

# INTRODUCTION

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## 1.1 GEOGRAPHY

Egypt is located on the northeast corner of the African continent. It is bordered by Libya to the west, Sudan to the south, the Red Sea to the east, and the Mediterranean Sea to the north.

Egypt has the largest, most densely settled population among the Arab countries. The total area of the country covers approximately one million square kilometers. However, much of the land is desert, and only 6 percent of Egypt's area is inhabited. Recently, the Egyptian government adopted a policy of land reclamation and fostering of new settlements in the desert. Despite these efforts, the majority of Egyptians live either in the Nile Delta located in the north of the country or in the narrow Nile Valley south of Cairo.

Administratively, Egypt is divided into 26 governorates (see map) and Luxor City. The four Urban Governorates (Cairo, Alexandria, Port Said, and Suez) have no rural population. Each of the other 22 governorates is subdivided into urban and rural areas. Nine of these governorates are located in the Nile Delta (Lower Egypt), eight are located in the Nile Valley (Upper Egypt), and the remaining five Frontier Governorates are located on the eastern and western boundaries of Egypt.

## 1.2 SOCIOECONOMIC INDICATORS

Egypt's economy expanded steadily during the 1990s. Reflecting that growth, the gross domestic product (GDP) per capita has achieved a level of US \$1,380 (UNDP 2005). The country's economic growth has been accompanied by improvements in a number of human development indicators, including:

- The proportion of households with sustainable access to improved sanitation which was 87 percent in 1990 reached 98 percent by 2000 (UNDP 2004).
- School enrolment levels have improved over time, and literacy levels have risen. For example, in 1990, the net enrolment ratio at the primary level was 84 and adult literacy was 47 percent; by 2003, the net enrolment ratio at the primary level had increased to 91 and adult literacy had risen to 56 percent (UNDP 2005).

From a social perspective, the advances which have occurred over time in the education of women are of particular note. Female enrolment at the primary level rose from 57 percent in 1970 to 98 percent in 2002. At the secondary level, female enrolment also expanded rapidly, from 23 percent in 1970 to 70 percent in 1997 (UNDP 2004). Although indicators have improved over time, gaps remain evident for a number of subgroups, particularly women. For example, the adult literacy rate among females in 2003 was 44 percent compared to 65 percent for males. The net primary enrollment ratio in 2002/2003 was 90 for females compared to 96 for males (UNDP 2005).

## 1.3 POPULATION SIZE AND STRUCTURE

The latest population census in Egypt was carried out in November 1996. According to the results, Egypt has a de facto population of 59.3 million. This number excluded the roughly 2.2 million Egyptians who were living abroad. By the beginning of 2005, it is estimated that population had increased by more than 10 million to 69.9 million (CAPMAS 2005).

Table 1.1 presents the trend between 1990 and 2004 in the size of Egypt's population and in the distribution of the population by urban-rural residence. The table shows that the total Egypt's population increased during this period by around 30 percent. Despite the sizeable population expansion, the percentage of the Egyptian population living in areas classified as urban remained virtually unchanged during the period.

#### 1.4 RECENT RATE OF NATURAL INCREASE

The rate of natural increase represents the difference between the level of births and deaths in a population. It indicates how fast a population will grow, taking into account these two natural events. Figure 1.1 shows that the rate of natural increase has been declining in Egypt since 1991.<sup>1</sup>

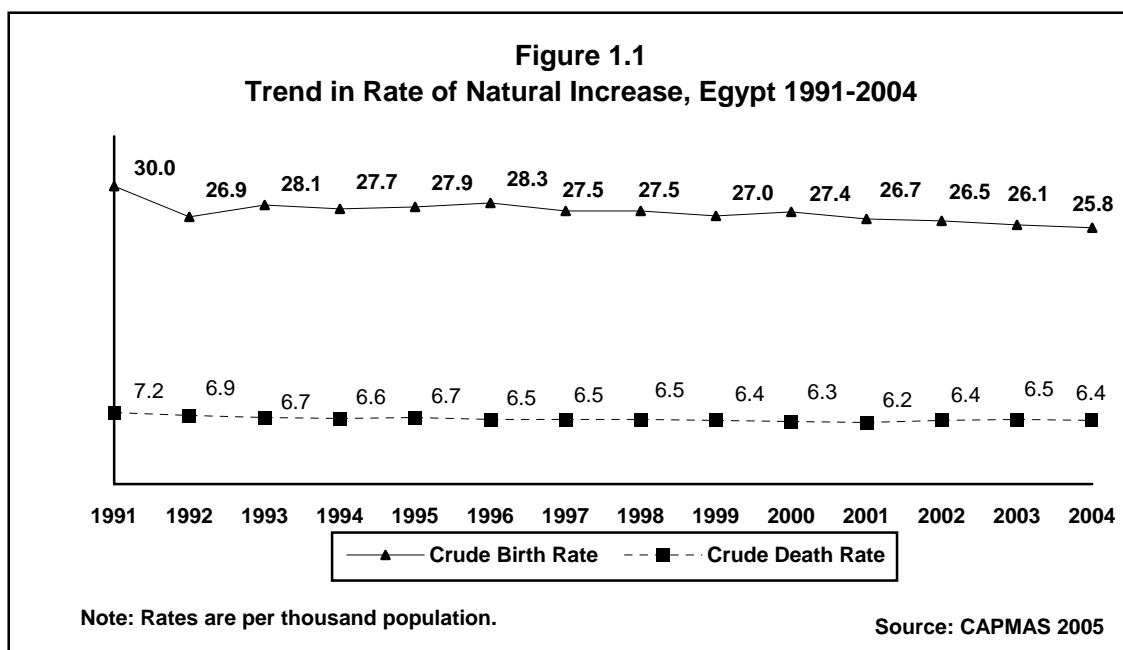
Most of the decline in the rate of natural increase since 1991 has been the result of changes in fertility behavior. The crude birth rate (CBR) dropped from a level of 30 per thousand population in 1991 to 28 per thousand by 1994. As Figure 1.1 shows, the decline leveled off in the mid-1990s, with the CBR fluctuating around a level of 27 births per thousand until the end of the decade. At that point, the CBR resumed declining although slowly reaching a level of 25.8 in 2004. The crude death rate (CDR), already at a comparably low level in 1990, also declined further in the period although the pace of decline was slow and erratic.

Table 1.1 Population of Egypt, 1990-2004

Total population in Egypt and the percentage living in urban and rural areas, 1990-2004

Years	Total population (millions) <sup>1</sup>	Place of residence	
		Urban	Rural
1990	51,911	43.4	56.6
1991	52,985	43.2	56.8
1992	54,082	43.2	56.8
1993	55,201	43.1	56.9
1994	56,344	43.1	56.9
1995	57,510	42.9	57.1
1996	58,755	42.6	57.4
1997	60,080	42.6	57.4
1998	61,341	42.6	57.4
1999	62,639	42.4	57.6
2000	63,976	42.5	57.9
2001	65,298	43.1	56.9
2002	66,628	42.9	57.1
2003	67,965	42.9	57.1
2004*	69,330	42.5	57.5

<sup>1</sup> Figures exclude Egyptians living abroad  
Source: CAPMAS 2005, Table 1.4



<sup>1</sup> A third factor influencing population growth is migration, which is not taken into account in Figure 1.1.

As Table 1.2 shows, declines in mortality during the period 1960-2004 had a demonstrable effect on increasing the life expectancy of the Egyptian population. The life expectancy at birth represents the average number of years a child born in a specific year may be expected to live during his/her lifetime. Life expectancy increased by 19.0 years for females and 16.8 years for males during the period.

## 1.5 POPULATION POLICY AND PROGRAMS

The government of Egypt is aware of the challenges that demographic problems pose to the attainment of the nation's development objectives. The country has adopted a national population policy which considers both quantitative and qualitative aspects of the population as important determinants of development.

Slowing the growth rate of population has long been a goal of the Egyptian government policy. In the early 1960s the government made an explicit commitment on the population question when it stated in the National Charter that “high growth rates represent the most dangerous obstacle that hinders efforts to raise the standard of living of the Egyptian people” (Ibrahim 1995). Governmental concern about population issues was further demonstrated when the Supreme Council for Family Planning issued the first National Population Policy in 1973. A main objective of the policy was to reduce the CBR from 34 births per thousand population in 1973 to 24 per thousand in 1982. The policy emphasized that population growth was dependent, in part, on socioeconomic development and that the manipulation of socio-economic change should itself be an element in a comprehensive population policy.

In 1977, family planning activities became more structured, organized and better managed, and the goals became more quantified at the national and sub-national levels. Information, Education, and Communication (IEC) activities were enhanced and synchronized in the late 1970s, when the Supreme Council for Population and Family Planning established high committees to coordinate IEC activities in support of the family planning activities.

In 1980, a new National Strategic Framework for Population, Human Resource Development and the Family Planning Program was issued. This national strategy and its related documents set a specific timetable and explicit measures for assessing progress toward the achievement of the population and human development goals. Reflecting the continued commitment of the Egyptian government to addressing population issues, a national population conference was held in 1984. The National Population Council (NPC) was established shortly after the conference, replacing a succession of lower-level governmental bodies.

In 1986, the third national population plan was formulated by the NPC, including quantifiable objectives. This plan came as response to the growing concern that previous efforts had failed to achieve real progress in reducing the population growth rate. The plan described the nature of the population problem of Egypt and re-emphasized the interaction between population and development factors.

In October 1995, a modified population strategy was developed, based on the recommendations coming from the 1994 International Conference on Population and Development (ICDP). The program of action articulated a comprehensive approach to issues of population and development and identified a range of demographic and social goals to be achieved over a 20-year period.

In January 1996, the Ministry of Health became the Ministry of Health and Population (MOHP), reflecting the Ministry’s increased responsibility for population sector activities. Responding to the

Year	Male	Female
1960	51.6	53.8
1976	52.7	57.7
1986	60.5	63.5
1991	62.8	66.4
1996	65.1	69.0
1999	66.3	70.5
2001	67.1	71.5
2002	67.5	71.9
2003	67.9	72.3
2004	68.4	72.8

Source: CAPMAS, 2005, Table 1.7

concerns of the Cairo conference declaration, the MOHP has merged family planning, maternal health, and child health services into a broad-based women's health program. It has expanded family planning services, particularly to low-income populations and to rural Upper Egypt. As part of these efforts, the MOHP has renovated most of its clinics and added more than 500 mobile family planning clinics to improve access to services.

The most recent documents codifying the National Population Program were issued in 2002. These documents which articulate detailed population strategies are considered a constructive addition to the 1986 national population plan, which constitutes the only official document up to the present.

## **1.6 HEALTH POLICIES AND PROGRAMS**

The Egyptian health system faces multiple challenges in improving and ensuring the health and well-being of the Egyptian people. The system faces not only the burden of combating illnesses associated with poverty and lack of education, but it must also respond to emerging diseases and illnesses associated with a modern, urban lifestyle. Emerging access to global communications and commerce is raising the expectations of the population for more and better care and for advanced health care technology. To meet these challenges, the Egyptian health system has a strong infrastructure of physicians, clinics and hospitals, availability of technology and pharmaceuticals, and excellent physical access to care, with 95 percent of the population being within five kilometers of a medical facility.

During the 1990s, the MOHP had the continuing objective of "health for all by the year 2000." Within that broad mandate, the Government of Egypt placed a priority on meeting children's health needs, with President Mubarak declaring that the 1989-1999 period would be a decade focused on the protection and development of the Egyptian child. A National Council for Childhood and Motherhood, co-chaired by the Prime Minister and the First Lady, was formed at that time to coordinate activities between ministries implementing programs affecting children and mothers.

To improve child health, the MOHP has focused on national programs to control diarrhea and acute respiratory infections and an expanded childhood immunization program. Targets were set to eradicate poliomyelitis and to eliminate neonatal tetanus before the year 2000. The MOHP also directed attention to reducing neonatal mortality by improving the quality of care given to newborns at home and in health facilities through postnatal care.

Following the merger of the health and population services described above, the MOHP also has stressed the importance of integrating family planning and maternal and child health. The government of Egypt has articulated as its long-term goal the achievement of universal coverage of basic health services for all of its citizens. It identified the extension of services to reach the most vulnerable population groups as a priority. As part of the policy reform agenda, health insurance is being expanded to cover more beneficiaries and efforts are being focused on enhancing the quality of health services. Attention also is being paid to improving health manpower distribution and the compensation provided to health workers. The importance of strengthening the information system to collect, analyze, and facilitate the use of health information at all levels was recognized, and steps have been taken to address this task. All these health reform plans are expected to have a positive effect on the health of women and children.

## 1.7 ORGANIZATION OF THE 2005 EDHS

The Egypt Demographic and Health Survey (2005 EDHS) is the latest in a series of a nationally representative population and health surveys conducted in Egypt.<sup>2</sup> The 2005 EDHS was conducted under the auspices of the Ministry of Health and Population (MOHP) and National Population Council (NPC) and implemented by El-Zanaty & Associates. Technical support for the 2005 EDHS was provided by ORC Macro through the MEASURE DHS project. MEASURE DHS is sponsored by the U.S. Agency for International Development (USAID) to assist countries worldwide in conducting surveys to obtain information on key population and health indicators. USAID/Cairo is the main financial contributor to the survey. The United Nations Children’s Fund (UNICEF) and Ford Foundation also supported the survey financially.

The 2005 EDHS was undertaken to provide estimates for key indicators such as fertility, contraceptive use, infant and child mortality, immunization levels, coverage of antenatal and delivery care, nutrition, and prevalence of anemia. In addition, the survey was designed to provide information on the prevalence of female circumcision, domestic violence, and children’s welfare. The survey results are intended to assist policymakers and planners in assessing the current health and population programs and in designing new strategies for improving reproductive health and health services in Egypt.

### 2005 EDHS TIMETABLE

The 2005 EDHS was executed in four stages. The first stage involved preparatory activities, including designing the sample and updating the frame. At the same time, the survey questionnaires were developed, pretested, and finalized. The preparatory stage was initiated in September 2004, and all of the activities were completed by mid-February 2005. The second stage, which took place from March through July 2005, involved training field staff and interviewing eligible households and individual respondents. The third stage encompassed all of the data processing activities necessary to produce a clean data file, including editing, coding, entering and verifying the data as well as checking it for consistency. This stage started soon after the beginning of the fieldwork and lasted until early August 2005. The focus of the final stage of the survey was analyzing the data and preparing the report. This phase began in October 2005 with the publication of the preliminary report, which presented the main findings from the survey.

The activities involved in each of the stages are described in more detail below. The survey timetable is presented in Table 1.3.

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<sup>2</sup> The 2005 EDHS is the fifth full-scale Demographic and Health Survey to be implemented in Egypt; the earlier surveys were conducted in 1988, 1992, 1995, and 2000. Three additional interim DHS surveys were carried out in 1997 and 1998 and 2003. Other national-level surveys for which results are shown in this report include the 1980 Egyptian Fertility Survey (EFS), the 1984 Egypt Contraceptive Prevalence Survey (ECPS), and the 1991 Egypt Maternal and Child Health Survey (EMCHS).

Table 1.3 Survey timetable, 2005 Egypt DHS

Activity	Starting date	Duration
Updating the sample frame	September 2004	1 month
Mapping	October 2004	7 weeks
Quick-count operation	October 2004	3 months
Recruitment and training of listing staff	January 2005	1 week
Listing and re-listing	January 2005	5 weeks
Sample selection	February 2005	6 weeks
Questionnaire design	December 2004	3 months
Preparation of training materials	January 2005	2 months
Pretest	January 2005	2 weeks
Finalization of questionnaires	February 2005	1 month
Training of data collection staff	March 2005	5 weeks
Printing survey materials	March 2005	2 weeks
Fieldwork	April 2005	2 months
Reinterviews	July 2005	2 weeks
Office editing and coding	April 2005	3 months
Data entry	May 2005	3 months
Computer editing	June 2005	3 months
Preliminary report	September 2005	1 month
Detailed tabulations	September 2005	2 months
Final report preparation	October 2005	4 months

## Sample Design

The primary objective of the sample design for the 2005 EDHS was to provide estimates of key population and health indicators including fertility and child mortality rates for the country as a whole and for six major administrative regions (the Urban Governorates, urban Lower Egypt, rural Lower Egypt, urban Upper Egypt, rural Upper Egypt, and the Frontier Governorates). In addition, seven governorates targeted for special USAID-sponsored family planning and health initiatives were over sampled, namely: Fayoum, Beni-Suef, Menya, Qena, and Aswan in Upper Egypt, and Cairo and Alexandria.

In the Urban Governorates, Lower Egypt, and Upper Egypt, the 2005 EDHS design allowed for governorate-level estimates of most of the key variables, with the exception of the fertility and mortality rates. In the Frontier Governorates, the sample size was not sufficiently large to provide separate estimates for the individual governorates. To meet the survey objectives, the number of households selected in the 2005 EDHS sample from each governorate was not proportional to the size of the population in the governorate. As a result, the 2005 EDHS sample is not self-weighting at the national level, and weights have to be applied to the data to obtain the national-level estimates presented in this report.

A more detailed description of the 2005 EDHS sample design is included in Appendix B. Sampling errors for selected variables are presented in Appendix C.

## Sample Selection

The sample for the 2005 EDHS was selected in three stages. The first stage included selecting the primary sampling units. The units of selection were shiakhastowns in urban areas and villages in rural areas. A list of these units which was based on the 1996 census was updated to August 2004 using information obtained from CAPMAS, and this list was used in selecting the primary sampling units (PSUs). Prior to the selection of the PSUs, the frame was further reviewed to identify any administrative changes that had occurred after August 2004. The updating process included both office work and field visits during a one-month period. After it was completed, urban and rural units were separately stratified by geographical location in a serpentine order from the northwest corner to the southeast corner within each governorate. During this process, shiakhastowns or villages with a population less than 2,500 were grouped with contiguous shiakhastowns or villages (usually within the same kism or markaz) to form units with a population of at least 5,000. After the frame was ordered, a total of 682 primary sampling units (298 shiakhastowns and 384 villages) were selected.

The second stage of selection involved several steps. First, detailed maps of the PSUs chosen during the first stage were obtained and divided into parts of roughly equal population size (about 5,000). In shiakhastowns or villages with a population of 20,000 or more, two parts were selected. In the remaining smaller shiakhastowns or villages, only one part was selected. Overall, a total of 1,019 parts were selected from the shiakhastowns and villages in the 2005 EDHS sample.

A quick count was then carried out to provide an estimate of the number of households in each part. This information was needed to divide each part into standard segments of about 200 households. A group of 48 experienced field workers participated in the quick count operation. They were organized into 16 teams, each consisting of 1 supervisor, 1 cartographer and 1 counter. A one-week training course conducted prior to the quick count included both classroom sessions and two field practices in a shiakhastown and a village not covered in the survey. The quick-count operation took place between the end of October 2004 and January 2005.

As a quality control measure, the quick count was repeated in 10 percent of the parts. If the difference between the results of the first and second quick count was less than 2 percent, then the first count was accepted. No major discrepancies were found between the two counts in most of the areas for which the count was repeated.

After the quick count, a total of 1,359 segments were chosen from the parts in each shiakhastown and village in the 2005 EDHS sample (i.e., two segments were selected from each of the 682 PSUs with the exception of 5 PSUs for which only one segment was selected). A household listing operation was then implemented in each of the selected segments. To conduct this operation, 13 supervisors and 26 listers were organized into 13 teams. Generally, each listing team consisted of a supervisor and two listers. A one-week training course for the listing staff was held in mid-January 2005. The training involved classroom lectures and two days of field practice in three urban and rural locations not covered in the survey. The listing operation took place during a five-week period, beginning immediately after the training.

About 10 percent of the segments were relisted. Two criteria were used to select segments for relisting. First, segments were relisted when the number of households in the listing differed markedly from that expected according to the quick count information. Second, a number of segments were randomly selected to be relisted as an additional quality control test. No major discrepancies were found in comparisons of the listings.

The third stage involved selecting the household sample. Using the household listing for each segment, a systematic random sample of households was selected for the 2005 EDHS sample. All ever-

married women 15-49 who were usual residents or who were present in the sampled households on the night before the interview were eligible for the EDHS.

## Questionnaire Development

The 2005 EDHS involved two questionnaires: a household questionnaire and an individual questionnaire. The questionnaires were based on the model survey instruments developed by MEASURE DHS+ for countries with high contraceptive prevalence. Questions on a number of topics not covered in the DHS model questionnaires were also included in the 2005 EDHS questionnaires. In some cases, those items were drawn from the questionnaires used for earlier rounds of the DHS in Egypt. In other cases, the questions were intended to collect information on new topics.

The household questionnaire consisted of three parts: a household schedule, a series of questions related to the socioeconomic status of the household, height and weight measurement, and anemia testing. The household schedule was used to list all usual household members and visitors and to identify those present in the household during the night before the interviewer's visit. For each of the individuals included in the schedule, information was collected on the relationship to the household head, age, sex, marital status (for those 15 years and older), educational attainment, repetition and dropout (for those 6-24 years), attendance of pre-school programs (for those 3-5 years old), and child labor (for those 6-14 years). The second part of the household questionnaire obtained information on characteristics of the physical and social environment of the household (e.g., type of dwelling, availability of electricity, source of drinking water, household possessions, and the type of salt the household used for cooking). Height and weight measurements were obtained and recorded in the last part of the household questionnaire for ever-married women age 15-49 years, children born since January 2000, and never-married adolescents age 10-19 years. In a subsample of one-third of households, all eligible women, all children born since January 2000, and all adolescents age 10-19 years were eligible for anemia testing.

The individual questionnaire was administered to all ever-married women age 15-49 who were usual residents or who were present in the household during the night before the interviewer's visit. It obtained information on the following topics:

- Respondent's background
- Reproduction
- Contraceptive knowledge and use
- Fertility preferences and attitudes about family planning
- Pregnancy and breastfeeding
- Immunization and child health
- Husband's background and women's work
- Female circumcision
- Health care access and other health concerns
- HIV/AIDS and other sexually transmitted infections
- Mother and child nutrition.

In addition, a domestic violence section was administered to women in the subsample of households selected for the anemia testing. One eligible woman was selected randomly from each of the households in the subsample to be asked the domestic violence section.



The individual questionnaire included a monthly calendar, which was used to record a history of the respondent's marriage status, fertility, contraceptive use including the source where the method was obtained, and the reason for discontinuation for each segment of use during each month of an approximately five-year period beginning in January 2000.

## **Pretest**

A pretest was conducted during the preparation for the 2005 EDHS. After a two-week training course, the household and individual questionnaires were pretested in February 2005 in a small number of households. Four supervisors, four field editors, and 16 interviewers participated in the first pretest. The pretest was conducted in two Upper Egypt governorates (Giza and Fayoum) and two Lower Egypt governorates (Gharbia and Kalyubia). A sample of 304 households were selected: 76 households in each governorate. The data collection took about four days and a total of 268 household and 261 individual interviews were completed during the pretest.

The questionnaires for the 2005 EDHS were finalized after the pretest. Both comments from interviewers and tabulations of the pretest results were reviewed during the process of finalizing the questionnaires.

English versions of the final Arabic language questionnaires are included in Appendix E.

## **Data Collection Activities**

*Staff recruitment.* To recruit interviewers and field editors, a list was obtained from the then Ministry of Social Affairs (now the Ministry of Social Solidarity (MOSS)) of female personnel who were working to fulfill the one-year period of governmental public service that is mandatory for university graduates. All candidates nominated for the field staff positions were interviewed, and only those who were qualified were accepted into the training program.

All candidates for the interviewer and field editor positions were recent university graduates. Another basic qualification was a willingness to work in any of the governorates covered in the survey. With a few exceptions, interviewers who had previous experience in surveys were not accepted into the training program. This decision was made to reduce any bias that might result from previous survey experience and to ensure that all trainees had a similar background. However, previous survey experience was a basic qualification for the candidates for the positions of supervisor.

All of the staff recruited for the anemia testing were required to have a medical background. Some were assigned by the MOHP, and others were recruited from among newly graduated physicians.

*Training materials.* A variety of materials were developed for use in training personnel involved in the fieldwork. A lengthy interviewer's manual, including general guidelines for conducting an interview as well as specific instructions for asking each of the questions in the EDHS questionnaires, was prepared and given to all field staff. In addition, a chart for converting months from the Islamic calendar to the Gregorian calendar was designed for the 60 months before the 2005 EDHS and distributed to all field staff along with a calendar of well-known worldwide or local events.

Other training materials, including special manuals describing the duties of the team supervisor and the rules for field editing, were prepared. Instructions for anthropometric data collection were included in a manual for the staff trained to collect height and weight data. A special manual covering the procedures to be followed in the anemia testing was also prepared.

*Training for supervisors and interviewers.* A special training program for supervisors was conducted during a one-day period prior to the main fieldwork training. This training focused specifically on the supervisor's duties, but it also covered the 2005 EDHS questionnaires in order to give supervisors a basic understanding of the content of the survey prior to the main training program.

Training for interviewers for the 2005 EDHS data collection began in mid-March 2005. Fourteen supervisors, 87 interviewers, and 36 anemia-testing and anthropometric-data-collection staff including 13 physicians and 2 nurses participated in the training program. This five-week training program, which was held in Cairo, included the following:

- Lectures related to basic interview techniques and to specific survey topics (e.g., fertility and family planning, maternal and child health, and female circumcision)
- Sessions on how to fill out the questionnaire, using visual aids
- Role playing and mock interviews
- Five days of field practice in areas not covered in the survey
- Four quizzes.

Trainees who failed to show interest in the survey, who did not attend the training program on a regular basis, or who failed the first two quizzes were terminated immediately.

Before the fourth field practice, a list was prepared of the 20 trainees who had performed best during both the classroom and field practices. Following the fourth field practice, 14 of these trainees were chosen to be field editors. A special training session was held for the field editors after their selection. By the end of the training course, 69 of the 87 candidates originally recruited for interviewer training were selected to work as interviewers or field editors in the EDHS fieldwork.

*Training for anthropometric-data-collection and anemia-testing staff.* Thirty-six personnel were selected for training in anthropometric data collection and anemia testing. The training included both classroom lectures and practice measurement and blood testing in a nursery school, in health facilities, and in households. At the end of the program, the 28 most-qualified trainees (14 males and 14 females) were selected for the anthropometric data collection and anemia testing. As discussed earlier, most of the personnel involved in the anemia testing had a medical background.

*Fieldwork.* Fieldwork for the 2005 EDHS began on April 21, 2005 and was completed in late June 2005. The field staff was divided into 14 teams; each team had 1 supervisor, 1 field editor, 3 to 4 interviewers, and 2 staff members assigned to height and weight measurement and anemia testing. All supervisors were males, while the field editors and interviewers were females. One male and one female staff member were involved in the anthropometric measurement and the anemia testing. During the fieldwork, the 14 field teams worked in separate governorates; the number of governorates assigned to an individual team varied from one to three, according to the sample size in the governorates. As a quality control measure, field editors regularly conducted reinterviews using a shortened version of the EDHS questionnaire. The results of the reinterview were compared to the responses in the original questionnaire and any mistakes were discussed with the interviewer. The teams also were closely supervised throughout the fieldwork by a fieldwork coordinator, two assistant fieldwork coordinators, and other senior staff.

As soon as the main data collection was completed in the first group of governorates, a random sample of up to 10 percent of the households was selected for reinterview as a quality control measure. Shorter versions of the 2005 EDHS questionnaires were prepared and used for the reinterviews. The visits to PSUs to conduct reinterviews also afforded an opportunity to make callbacks to complete interviews with households or individuals who were not available at the time of the original visit by the 2005 EDHS interviewers. Household or individual questionnaires in which there were significant errors that could not be corrected in the office were also assigned for callbacks. Special teams were organized to handle callbacks and reinterviews. During this phase of the survey, interviewers were not allowed to work in the governorate in which they had worked in the initial fieldwork. Callbacks and reinterviews began in mid-July 2005 and took about two weeks to complete.

## **Data Processing Activities**

*Office editing.* Staff from the central office were responsible for collecting questionnaires from the teams as soon as interviewing in a cluster was completed. Office editors reviewed questionnaires for consistency and completeness, and a few questions (e.g., occupation) were coded in the office prior to data entry. To provide feedback for the field teams, the office editors were instructed to report any problems detected while editing the questionnaires, which were reviewed by the senior staff. If serious errors were found in one or more questionnaires from a cluster, the supervisor of the team working in that cluster was notified and advised of the steps to be taken to avoid these problems in the future.

*Machine entry and editing.* Machine entry and editing began while interviewing teams were still in the field. The data from the questionnaires were entered and edited on microcomputers using the Census and Survey Processing System (CSPro), a software package for entering, editing, tabulating, and disseminating data from censuses and surveys.

Fifteen data entry personnel used twelve microcomputers to process the 2005 EDHS survey data. During the machine entry, 100 percent of each segment was reentered for verification. The data processing staff completed the entry and editing of data by the end of July 2005.

## **1.8 SURVEY COVERAGE**

Table 1.4 summarizes the outcome of the fieldwork for the 2005 EDHS by place of residence. The table shows that, during the main fieldwork and callback phases of the survey, out of 22,807 households selected for the 2005 EDHS, 22,211 households were found, and 21,972 households were successfully interviewed which represents a response rate of 99 percent.

A total of 19,565 women were identified as eligible to be interviewed. Out of these women, 19,474 were successfully interviewed, which represents a response rate of 99.5 percent. The household response rate exceeded 98 percent in all residential categories, and the response rate for eligible women exceeded 99 percent in all areas. In general, response rates were slightly higher in rural areas than urban areas.

Table 1.4 Sample results

Percent distribution of households and eligible women by the result of the interviews, and response rates, according to residence, Egypt 2005 Demographic and Health Survey

Interview result	Urban	Rural	Urban Governorates	Lower Egypt			Upper Egypt			Frontier Governorates	Total
				Total	Urban	Rural	Total	Urban	Rural		
<b>Households</b>											
Dwellings sampled	11,164	11,643	5,231	6,656	2,071	4,585	9,998	3,247	6,751	922	22,807
Households found	10,746	11,465	5,024	6,500	1,989	4,511	9,806	3,153	6,653	881	22,211
Households interviewed	10,555	11,417	4,923	6,454	1,965	4,489	9,723	3,094	6,629	872	21,972
Response rate	98.2	99.6	98.0	99.3	98.8	99.5	99.2	98.1	99.6	99.0	98.9
<b>Eligible women</b>											
Eligible women	8,147	11,418	3,568	5,918	1,560	4,358	9,177	2,486	6,691	902	19,565
Eligible women interviewed	8,095	11,379	3,538	5,903	1,553	4,350	9,132	2,471	6,661	901	19,474
Response rate	99.4	99.7	99.2	99.7	99.6	99.8	99.5	99.4	99.6	99.9	99.5