the outbreak of World War II, when Yemen came under the rule of the Hameed Al-Deen family in the north. This lasted until the revolution, 26 September 1962. The British remained in the south until the outbreak of the 14 October Revolution, which resulted in independence 30 November 1967 (Mustafa, 1984).

With the success of the two revolutions, Yemen entered a new era of economic, social, cultural, and political change. The latest of these changes was the unification of the two parts of Yemen (north and south) on 22 May 1990. This led to democratic changes and the establishment of political parties. Parliamentary elections were held 27 April 1993, resulting in the first Parliamentary Council, which in turn elected the Presidential Council to abide by the unified country's legislation.

1.3 NATURAL RESOURCES

Yemen is divided into five regions:

Mountain Area

This area consists of two mountain ranges: the first is the North-South mountain range, parallel to the Red Sea; the second is West-East mountain range, parallel to the Gulf of Aden. The height of these mountains varies between 1,000 and 3,600 meters. The highest peak on Nabi Shuaib Mountain is 3,666 meters above sea level. It is the highest peak in the Arabian Peninsula and in the Arab region.

The water from these mountains drains in all directions, forming valleys with basins and plains suitable for agriculture.

Hill Area

The hill area is to the east and north of the mountainous area parallel to it. The hill area becomes wider toward the Al-Rub Al-Khali region on the north. The highest peak is 1,000 meters. The boundaries of this region are contiguous with the Al-Rub Al-Khali region, which extends deep into the Arabian Peninsula and comprises one-quarter of its area.

The Coastal Area

The coastal area includes all areas adjacent to the Red Sea, Gulf of Aden, and the Arabian Sea. It is continuous, forming a coastal strip stretching from the Omani border in the east to Bab Al-Mandab Strait in the west, and north to the border of Saudi Arabia, a distance of approximately 2,000 kilometers. The coastal area varies in width from 30 to 60 kilometers.

Al-Rub Al-Khali Area

This area is part of the Yemeni desert and contains some desert plants, particularly in the outermost areas; it is contiguous with the hill area. As one goes deeper into the Al-Rub Al-Khali desert, there are fewer plants and the sand dunes increase.

The Yemeni Islands

These islands are scattered in the Yemeni territorial waters of the Red Sea and the Arabian Sea. Most of the islands are in the Red Sea, parallel to the Yemeni coast. The biggest and the most important island in the Red Sea is Kamaran, which is densely populated. In the Arabian Sea, the Yemeni islands are close together. The most famous island is Socotra, on which are found *ormosia*, *dracena draco* and *pterocarpus draco* trees, from which gum, various medicine, incense, and pigments are obtained.

1.4 POPULATION

Population Size and Distribution

The latest two census of the population in the Republic of Yemen were conducted in 1986 and 1988. The 1986 Census was conducted in the northern governorates (then called the Yemen Arab Republic, Y.A.R), while the 1988 Census was conducted in the southern governorates (then called the People's Democratic Republic of Yemen, P.D.R.Y.). According to these censuses, the resident population size in the northern governorates was about 7.8 million and the resident population size in the southern governorates was about 1.8 million.

The resident population size in the Republic of Yemen was estimated at approximately 11.3 million in 1990. (Central Statistical Organization, 1991b).

At the national level, population density is about 21.4 persons per square kilometer (1990), distributed among 17 governorates and the Capital Mayorship (Sana'a City). The governorates include 238 directorates or districts (Public Survey Authority, 1990).

The population is distributed between rural and urban areas. In 1990, 21.4 percent of the population lived in urban areas. The most densely populated cities are Sana'a, Aden, Taiz, Hudaidah, and Mukalla.

Population Growth

Improvements in the living and health conditions in Yemeni society following the revolution had a significant impact on population growth. The growth rate increased slightly as a result of stable birth rates coupled with decreasing death rates.

In 1988, the crude birth rate in Yemen was 52.6 per thousand, while the crude death rate was 21.8 per thousand. Accordingly, the annual rate of population growth is 3.1 percent. The total fertility rate, which is the total number of live births per woman by the end of the reproductive years, is 8.2 births per woman. Therefore, among developing countries, the Republic of Yemen is considered to have one of the highest rates of population growth and highest fertility rates.

It is worth mentioning, that mortality in Yemen is still high, particularly among children. In 1988 the infant mortality rate was 130 per thousand (Central Statistical Organization, 1992a). Life expectancy at birth is moderate compared to many countries. In 1988 it was estimated at 46.3 years for both sexes. In the last decade there was a clear improvement in the standard of living and health conditions, which was reflected in the continuing increase in life expectancy.

1.5 SOCIOECONOMIC CONDITIONS

Education

Education is one of the most important measures of social and economic development. Hence, the State has paid great attention to education since the revolution in the early sixties. Illiteracy among Yemenis was the highest among Arab and other developing countries. At the time of the revolution, there was not one secondary school in the country. Only Aden, being under the British occupation, was an exception.

Statistics show that considerable progress has been achieved in this area. Almost 2 million students were enrolled in over 12,000 schools in 1990/91, while Sana'a and Aden universities had an enrollment of about 35,000 students in 1989/90 (Ganin and Mutahar, 1992). These figures confirm that there has been a great improvement in the education sector in Yemen, especially when compared to the previous Imami and Colonial regimes.

Despite these efforts, figures show that more than half of the population is still illiterate. The 1986 and 1988 censuses in both the northern and southern governorates show that illiteracy is about 67 percent and is higher among females than males. Figures also show that enrollment in basic education is about 57.4 percent for the population aged 6-15 years (Ganin and Mutahar, 1992).

These figures indicate that Yemen needs to expend more resources to increase basic education, especially considering the high rate of population growth.

Health

Health conditions in any community are the result of various social, economic, cultural, and environmental factors. Yemen witnessed many changes in the period following the revolution. This is reflected in the improved level of health of the population, and in the increased coverage of health services. As a result, infant mortality has declined, while life expectancy has increased. For example, the infant mortality rate decreased from 171 per thousand live births in 1975 in the northern and western governorates to 130 per thousand in 1990 (Central Statistical Organization, 1992a).

The efficiency of health services has increased. In 1990, the number of hospitals reached 74, in addition to 94 health centers. These facilities have a capacity of 9,891 beds, with a staff of 2,854 doctors, 2,004 of whom are nationals (Central Statistical Organization, 1991a; 1992a).

Despite progress in the health sector, health services cover only 40 percent of the population and are concentrated in urban areas. Rural areas are to some extent deprived of such services, especially in remote areas, which are difficult to reach.

Population Activities

According to 1990 population estimates, the labor force—all persons age 15-64 years—represents 44.3 percent of the population. Additionally, children under 15 years make up 53.5 percent, and 3.3 percent are elderly persons (65 years or more). Thus, the dependency ratio in Yemen is high: 126 persons in the non-productive age groups for every 100 persons aged 15-64 years. This is a result of the large number of children under 15 years, which is common in developing countries.

Most of the Yemeni labor force (62.2 percent) is involved in agriculture and fishing, while the rest are distributed among other sectors (Saif et al., 1992).

There are approximately 5.1 million acres of arable land in Yemen, 9.5 percent of the total land area. Only 1.1 million acres are under cultivation (Hashem et al., 1992).

Agriculture depends mainly on rain water. Eighty percent of the arable land receives rain water. Thus, production is subject to climatic conditions. Locally-grown fruits and vegetables are sufficient to meet the needs of the population; however, some essential food stuffs are imported, such as wheat, two-thirds of which is imported (Hashem et al., 1992).

There are indications that Yemen has considerable unused mineral wealth, such as oil. The Yemeni government pays great attention to oil exploration operations, which have increased greatly since unification. It is likely that in the coming years Yemen will be an oil exporting country, exporting oil in large quantities.

1.6 POPULATION POLICY AND STRATEGY

In 1984, the National Committee for Population and Family Planning (NCPFP) was established to strengthen the government capacity to implement population policy in North Yemen. After the achievement of Yemeni unity in May 1990, the government drafted a national population strategy which, after revision, was adopted as national policy at the National Population Conference in October 1991. The National Population Council was established to oversee implementation of the policy. The overall objectives of the National Population Strategy for the year 2000 are (Central Statistical Organization, 1992a):

1. Reduce the infant mortality rate from 130 to 60 deaths per thousand live births;
2. Reduce the mortality rate for children age 1-4 years by 50 percent;
3. Increase immunization coverage for children under one year of age to 85 percent or more, and to expand tetanus immunization among women of reproductive age;
4. Reduce by 50 percent, compared with 1990 levels, the number of deaths among children due to diarrhea.

The objectives of the family planning strategy are:

1. Increase the use of contraception to 35 percent among women of reproductive age, and expand family planning services to men;
2. Make family planning a free choice for couples, a basic human right, as well as a factor for social change. Family planning must also include the right to treatment of infertility (Central Statistical Organization, 1992a).

1.7 OBJECTIVES OF THE SURVEY

The General Department for the Population Studies and Research Center, with the cooperation of the Ministry of Public Health, the Pan Arab Project for Child Development (PAPCHILD), the Demographic Health Surveys (DHS), and the U.S. Agency for International Development (USAID), has implemented the various phases of the 1991-92 Yemen Demographic and Maternal and Child Health Survey (YDMCHS). The survey was carried out as a part of the DHS program and also the PAPCHILD program. The DHS program is assisting governments and private agencies in the implementation of household surveys in developing countries; PAPCHILD has similar goals for developing countries in the Arab League. The main objectives of the DHS project are to: (a) provide decisionmakers with a data base and analyses useful for informed

policy choices, (b) expand the international population and health data base, (c) advance survey methodology, and (d) develop skills and resources necessary to conduct high quality demographic and health surveys in the participating countries.

The YDMCHS was specifically aimed at furnishing information on basic population and household characteristics, maternal and child health, fertility, family planning, and infant and child mortality in Yemen. The survey also presents information on breastfeeding practices and the nutritional status of children under age five. The survey will provide policymakers and planners with important information for use in formulating programs and policies regarding maternal and child health, child mortality, and reproductive behavior.

1.8 ORGANIZATION OF THE SURVEY

The Yemen Demographic and Maternal and Child Health Survey (YDMCHS) is the first national survey conducted in Yemen since unification of the country. It was designed to collect data on households, ever-married women of reproductive age, and children under age five. The subjects covered in the household survey were: characteristics of households, housing and living conditions, school enrollment, labor force participation, general mortality, disability, fertility, and child survival. The areas covered in the survey of women of reproductive age were: demographic and socioeconomic characteristics, marriage and reproductive history, fertility regulation and preferences, antenatal care, breastfeeding, and child care. For children under five in the survey, the topics included diarrheal and other morbidity, nutritional supplementation, accidents, vaccination, and nutritional status.

Sample Design and Implementation

The YDMCHS sample was designed to enable data analysis for Yemen as a whole, and separately for urban and rural areas, and for two regions: (1) the northern and western governorates, and (2) the southern and eastern governorates. The target sample was set at completed interviews for about 12,000 households with about 6,000 eligible women. No target number was fixed for children under five, for whom information was to be collected for *all* children in each household that was selected for the women's interview. In half of the selected households, only the Household Questionnaire was administered; in the other half, in addition to administering the Household Questionnaire, all eligible women were interviewed and information on eligible children was collected.

The YDMCHS covered the entire country, except for nomadic peoples and those living on hard-to-reach Yemeni islands. The survey adopted a stratified, multi-stage sampling design. The sample was stratified by urban and rural areas in the two regions. In this report, the northern and western governorates region includes: Sana'a City and the governorates of Sana'a, Taiz, Hodeidah, Ibb, Dhamar, Hajjah, Al-Beida, Sa'adah, Al-Mahweet, Ma'areb, and Al-Jawf. The southern and eastern governorates region consists of Aden, Laheg, Abyen, Shabwah, Hadramout, and Al-Mahrah governorates. In the first stage, sampling units or clusters were selected; the second stage involved selection of households. The initial objective of having a self-weighted sample was compromised in order to have reliable estimates for urban and rural areas within each region. Sana'a City, the urban (not rural) areas of Aden, and the rural areas of Laheg were oversampled.

For the survey, 258 sampling units were selected, which contained 13,712 households. In half of the selected households, only the Household and Housing Characteristics Questionnaires were administered. In the other half, the Women's and Child's Questionnaires were also administered to all eligible women and children. The sample design is described in more detail in Appendix B. A discussion of sampling errors is presented in Appendix C, along with the sampling errors calculated for the entire sample, urban and rural samples, and regional samples.

1.9 IMPLEMENTATION OF THE SURVEY

Preparation Stage

Preparatory steps for the DHS survey project began in 1989 (before unification) at the Population Research Center of the Central Statistical Organization, in Sana'a. At the time, the Pan Arab Project for Child Development (PAPCHILD) was also involved in planning a survey in South Yemen. These efforts continued after unification and included both the DHS project and the PAPCHILD project in planning for the first national survey. The Prime Minister's Resolution No. 9, issued in 1991, initiated the survey and led to the formation of the Supreme Committee for the Yemen Demographic and Maternal and Child Health Survey. A technical committee was also formed and charged with preparation, organization, planning and implementation of the YDMCHS project, including all the technical and operational requirements (see Appendix A for the names of the members of the Supreme Committee and the Technical Committee, and other persons involved in the YDMCHS).

Questionnaires

Design, preparation and revision of questionnaires. The YDMCHS survey includes the following questionnaires:

- Household Questionnaire
- Housing Characteristics Questionnaire
- Reproductive Health Questionnaire (also called the Women's Questionnaire)
- Child Health Questionnaire (also called the Children's Questionnaire)
- Community Questionnaire

The items included in these questionnaires were selected after reviewing similar surveys such as those carried out by the Pan Arab Project for Child Development (PAPCHILD), which was sponsored by the Arab League Organization, and the model questionnaires of the Demographic and Health Surveys (DHS) in Calverton, Maryland, USA. The final YDMCHS questionnaires were mainly based on PAPCHILD's model questionnaires. The questionnaires were modified to suit the conditions of Yemeni society and to meet the information requirements of the country. A large number of questions were included in the YDMCHS questionnaires in order to obtain as much information as possible on demographic and population dynamics, health and environmental issues, other indicators of standards of living, housing conditions, maternal and child health, and characteristics of local communities regarding provision of health services. English versions of the questionnaires (except the Community Questionnaire) are reproduced in Appendix E.

The Household Questionnaire consists of a household roster, including questions on orphanhood, education level and economic activity of household members. It also collects information on general mortality, disability and, for ever-married women under age 55, information on fertility and child survival.

The Housing Characteristics Questionnaire, was administered as part of the household survey. It includes eight sections: housing, cooking, water, lighting, sanitation, waste disposal, ownership of objects and assets, and drainage.

The YDMCHS Women's Questionnaire or Reproductive Health Questionnaire consists of nine sections:

- Respondent's background
- Marriage and co-residence

- Reproduction and child survival
- Antenatal care: current pregnancy
- Maternal care: the last five years
- Child feeding
- Cause of death for children who died
- Family planning and childbearing attitudes
- Husband's background

The Child Health Questionnaire, which is also referred to as Children's Questionnaire, consists of six sections:

- General child care
- Morbidity: diarrhea
- Morbidity: other illnesses
- Immunization
- Weight and height¹

Preparation of interviewer's instructions and training booklets. After completion of the design stage, interviewer's manuals containing instructions on interviewing techniques and on procedures for completing questionnaires were prepared for each questionnaire. The manuals provided simple, clear descriptions of each question as well as of basic terminology used in the survey (e.g., household, live birth).

Survey Pretest and Printing of Documents

Training of supervisors and female field editors. Twenty men were trained as supervisors for the survey fieldwork and 6 women were trained as interviewers for the pretest and as field editors for the main survey. All were trained in the theoretical aspects of survey research and the practical aspects of completing questionnaires, i.e., understanding the purpose of each question, understanding the instructions for completing the questionnaires, and learning techniques to obtain specific and accurate answers from the respondents.

Practical training. The pretest field practice followed the theoretical training. Trainees interviewed selected households (that were not included in the main survey) as well as eligible women and eligible children in those households in both Sana'a City and rural areas around the capital. The pretest field practice lasted for 15 days from 25 August until 10 September 1991.

Revision of basic survey documents. Based on the experience of the pretest interviewing and pretest field operations, the survey documents, questionnaires and instruction manuals were evaluated for appropriateness and adequacy for implementing the YDMCHS. As a number of problems were identified in the documents, some questions and instructions were revised accordingly.

Printing of documents and questionnaires. After finalizing the questionnaires and fieldwork manuals, the basic survey documents and other forms to be used in the field for monitoring fieldwork operations and checking quality control were printed. The number of questionnaires printed was as follows:

Household Questionnaire (16,500 copies),
Housing Characteristics Questionnaire (15,000 copies),
Reproductive Health Questionnaire (8,500 copies),

¹The analysis of nutritional status is not included in this report. It will be published in a separate report covering a thorough assessment and detailed analysis of height/weight data.

Child Health Questionnaire (6,000 copies),
Community Questionnaire (350 copies).

In addition to the questionnaires, 250 copies of the interviewer's manual were printed to guide interviewers, field editors and supervisors during the training and fieldwork.

Training of Female Interviewers

From past experience, it was known that survey fieldwork would be difficult to implement. The Technical Committee felt that, in the context of Yemeni culture, female interviewers would not be able to work away from home for long periods. Therefore, it was decided that fieldwork in all parts of Yemen should be finished within two months. This meant cutting the duration of fieldwork drastically and doubling the number of field teams originally planned. In order for interviewers to be representative of the whole country, every attempt was made to recruit interviewers for the YDMCHS from all the governorates.

Because the number of interviewers to be trained was doubled, the training was conducted simultaneously at two sites: Sana'a in the north and Aden in the south. The Sana'a group included 75 persons (interviewers, editors and supervisors) who later formed nine field teams, which worked in the northern and western governorates. The other group, trained in Aden, included 45 persons (interviewers, editors and supervisors) who later formed seven teams covering the southern and western governorates.

The experience of pretest training and interviewing was useful in preparation for the training of interviewers for the main fieldwork. Intense theoretical and practical training for both groups was conducted for three weeks by professional trainers who were specialists in survey methodology, statistics and public health. Practical training for anthropometric measurements, that is, use of scales for weighing children and boards for measuring children's height (or recumbent length), followed completion of classroom training for the questionnaires. Female trainees spent one week completing practice interviews on selected households that were not included in the main survey. The fieldwork practice provided an opportunity for interviewers to become familiar with the process and problems of interviewing in the field, and for trainers to evaluate interviewer-trainees on their competence to carry out fieldwork. After the selection of interviewers, 16 teams were formed to implement the main survey fieldwork.

Main Survey Fieldwork

A plan was drawn up to use 16 teams to implement the main fieldwork. Each team included one field supervisor, one male or female field editor, and four or five interviewers.

The data collection started on 16 November 1991 when the teams were dispatched to different governorates to begin fieldwork. The teams returned from the field on different dates because of differences in workloads and distances from Sana'a to the assigned areas. The last team returned from the field on 15 January 1992. All teams completed their work successfully.

During the fieldwork period, the teams were encouraged to call the project's technical staff in Sana'a to keep the survey operations desk informed about the progress of the work and any problems requiring assistance. The senior project staff from Sana'a and Aden also visited teams to monitor the quality of fieldwork and to solve any technical or field problems the teams encountered. Whenever possible, the monitoring staff returned to Sana'a with completed questionnaires so that data preparation and data processing could be carried out simultaneously with fieldwork. On receipt of the questionnaires at the central office, the process of revising, editing, coding and processing the data was carried out.

On average, an interviewer completed 4 to 6 household interviews daily and 2 or 3 interviews with eligible women. The overall duration of fieldwork was affected by travel time from one area to another. Travel time was often substantial because many of the household clusters were far apart or not linked by roads. The number of interviews completed by individual teams varied due to a number of factors including: the distance between households in rural areas, the number of persons in the households, and the need for repeat visits to households in urban areas to complete interviews with eligible respondents.

Data collection was completed on schedule despite difficulties such as rough terrain and poor roads, inadequate accommodations for the field teams, and widely scattered households in some areas. The difficulties were overcome by the efforts and dedication of the supervisors and interviewers. Their enthusiasm and the survey officials' understanding of the nature of this undertaking had a great impact on solving many of the difficulties the field teams faced. The survey operations desk in Sana'a maintained regular contact by phone with field supervisors. The supervisor called to report their progress, to ask technical questions they were not sure of or could not solve, and to discuss problems encountered in the field for which they needed assistance.

Preparation of Data

Editing and coding. Data preparation began one week after the start of fieldwork and continued simultaneously with the fieldwork activities. Field editors checked the questionnaires for completeness and consistency. Field supervisors also checked completed questionnaires on a sample basis. Completed questionnaires were then sent to the central office in Sana'a or brought by staff when they returned after visiting the teams. In the central office in Sana'a the questionnaires were edited again, and open-ended and other questions requiring coding were coded. This stage started on 22 November 1991 and was completed by the end of January 1992.

Data Entry. Data entry was carried out using microcomputers and continued from January until the end of February 1992. The process of data entry, editing and cleaning was done with ISSA (Integrated System for Survey Analysis) programs specially designed for the DHS surveys.

Data consistency checks and production of tables. Consistency checks and data cleaning started on 1 March 1992 and were completed by the end of June 1992. During July 1992 preliminary reports on the Yemen Demographic and Maternal and Child Health Survey were prepared, one in English by Macro International and one in Arabic by PAPCHILD. Both reports were published in August 1992. After the publication of the preliminary report, tabulations for the final report were carried out by both Macro International and PAPCHILD.

1.10 RESULTS OF THE HOUSEHOLD AND WOMEN'S INTERVIEWS

Table 1.1 is a summary of the results from the household and women's interviews by urban-rural residence. Of the 13,712 households selected for inclusion in the survey, 13,206 were found and 12,836, or 97 percent, were successfully interviewed. In all, 6,150 ever-married women age 15-49 years were identified in the households selected for individual interviews. Of these, 5,687 women were successfully interviewed and information was collected for 6,715 of 7,022 eligible children under five. The response rates for eligible women and children are 93 and 96 percent, respectively. The response rates for urban and rural areas are almost the same. The main reason for not completing some household interviews was that the dwellings were vacant at the time of fieldwork, although they were occupied when the household listing was carried out. The principal reason for nonresponse in the case of eligible women was that respondents were not at home despite repeated visits by interviewers to the selected households.

Table 1.1 Results from the household, women's and children's questionnaires

Number of households, eligible women, and eligible children, and response rates, Yemen 1991/92

Result	Residence		Total
	Urban	Rural	
Household interviews			
Households sampled	3333	10379	13712
Households found	3171	10035	13206
Households interviewed	3077	9759	12836
Household response rate	97.0	97.2	97.2
Individual interviews			
Number of eligible women	1568	4582	6150
Number of eligible women interviewed	1453	4234	5687
Eligible woman response rate	92.7	92.4	92.5
Children's questionnaires			
Number of eligible children	1561	5461	7022
Number of eligible children for whom quest. completed	1474	5241	6715
Eligible children response rate	94.4	96.0	95.6

