Sri Lanka

Demographic and Health Survey 1987

Department of Census and Statistics
Ministry of Plan Implementation

Sri Lanka
Demographic and Health Survey
1987

FOREWORD

The Demographic and Health Survey (DHS) is an important link in a chain of surveys carried out in Sri Lanka in the past decade or so. Having been designed as part of an international survey program and modelled on the lines of the well renowned World Fertility Survey (WFS) program, the DHS provides an exceptionally valuable source of data for the estimation of trends over time within Sri Lanka as well as for cross national comparison.

The survey focussed primarily on fertility, contraception and child mortality as did WFS but also measured several indicators of child health, particularly immunization coverage and nutrition status. The inclusion of health sector information has been welcome and fruitful, for improvement of nutrition status is a subject to which the Government of Sri Lanka has accorded high priority.

The DHS has been an exception in the series of demographic surveys in Sri Lanka for two reasons - firstly for the rapid speed with which it was completed and secondly for the rapid dissemination of its findings. The findings from a preliminary analysis have already been presented to those concerned at two seminars, and through two advanced publications before the publication of this survey Report. To see the findings of a survey being discussed and utilized is indeed a great satisfaction. We hope that the data would be further analyzed and put to pragmatic use in improving the situation of all people.

I must thank the United States Agency for International Development (USAID) for funding this survey, the Institute for Resource Development (Westinghouse) for implementing the survey program and the survey staff of the Department of census and statistics for their contribution to conducting the survey in Sri Lanka. My thanks are also due to the survey respondents for their excellent cooperation.

R.B.M. Korale
Survey Director and Director of
Census and Statistics.

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CHAPTER 1.

Background

1.1 History, geography, and economy

Sri Lanka, an island nation earlier known as Ceylon, has a recorded history that stretches back about 2500 years. Since the 15th century, the country experienced several foreign invasions and was ruled in succession by the Portuguese, the Dutch, and the British until 1948 when independence was finally gained.

Since independence, Sri Lanka has been primarily a welfare state, which has enabled her to make significant advances in social development. Of singular importance are the achievements in education and public health. Sri Lanka's social indicators such as literacy rates, infant mortality rates, life expectancy and total fertility rates are far better than most countries in the region or what one might expect on the basis of her national income. A factor of equal significance is the gradual disappearance of gender inequalities and the convergence of regional levels towards national averages.

Geographically, the island of Sri Lanka is situated off the southern coast of India between northern latitudes 5° 55' and 9° 50' and Eastern longitudes 79° 42' and 81° 52'. The island, an elongated pearl in shape, spans an area of 65,608 square kilometers, stretching a maximum length of 435 kilometers and a width of 225 kilometers.

Three distinct agro-climatic zones can be identified: 1) the wet zone which covers the south-western part of the island and receives the highest rainfall from two monsoons annually; 2) the dry zone which covers the entire northern and eastern parts of the island and is dependent for more than half of each year on surface water for irrigation; and 3) the intermediate zone which is a narrow strip between the wet and the dry zones on the side of the south-western hills. It is in the wet zone and the intermediate zone that the main commercial estate plantations of tea, rubber, coconut, and spices are situated. The tea estates are located largely in the south central hills and the adjacent southern and western low lands; the coconut estates are along the coastal belt; and the rubber estates go from the coast up to the central hills. The dry zone primarily supports paddy cultivation.

Sri Lanka's economy is predominantly agricultural and is heavily dependent on tea, rubber, and coconut for foreign exchange. In recent years, the government has attempted to diversify the economy in order to relieve the heavy dependence on export crops. The present government has adopted the policy of an open economy, encouraging foreign investment and promoting the growth of the private sector. A free trade zone has been set up in the suburbs to the north of the capitol city, Colombo. Rural development has also received high priority. One of the most important rural development efforts is the Mahaweli river diversion project which is intended to provide irrigation to the major part of the dry zone agricultural areas. Rural development is also being achieved through the establishment of integrated rural development projects in several of the less developed, largely rural districts.

1.2 Population

Sri Lanka possesses a wealth of demographic data upon which a considerable degree of reliance can be placed. The main sources of population information are the periodic censuses which started in 1871 and the system of vital registration which was established in 1887. In addition, a number of sample surveys carried out in the country in recent years provide an abundance of data on demographic, social, and economic characteristics of the people. Two of the most important of these, particularly for purposes of comparison with the Sri Lanka Demographic and Health Survey (SLDHS) are the Sri Lanka World Fertility Survey (SLWFS) in 1975 and the more recent Sri Lanka Contraceptive Prevalence Survey (SLCPS) conducted in 1982.

As of mid-1987, Sri Lanka had an estimated total population of 16.2 million. The rate of population growth has fluctuated during this century. Prior to World War II, the growth rate was between 0.9 and 1.7 percent. After 1945 and the dramatic decline in the death rate due to malaria control efforts, the growth rate rose to 2.8 percent. During the period from 1963 to 1971 the population growth rate levelled off and then declined to 1.7 percent during the period from 1971 to 1981. This recent decline in growth has been aided by two large emigration streams. One is employment oriented migration mainly to the Gulf countries. The second is the repatriation of Tamils of Indian origin. Had it not been for this net out migration, it has been estimated that the growth rate would have been 2.2 percent rather than the observed 1.7 percent during the decade of the 1970s (Dept. of Census and Statistics, 1985).

The distribution of population, as in most countries, is highly uneven. In general, more than half of the population is concentrated in the wet zone districts which account for only 20

percent of the total land area. Since about 1930, there has been a shift of population from the high density wet zone to the low density dry zone. This transfer was very pronounced in the 1970s. Investments in dry zone agriculture, colonization schemes, improvements in the irrigation facilities, and the eradication of malaria in the 1940s have probably been contributory factors which aided the population movements between the climatic zones.

The fertility levels in Sri Lanka have shown a steady decline since the end of the World War II. The crude birth rate fell from an average of 38.1 per 1000 during the period 1946-50 to 28.7 per 1000 in 1971-74. In the latter half of the 1970s, however, the crude birth rate showed signs of levelling off, but by the early 1980s the declining trend resumed, bringing the crude birth rate to an estimated 24.3 per 1000 by 1985.

Mortality levels have also declined over the past four decades. The crude death rate was approximately 22 per 1000 in 1945 but then dropped dramatically in the next five years to approximately 13 per 1000 in 1950. Since 1950, the death rate has continued to decline but at a slower pace. In 1985 the crude death rate was estimated to be 6.2 per 1000.

Sri Lanka is a multiracial country which consists of several ethnic groups. According to the 1981 census, Sinhalese constitute 74 percent of the population, Sri Lankan Tamils 12.7 percent, Indian Tamils 5.5 percent, Sri Lankan Moors 7.1 percent, and Burghers, Malays, and others 0.8 percent. Most Sinhalese are Buddhists, most Tamils are Hindus, Moors are Muslims, and Burghers are Christians.

1.3 Family planning policies and programmes

The impact of rapid population growth on economic and social development has long been recognized in Sri Lanka. In 1953, the Family Planning Association of Sri Lanka (FPASL), a nongovernmental organization, was established. By 1955, the Government provided a grant to the FPASL which was increased in subsequent years. Recognizing the importance of providing family planning services to all women in the reproductive ages, the Government entered into an agreement with the Royal Government of Sweden to arrange a pilot project in community based family planning services. This project demonstrated that it was possible to introduce contraceptive methods acceptable to the people. Consequently, the National Family Planning Programme was inaugurated in 1965 with direct involvement of the government and a view to reducing the crude birth rate to 25 per 1000 by the year 1976. To coordinate and direct the activities of the national programme, a Family Planning Bureau was established within the Ministry of Health in 1968 and later

renamed the Family Health Bureau (FHB) when the government sought to integrate family planning with maternal and child care services. The country's family planning program was further strengthened in 1973 when the United Nations Fund for Population Activities (UNFPA) provided assistance to improve the various supporting services essential for the successful implementation of the national family planning programme.

Besides the FPASL, there are several other non-governmental organizations involved with the provision of family planning services. Among these are the Sri Lanka Association for Voluntary Surgical Contraception (SLAVSC) established in 1974 and the Community Development Services (CDS) established in 1978.

A major thrust of the government's family planning program is to educate people about the effects unplanned population growth has on economic development as well as on the quality of life for individuals. It is also the Government's policy to provide a variety of family planning services to couples so that they can select a contraceptive method free from coercion or compulsion. In pursuance of this policy, the Government has established 25 District Population Committees, which are led by the Head of the district administration, and represented by the relevant ministries, departments, and field level officers, to implement and monitor the population policy in the 25 administrative districts of the country.

The family planning service for which there has been the highest demand is sterilization. The Government supports sterilization through an incentive scheme that provides acceptors with reimbursement of incidental expenses, travel costs, and lost income. The acceptance of modern temporary methods has been far lower than sterilization. The current focus of the Government, therefore, is on developing a system whereby the use of effective temporary methods acceptable to the population can be increased.

1.4   Health priorities and programmes

The health policy of the Government of Sri Lanka is to provide health care to the entire population so that all people can lead a socially and economically productive life. Government provides free health care services through primary health care facilities at the peripheral level and specialized and intensive care at leading hospitals. In the last four to five decades, the health care system has been expanded and strengthened. A network of public health nurses and midwives provide maternal and child health care to the vast majority of the rural population.

The current emphasis on immunization against common communicable diseases has been one of the most effective health programmes launched in recent years. The programme seeks to

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immunize all children against tuberculosis, poliomyelitis, diphtheria, whooping cough, tetanus, and measles. Within the integrated package of maternal and child care services, the promotion of breastfeeding and the monitoring of child nutritional status have also assumed high priority.

Besides specific health policies and actions, many other social developments have had a bearing on the promotion of health standards in Sri Lanka. The most important of these perhaps was the introduction of free education in the mid 1940s. The ensuing gradual but steady expansion of school enrolment and achievement of higher educational levels has likely been a major factor influencing reproductive behavior and child care practices. Additionally, the nationwide food distribution system has provided food security to the population as a whole. In recent years, the highest priority was given to local production of rice which has enabled the country to reach self sufficiency in this staple food. Other efforts designed to improve the rural infrastructure, such as construction of roads, community wells, latrines, and housing have affected rural health conditions and provided better access to health service outlets.

1.5 Objectives of the survey

The Sri Lanka Demographic and Health Survey has the following objectives:

1. To provide policymakers and administrators with current and accurate data on fertility, morbidity, family planning and selected indicators of health status which could be used for planning new strategies for the wellbeing of the population;

2. To provide data which can be used to analyze trends over time. The SLDHS examines many of the same fertility, mortality, and health issues that were addressed in earlier surveys, most notably the SLWFS and the more recent SLCPS; and

3. To add to the international body of data which can be used for comparative studies.

1.6 Survey sample design

On the basis of socio-economic and ecological criteria, and the experience of the SLWFS, nine zones were created. It was felt that some of the six SLWFS zones were too heterogenous and should be redrawn as shown in Figure 1.1 and described below:

Zone 1 - Colombo Metropolitan area consisting of
        SLWFS zone 1 and parts of zone 2.

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Figure 1.1 - SLDHS SAMPLE ZONES
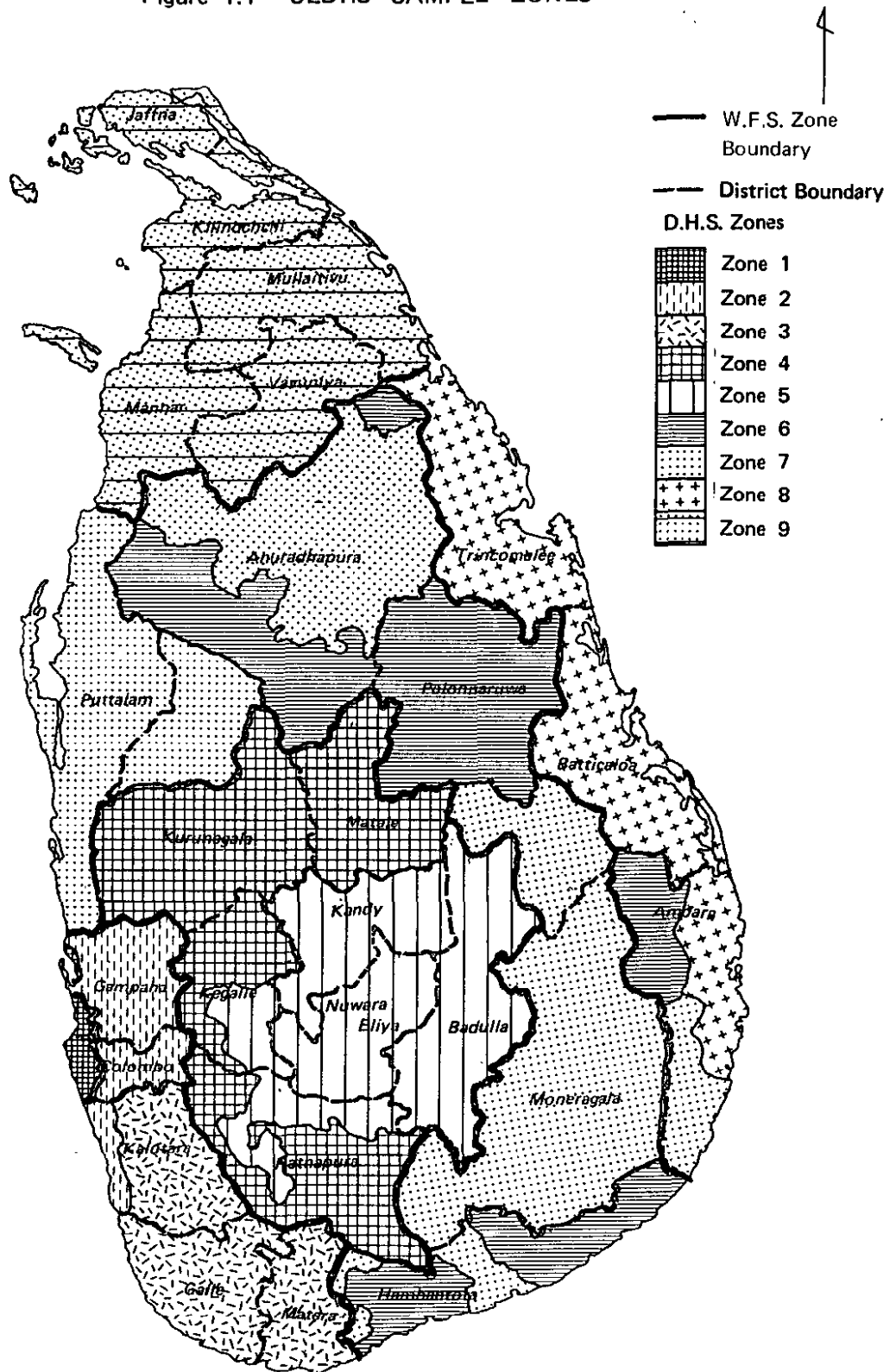
Zone 2 - Colombo feeder areas and Northern part of
           SLWFS zone 2.

Zone 3 - South Western coastal low lands
           corresponding to Southern part of SLWFS zone 2.

Zone 4 - Lower South Central hill country corresponding to
           Western and Southern part of SLWFS zone 6, excluding
           districts with a concentration of estates.

Zone 5 - South Central hill country corresponding to part of
           SLWFS zone 5 with a concentration of estates.

Zone 6 - Irrigated Dry Zone corresponding to SLWFS zone 3, with
           major or minor irrigation schemes.

Zone 7 - Rain fed Dry Zone covering the rest ofSLWFS zone 3.

Zone 8 - Eastern Coastal Belt, corresponding to SLWFS zone 4 (not
           included in SLDHS).

Zone 9 - Northern Province corresponding to SLWFS zone 5 (not
           included in SLDHS).

        The changes SLDHS made to the SLWFS zones were designed: a)
to separate the Colombo urban feeder areas from rural
hinterlands; b) to separate rural areas with predominantly
estate populations from other rural areas; and c) to
distinguish between irrigated dry zone areas which are new
settlements under development projects from those areas which
rely primarily on rains for cultivation.

        Although the survey originally planned to conduct interviews
in all nine zones, civil disturbances in zones 9 and 8 (the
Northern and Eastern provinces) prevented interviews from being
conducted there. These zones, which contain approximately 14
percent of the 1986 estimated population of Sri Lanka, have been
excluded from the SLDHS.

        With the exception of zone 5, the sample was allocated
equally between zones with an estimated target 900 completed
individual interviews per zone. Zone 5 was given a larger target
sample size of 1,350 to permit over sampling of the estate
plantation workers.

        In principle, the sample was designed to cover private
households in the areas sampled. The population residing in
institutions and institutional households was excluded. For the
detailed individual interview, the eligibility criteria were:
ever-married women aged 15 through 49 who slept in the household
the previous night.

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For the selection of area units, the sample frame was based on block statistics from the 1981 Census of Population and Housing. However, these figures were updated where possible on the basis of the work done in connection with a 1985-86 labour force survey. This applied in particular to newly settled areas with the development of irrigation schemes in the dry zone. For the final selection of housing units within ultimate area units, a special operation was undertaken before the survey to update household lists within selected census blocks.

The zones created by the SLDHS, which were designed to capture relatively homogeneous subgroups of the population, served as the primary strata. Each zone was further stratified into (up to) three strata: urban, rural, and estate areas. Further implicit stratification was achieved by ordering the sampling areas according to administrative and geographical location. Similar systematic sampling procedures were followed at all stages up to and including the selection of housing units.

The sampling of housing units was undertaken in two or three stages depending upon the stratum. In densely populated zones 1, 2, and 3, and in urban strata of all zones a three stage design was used:

1.   At the first stage, a stratified sample of Gram Savaka or equivalent areas (wards or estates) with probability proportional to size (PPS) was selected. The number of primary sampling units (PSIs) selected was 54 in zones 5 and 36 in each of the other zones. Within a given zone, the number to be selected in a stratum was allocated proportionately to the strata populations.

2.   Within each PSU, two census blocks were selected with PPS, systematically without replacement.

3.   The final stage consisted of the selection of the housing units in selected blocks with inverse PPS so as to yield a self weighting sample within each stratum.

For the main survey, there was no further sampling as all eligible women in each selected housing unit were taken into the sample. Also, for the anthropometric measurements, all children 3 through 36 months of eligible women were taken.

In the non-urban strata in zones 3 through 7, the only difference in procedures was that generally only one block was selected per PSU. This procedure effectively reduced the number of stages to two: blocks as the first stage and housing units as the second stage.

Since zones were allocated generally uniform sample sizes, the overall sampling fractions varied in inverse proportion to

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the zone population.   The overall sampling fractions were as follows for the various zones:

Zone		Estimated 1986 population in thousands	Overall sampling fraction x 10^3
1		1600	4.3
2		1830	3.5
3		2290	2.8
4		2700	2.4
5	estates	680	7.0
	Other strata	2030	2.3
6		1160	5.5
7		1630	3.9

The overall average sampling fraction is 3.95 per thousand. The sampling weights applied in the analysis are inversely proportional to the above fractions, with a further modification for household and individual non-response.   These weights are applied to all data presented in this report and are shown in Table 1.1.

The sample was designed to be self-weighting within strata as well as across strata within a given zone (with the exception of the estate area in zone 5 which was over sampled).

1.7 Survey organization and field work

The Demographic and Health Survey in Sri Lanka was implemented by the Department of Census and Statistics (DCS) of the Ministry of Plan Implementation in close collaboration with the Institute for Resource Development (IRD) /Westinghouse, USA. Funding for the survey was provided by the U.S. Agency for International Development.

The survey organization in Sri Lanka was headed by the Director of the Department of Census and Statistics.   A Deputy Director of the Department functioned as Project Manager and an Assistant Director as Assistant Project Manager.   Other DCS staff including two statisticians, statistical supporting staff, and administrative and secretarial staff worked during various stages of the survey.   IRD/Westinghouse provided technical collaboration through periodic consultant visits concerned with sample selection, questionnaire design, anthropometric measurements,

TABLE 1.1: Household and individual weights applied to SLDHS data, SLDHS 1987.

Zones	SLDHS strata	Inverse of sampling fraction	Adjustment for household non-response	Adjustment for individual non-response	Scaled individual weight	Scaled household weight
Zone 1	Urban	1/4.3	956/887	703/642	0.858937	0.810151
Zone 2	Urban	1/3.5	142/137	113/107	0.978745	0.957194
	Rural	1/3.5	117⁻,ı125	856/814	0.982068	0.964534
Zone 3	Urban	1/2.8	111/111	84/80	1.173562	1.154363
	Rural	1/2.8	863/848	601/594	1.150853	1.174782
	Estates	1/2.8	49/46	37/37	1.190571	1.229647
Zone 4	Urban	1/2.4	62/62	51/51	1.303958	1.346757
	Rural	1/2.4	1125/1103	904/889	1.352407	1.373618
	Estates	1/2.4	58/57	44/44	1.326835	1.370384
Zone 5	Urban	1/2.3	83/81	57/54	1.471707	1.440010
	Rural	1/2.3	769/724	570/533	1.545548	1.492658
	Estates	1/7.0	663/651	581/578	0.456756	0.470257
Zone 6	Urban	1/5.5	85/83	62/61	0.592263	0.601836
	Rural	1/5.5	800/771	620/591	0.619373	0.609780
Zone 7	Urban	1/3.9	27/27	16/16	0.802436	0.828773
	Rural	1/3.9	1001/955	806/774	0.875861	0.868693

data processing, and analysis.

The field staff for the survey were drawn from among Statistical Investigators of the DCS, the majority of whom had field experience in previous fertility surveys such as the SLWFS and SLCPS. Nine survey teams were formed. A team consisted of four to seven female interviewers and a supervisor for a total of 48 interviewers and 9 supervisors (5 female and 4 male). In addition, 18 measurers collected length and weight data from children 3 through 36 months of age. A measurer and assistant measurer accompanied each team of interviewers. The interviewers, supervisors, and measurers were trained in January 1987 for 10 days. The measurers were given a standardization test by an experienced nutritionist immediately following their training and again midway through field data collection.

The training for the interviewers was conducted over a period of two weeks and consisted primarily of role playing sessions and other exercises deigned to familiarize them with the questionnaire. In addition, each interviewer completed at least three practice interviews in the field. All the supervisors had previously been involved with the SLWFS and/or the SLCPS. Among

the interviewers, about three-fourths had experience conducting interviews for SLWFS and/or SLCPS. During the first week of data collection, all new interviewers were teamed with an experienced interviewer and two questionnaires were completed for each respondent. The questionnaire from the new interviewer was then compared against the questionnaire completed by the experienced person and necessary corrections made. This procedure provided additional on the job training for new interviewers and helped to build their confidence.

The training of heights and weights measurers and assistants was carried out with special care as this was the first experience with anthropometric measurements for the survey staff. The training was conducted by a specialist from IRD Westinghouse and followed guidelines developed by the United Nations (United Nations Department of Technical Co-operation for Development Statistical Office, New York 1986).

The 18 measurers and assistants participated in the relevant training sessions for the interviewers. In addition, for over a week, they received practical instruction outside the classroom in the techniques of taking accurate height and weight measurements of children. Practice sessions were conducted at two children's homes in Colombo. At the completion of the training period all measurers were given a test which consisted of all trainees and the supervisor measuring a group of 10 children twice. The measurements were graded for precision (the ability to record the same measurement twice on the same child) and for accuracy (the closeness of the reading to that of the supervisor). One of the measurers failed to pass the test and was assigned to other survey duties. To ensure that standards were maintained throughout the field work, the test was readministered midway through field work. Analysis of the test data indicated that 55 percent of the measurers overestimated length, 29 percent underestimated and 16 percent showed no variation from the supervisor's measurements. The average error among those who underestimated length was 2.7 millimeters. The average error among those who overestimated length was 1.9 millimeters. During the test, 91 percent of the children were measured to within half a centimeter of the supervisor's measurement.

For the purpose of coordinating the field work and implementing quality control procedures, five field coordinators were appointed. The coordinators visited the interviewers in the field and reviewed questionnaires completed by each interviewer both at the beginning and midstream of field work.

Data collection began January 18, 1987, and was essentially completed by the end of March except for a few areas which began late and were completed by May. Each questionnaire was edited in the field during the evening following the interview. In

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addition, all questionnaires were further reviewed and edited in Colombo. Data were entered onto microcomputers starting just two weeks after the commencement of field work. The ISSA (Integrated System for Survey Analysis) software package of programs developed by IRD/Westinghouse was used for data entry, machine editing, and tabulation. An especially effective procedure for correcting errors and inconsistencies detected during office editing and data entry was to relay information about problems in a questionnaire to the interviewers while they were still in the field. In most cases the problem could be corrected by going back to a respondent. As a result of this procedure, field errors diminished considerably with time and the volume of editing was reduced to a minimal level.

All survey activities were completed on schedule and within a relatively short period of time from October 1986 to March 1988. The calender of activities is shown below:

Survey design	Oct 1986
Questionnaire design and translation	Nov 1986
Preparation of manuals	Oct to Nov 1986
Pretest of questionnaires	Nov 1986
Selection of field staff	Dec 1986
Questionnaire and manual printing	Dec 1986
Supervisor, interviewer, and measurers training	Jan 1987
Field work	Jan to April 1987
Data processing and editing	Feb to May 1987
Tabulations	July to August 1987
Preparation of preliminary report	August 1987
Preparation of draft final report	September to Nov 1987
Seminar on principal findings	November 1987
Preparation of final report	Dec 1987 to March 1988

TABLE 1.2:   Percent distribution of the female population
             by age from all women in the 1987 SLDHS
             household sample, and from the 1984 estimated
             female population for all Sri Lanka.

| AGE GROUPS | PERCENT DISTRIBUTION OF FEMALES | |
	All Sri Lanka 1984 estimate*	1987 SLDHS Households
00-04	12.5	9.7
05-09	11.4	11.5
10-14	11.3	11.0
15-19	10.9	10.7
20-24	10.4	10.0
25-29	8.7	8.4
30-34	7.6	7.5
35-39	5.7	6.8
40-44	4.6	5.1
45-49	4.1	3.6
50-54	3.6	4.5
55-59	2.8	3.3
60-64	2.2	2.3
65+	4.2	5.5
Percent total	100	100
N=	7,648,000	20,232.4**

*   Source: Department of Census and Statistics, Statistical
             Abstract of the Democratic Socialist Republic
             of Sri Lanka, 1985, Colombo, Sri Lanka, 1987.

** Weighted number of females in SLDHS households.

1.8   The SLDHS questionnaire and respondents

     The Sri Lanka Demographic and Health Survey used two
questionnaires each of which was pretested. The first, called
the Household Questionnaire, was used to list all usual household
members and any visitors who slept in the household the preceding
night.   For each person listed, information on age, sex, and
marital status and whether or not he/she slept in the household
the previous night was recorded.   From this list eligible
respondents were selected for interview.   An eligible respondent
is defined as a woman currently married, divorced, separated, or
widowed between the ages of 15 and 49 who slept in the household
the previous night.

     Table 1.2 compares the SLDHS age distribution of all women
identified through the Household Questionnaire with the age

distribution of the 1984 estimated female population in Sri Lanka. Among women aged 15 through 49, the SLDHS age distribution is almost identical with the all Sri Lanka age distribution upto age 35. In the age categories 35-39 and 40-44, the percent of women in the SLDHS sample is higher than the percent in the all Sri Lanka 1984 estimate, but in the category 45-49 the percent of women in the SLDHS sample is slightly lower.

The second or Individual Questionnaire was administered to each eligible respondent. On the average, an individual interview took approximately 35 to 40 minutes. The Individual Questionnaire consisted of nine sections:

1. Respondents background

2. Birth history - dates of all live births and infant and child deaths

3. Contraception - knowledge, ever use, current use and a detailed history of inter birth use in the last 5 years

4. Child health - immunization status, episodes of diarrhea, breastfeeding, the use of supplementary foods, prenatal care, and assistance at delivery

5. Marriage and migration

6. Fertility preferences

7. Husband's background and respondent's work

8. Socio-economic indicators

9. Length and weight - measurements of all children 3 through 36 months.

More than in similar fertility and family planning surveys conducted in the past, the SLDHS devoted considerable time and attention to obtaining information on the health status of mothers and children. In addition to many health related questions, anthropometric length and weight measurements were taken on all children 3 months through 36 months.

The results from the Household and Individual Questionnaires are shown in Table 1.3. A total of 8,119 households were listed in seven zones. Not all of these turned out to be valid households in the field and the completion rate (response rate) at the household level was 96.3 percent. From these households, 6,170 eligible respondents were identified and interviews were completed among 5,865 ever-married women for a response rate of 95.1 percent.

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It is important to note once again that the districts in the northern and eastern portions of the country were not covered by the SLDHS because of civil disturbances. Whenever comparisons are made between the SLDHS and the earlier SLWFS and SLCPS, the differences in areas covered by the surveys should be kept in mind.

1.9 Background Variables

The survey's primary findings concerning fertility, contraception, fertility preferences, child mortality, and health are presented in the following chapters. The major background

TABLE 1.3: Results of SLDHS household and individual interviews by sector, SLDHS 1987.

Result of Interview	All sampled areas	Colombo	Other urban areas	Rural areas	Estates
Household Interviews					
Completed household interviews	94.5	91.4	95.4	94.7	95.7
No competent respondent at home	1.4	2.5	1.1	1.4	0.4
Head of household absent	0.4	0.2	0.2	0.3	0.9
Refused interview	0.04	0.2	0.0	0.0	0.1
*Dwelling vacant	1.3	1.0	1.9	1.1	2.5
*Dwelling destroyed	0.6	0.5	1.0	0.6	0.0
Dwelling not found	0.5	1.1	0.2	0.5	0.4
Other	1.3	3.1	0.2	1.3	0.0
TOTAL PERCENT	100	100	100	100	100
HOUSEHOLD RESPONSE RATE	96.3	92.8	98.2	96.3	98.2
UNWEIGHTED NUMBER OF HOUSEHOLDS	8,119	972	525	5,834	788
Individual Interviews					
Completed individual interviews	95.1	89.9	95.8	95.2	99.6
Respondent not at home	3.6	7.1	3.6	3.5	0.5
Refused interview	0.2	1.3	0.0	0.1	0.0
Partly completed	0.1	0.1	0.0	0.1	0.0
Other	1.1	1.5	0.5	1.2	0.0
TOTAL PERCENT	100	100	100	100	100
TOTAL UNWEIGHTED NUMBER OF ELIGIBLE WOMEN	6,170	714	385	4,409	662

* Dwelling vacant and dwelling destroyed are not included in the calculations the response rate.

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variables used throughout this report are age, parity, sector, zone, and education. Each of these variables is briefly described below:

AGE. Age is computed from the year and month of birth as reported by the respondent. Among all women interviewed, 90 percent were able to give both the year and month of birth and this date was almost always supported with some documentary evidence such as a National Identity Card or occasionally a birth certificate. Six percent of the women were able to give only the year of birth but not the month and 4 percent were unable to give either the year or month of birth. Whenever the year or month of birth is missing, an imputed age has been assigned.

PARITY. The information on parity was collected using a series of questions to ascertain the number of children living with the mother, living elsewhere, or dead. Each series of questions was asked separately for sons and daughters. The interviewer totalled the children in all 3 categories and then verified with the woman whether the total was correct. Any discrepancy was resolved immediately through probing and by checking against the birth history.

SECTOR. The variable sector identifies the respondent's place of residence. Four categories were used: Colombo metropolitan, other urban,' rural, and estate. The metropolitan Colombo area was separated from the other urban areas because of its distinction as the capitol city. An urban area is one which is defined for administrative purposes as being under the administration of a Municipal Council or an Urban Council. Estates are the plantations of tea, rubber and coconut. The remaining areas fall into the rural category.

ZONE. Initially, nine fairly homogeneous geographical zones were created for the purpose of providing estimates in the SLDHS. Because of civil disturbances, only seven zones could be included in the survey.

EDUCATION. The level of education was defined in terms of the grades completed in school. Four major groups were identified: no schooling or never attended formal school, primary (grades 1 through 5), secondary (grades 6 through 9), and more than secondary (grades 10 and above).

The relationship between education of respondent and the other six background variables is shown in Table 1.4. A unique achievement of Sri Lanka is the relatively high proportion of women who have some education compared with other countries in the South Asia region. Only 11 percent of the SLDHS sample of ever-married women 15-49 have no education. Many of these women are on the estates where about 44 percent have no education. In other rural areas, approximately 10 percent of the ever-married

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TABLE 1.4: Percent distribution of ever-married women aged 15-49 by level
of education according to selected background characteristics,
SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	EDUCATION					All Women	
	No Education	Primary	Secondary	More than Secondary	Percent Total	Weighted Number	Unweighted Number
AGE							
15-19	15.8	24.1	54.8	5.3	100.0	133.9	139.0
20-24	11.6	29.9	36.0	22.6	100.0	723.3	723.0
25-29	7.7	26.7	41.1	24.5	100.0	1112.7	1126.0
30-34	8.4	25.8	40.4	25.5	100.0	1203.4	1185.0
35-39	9.8	28.8	35.3	26.0	100.0	1130.7	1133.0
40-44	13.9	34.4	30.4	21.3	100.0	921.9	925.0
45-49	19.8	37.6	26.1	16.5	100.0	638.7	634.0
PARITY							
0	10.4	20.4	37.5	31.7	100.0	517.0	510.0
1	7.8	19.1	38.7	34.5	100.0	1042.9	1038.0
2	8.9	24.2	37.7	29.1	100.0	1340.2	1344.0
3	8.8	30.8	39.0	21.4	100.0	1165.6	1167.0
4 +	16.7	41.8	31.4	10.1	100.0	1798.8	1806.0
SECTOR							
Colombo City	5.3	19.2	45.5	30.1	100.0	551.4	642.0
Other Urban	6.4	20.1	41.1	32.4	100.0	393.6	369.0
Rural	9.7	30.9	36.6	22.7	100.0	4553.0	4195.0
Estates	43.6	40.4	11.3	4.7	100.0	366.4	659.0
ZONE							
Zone 1	5.3	19.2	45.5	30.1	100.0	551.4	642.0
Zone 2	3.7	19.1	45.9	31.3	100.0	904.1	921.0
Zone 3	9.2	31.5	35.0	24.3	100.0	821.5	711.0.
Zone 4	10.2	32.4	35.5	21.8	100.0	1327.2	984.0
Zone 5	21.6	30.4	28.4	19.7	100.0	1167.3	1165.0
Zone 6	10.5	33.9	33.7	21.9	100.0	402.2	652.0
Zone 7	12.9	40.6	33.5	13.0	100.0	690.8	790.0
Total	11.2	29.7	36.2	22.9	100.0	5864.5	5865.0

women have no education.

Table 1.5 provides further information on basic background
variables and also shows the weighted and unweighted number of
respondents for each category of the variable. With the
exception of religion, these background variables are used
throughout this report. Religion has not been used because the
exclusion of the northern and eastern provinces resulted in an
under representation of Hindus and Muslims.

TABLE 1.5:   Percent distribution of ever-married
              women by selected background
              characteristics, SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	Percent	Number of Respondents	
		Weighted	Unweighted
AGE			
15-19	2.3	133.9	139.0
20-24	12.3	723.3	723.0
25-29	19.0	1112.7	1126.0
30-34	20.5	1203.4	1185.0
35-39	19.3	1130.7	1133.0
40-44	15.7	921.9	925.0
45-49	10.9	638.7	634.0
PARITY			
0	8.8	517.0	510.0
1	17.8	1042.9	1038.0
2	22.9	1340.2	1344.0
3	19.9	1165.6	1167.0
4	12.8	748.0	761.0
5	8.5	496.6	487.0
6+	9.5	554.2	558.0
EDUCATION			
No education	11.2	657.2	737.0
Primary	29.7	1739.1	1777.0
Secondary	36.2	2122.5	2062.0
More than sec.	22.9	1345.6	1289.0
RELIGION			
Buddhist	81.9	4802.5	4554.0
Hindu	5.8	338.1	546.0
Muslim	4.8	280.4	259.0
Catholic	6.7	390.2	448.0
Other Christian	0.8	45.3	51.0
Other	0.1	5.6	5.0
SECTOR			
Colombo	9.4	551.4	642.0
Other Urban	6.7	393.6	369.0
Rural	77.6	4553.0	4195.0
Estates	6.2	366.4	659.0
ZONE			
Zone 1	9.4	551.4	642.0
Zone 2	15.4	904.1	921.0
Zone 3	14.0	821.5	711.0
Zone 4	22.6	1327.2	984.0
Zone 5	19.9	1167.3	1165.0
Zone 6	6.9	402.2	652.0
Zone 7	11.8	690.8	790.0
Total	100	5864.5	5865.0

CHAPTER 2.

Nuptiality And Exposure to Risk of Conception

2.1 Current marital status

Current marital status is of basic importance in its own right and in the determination of many fertility and contraceptive prevalence indicators discussed later in this report. The denominator for some of these indicators is all ever-married women, while for others it is currently married women.

The SLDHS identified five categories of current marital status: currently married and living together, currently married but not living together, widowed, divorced, and separated. The term married is intended to mean legal or customary union. Living together outside such legal or customary marriages is socially unacceptable and is almost non-existent in Sri Lanka; hence, there is no marital status category such as "living together" that might be found in other countries.

"Currently married" are those women who are married and their husbands are at present either living with them or are temporarily away for reasons such as employment. Since short term spousal separations have been noticed in recent years due to migration abroad and to other parts of the country, SLDHS identified two categories of currently married; one "living with the husband," and the other "not living together with the husband." Divorce is complete dissolution of marriage, while separation is legal separation which does not permit either party to remarry.

The current marital status distribution of the SLDHS sample is given in Table 2.1. Of the total sample, 92.8 percent are currently married and the proportion of women whose husbands are away is only 1.4 percent. Marital dissolution by divorce is extremely low at 0.3 percent, but separation is higher at 3.2 percent and almost as high as that caused by widowhood which is 3.8 percent.

Widowhood increases with age to a level of 12 percent among women 45-49 years. Divorce too tends to occur at older ages past 30 years but within any age group is less than 1 percent.

TABLE 2.1: Percent distribution of ever-married women aged 15-49 according to age by current marital status, SLDHS 1987.

CURRENT AGE	CURRENT MARITAL STATUS						
	Currently married living together	Currently married not living together	Widowed	Divorced	Separated	Percent total	Weighted N
15-19	93.1	2.1	1.2	0.0	3.6	100	134
20-24	95.1	0.9	1.1	0.1	2.7	100	723
25-29	94.8	1.4	1.0	0.0	2.8	100	1113
30-34	93.8	1.4	2.0	0.3	2.5	100	1203
35-39	90.4	1.9	3.6	0.2	3.9	100	1131
40-44	88.3	1.0	6.6	0.7	3.4	100	922
45-49	82.1	1.8	11.9	0.3	3.9	100	639
Total	91.4	1.4	3.8	0.3	3.2	100	5865

Separation tends to be slightly higher among older age groups but like divorce, the differences between age groups are not outstanding.

2.2 Age at first union

The age at first marriage is an important social event and demographic indicator of fertility since child-bearing in Sri Lanka takes place predominantly within marriage. A rising age at marriage was one of the most important determinants of the fertility decline that commenced in Sri Lanka in the 1950s.

One approach to identifying trends in age at marriage from the SLDHS survey data is to examine the experience of different cohorts. For all women in the sampled households (ever married as well as never married women), Table 2.2 presents the percent distribution by age at first marriage according to current age. Also presented in this table is the median age at first marriage for cohorts aged 25 and older. The median is not shown for the two youngest cohorts because in each of these age groups over fifty percent of the women have not been married.

Table 2.2 suggests that women who are currently between the ages of 25 and 40 married at an older age than women who are currently aged 40 and above. For example, the median age at first marriage among younger cohorts is approximately 23 years. This is two to three years higher than the median age at first marriage among women who are currently 40 and above. However, the median for the older cohorts needs to be viewed with some caution because these women may tend to underreport their age at marriage.

A summary measure derived from Table 2.2 that is useful for comparing cohort trends is the percent of women who have married

by a certain age in all cohorts who have passed that age. For example, the proportion of women married by age 20 in the age cohorts 20-24, 25-29, 30-34, 35-39 has remained approximately the same at 30 percent. On the other hand, among the cohorts aged 40-44 and 45-49, the proportion married by age 20 is much higher at 41 and 50 percent respectively. Since age at marriage in Sri Lanka tends to be high, it is more meaningful to examine the proportions married at an older age. When the pivotal age is shifted to 25, the proportion married before this age declines steadily from 76 percent for the 45-49 group to 61 percent for the 25-29 age cohort. More women in the younger cohorts appear to have delayed marriage than women in older cohorts.

Another way of estimating trends in the age at marriage is by comparing data from earlier censuses and surveys. Table 2.3 suggests that the age at marriage has increased in recent years. The table shows the percent of women who have ever been married

TABLE 2.2: Percent distribution of all ever-married and never married women (from household schedule)* according to current age by age at first union and median age at first union according to current age, SLDHS 1987.

| CURRENT AGE | Never married | | | | AGE AT FIRST UNION | | | | | Total Percent | Weighted N | Median Age ** |
		< 15	15-17	18-19	20-21	22-24	25-27	28-29	30+			
15-19	92.7	0.6	5.1	1.6	0.0	0.0	0.0	0.0	0.0	100	1824	***
20-24	57.1	1.1	12.8	14.3	10.5	4.3	0.0	0.0	0.0	100	1685	***
25-29	30.0	2.9	11.5	15.9	14.6	16.0	8.5	0.7	0.0	100	1589	23.1
30-34	14.2	2.3	11.4	15.2	16.8	18.1	12.2	6.0	3.8	100	1403	22.6
35-39	9.1	4.2	13.4	12.6	12.8	20.0	12.7	7.1	8.1	100	1243	23.1
40-44	6.2	8.0	18.4	14.3	13.5	16.3	11.1	3.8	8.4	100	983	21.4
45-49	3.5	11.4	22.1	16.3	13.1	13.2	9.0	5.0	6.4	100	662	20.0
Total	37.5	3.4	12.2	12.2	10.9	11.5	6.7	2.7	3.0	100	9389	***

* All women (taken from the household schedule) includes women ever-married, currently married, and never married.

** Defined as the age by which one-half of all women have ever-married.

*** Omitted due to censoring.

among five year age cohorts for the censuses of 1963, 1971, and 1981 and the 1975 SLWFS and 1987 SLDHS. The table also shows the singulate mean age of marriage (SMAM). The SMAM is a period rather than a cohort measure. It can be interpreted as the mean age of marriage among women who marry before the age of 50.

The singulate mean age at marriage increased from 22 years in 1963 to 25 years in 1975. Since 1975, the SMAM has remained relatively constant at about 25 years. Similarly the proportion married among the three youngest cohorts aged 15 though 29 declined between the 1963 census and the 1975 SLWFS but then increased slightly or at least levelled off in the 1980s.

TABLE 2.3: Proportion of all women in ·five year age groups who have ever-married, and singulate mean age at marriage (SMAM), 1963 census, 1971 census, 1975 SLWFS, 1981 census, and 1987 SLDHS.

| AGE GROUP | PROPORTION EVER-MARRIED | | | | |
	1963 Census	1971 Census	1975 SLWFS	1981 Census	1987 SLDHS
15-19	14.8	10.6	6.8	9.9	7.3
20-24	57.6	46.8	39.4	44.7	42.9
25-29	81.0	75.4	68.1	69.6	70.0
30-34	88.6	89.1	86.3	84.2	85.8
35-39	89.8	94.2	94.2	91.1	90.9
40-44	86.1	95.3	95.4	94.1	93.8
45-49	81.6	95.9	97.9	95.5	96.5
SMAM	22.1	23.5	25.1	24.4	24.8

Trends and differentials in the median age at marriage in 1987 among all women are shown in Table 2.4. The highest median age at marriage is 26.5 years among the cohort aged 25-29 living in urban areas other than Colombo. Indeed, across all age groups, women living in other urban areas have the highest median age at marriage, except for the age group 45-49. Conversely, the lowest median age of marriage for all cohorts is among women living on the estates and women in Zones 6 and 7.

2.3 Current exposure status

Women who are currently exposed to the risk of pregnancy are the potential client group for family planning programs. These women constitute the denominator used by many family planning programmes to estimate measures such as unmet need for contraception. The SLDHS defined "exposed to the risk of pregnancy" as women who: a) menstruated in the last six weeks and b) had sex in the last four weeks and c) have an open birth interval of less than five years or, if longer, d) used contraception during the interval. In other words, these are women who are sexually active, presumably ovulating, and presumably fecund. This is a more rigid definition than adopted in previous fertility and contraceptive surveys which classified women as "exposed" solely on the basis of the woman's perception of her ability to conceive. The SLDHS included more questions related to exposure which enabled the collection of greater detail regarding a woman's ability to conceive. These questions focussed on the duration of time since last sexual intercourse

and since last menstruation. In addition, comprehensive probing on the use of contraception during the last 5 years was undertaken.

The data from the SLDHS on exposure are presented in Table 2.5. The categories in this table are hierarchical in the order presented. That is, first, pregnant women are selected from among all currently married women aged 15-49. Nonpregnant women are then checked to see whether they are amenorrheic. Those not amenorrheic are then checked to see if they are infecund (i.e.

TABLE 2.4: Median age at first union among all ever-married women (from household schedule)* aged 25 - 49 years by sector and zone, SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	CURRENT AGE					All Ages 25-49
	25-29	30-34	35-39	40-44	45-49	
SECTOR						
Colombo City	24.6	24.0	24.5	22.5	21.9	23.8
Other Urban	26.5	25.2	24.9	24.8	21.4	24.9
Rural	23.1	22.4	22.9	20.9	20.0	22.1
Estates	20.4	21.6	20.9	20.1	19.1	20.6
ZONE						
Zone 1	24.6	24.0	24.5	22.5	21.9	23.8
Zone 2	23.9	22.9	24.4	23.3	23.6	23.7
Zone 3	24.1	25.0	24.8	24.8	23.0	24.6
Zone 4	23.1	22.6	22.7	19.1	19.4	21.7
Zone 5	22.6	22.5	21.9	21.2	19.1	21.8
Zone 6	21.7	21.5	21.1	18.8	18.2	20.7
Zone 7	21.3	20.3	20.5	18.6	17.4	19.9
All Groups	23.1	22.6	23.1	21.4	20.0	22.4

* All women (taken from the household schedule) includes women ever-married, currently married, and never married.

TABLE 2.5: Percent distribution of currently married women aged 15-49 by exposure to conception status according to current age, SLDHS 1987.

EXPOSURE TO CONCEPTION STATUS	CURRENT AGE							TOTAL
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Currently pregnant	30.8	16.0	10.6	7.0	2.5	0.7	0.1	6.9
Amenorrheic	16.0	17.5	14.6	9.3	5.2	2.2	0.1	8.8
Infecund *	0.0	0.9	2.6	6.0	9.2	16.4	32.9	9.4
No sex in last 4 weeks	5.8	9.5	9.9	10.3	13.3	21.0	26.0	13.8
No period in last 6 wks.	0.0	4.3	3.4	1.4	1.9	2.7	9.4	3.2
EXPOSED WOMEN**								
Using sterilization	1.0	5.0	16.3	29.1	35.1	30.8	15.7	22.9
Using modern temporary	8.3	14.0	13.1	9.5	6.1	4.8	3.8	8.8
Using traditional	6.1	13.2	14.7	17.2	19.4	15.6	8.0	15.2
Not contra-cepting	32.0	19.7	15.0	10.1	7.3	5.8	4.0	11.0
TOTAL %	100	100	100	100	100	100	100	100
WEIGHTED N =	127	695	1071	1146	1044	824	535	5442

* Has a non-contraceptive open interval of at least five years

** Exposed to the risk of pregnancy is the sum of the percent using sterilization, modern methods, traditional methods or not using any method. It is defined as women who have:

-- menstruated in last six weeks and
-- had sex in last four weeks and
-- an open interval of less than five years or, if longer used contraception during the interval.

whether they have had a non-contraceptive open interval of at least five years). Women who are found to be fecund are checked to see if they report having sexual intercourse in the last month, a category that will include postpartum abstinence. Women who have had sex in the last month are then checked to see if they reported having a menstrual period in the last six weeks, a group that could include some menopausal women not already classified in the preceding categories as well as premenarchial women, and women who have just become pregnant but do not recognize their condition. All remaining women are regarded as exposed.

Exposure as used here is a theoretical concept. Many of these exposed women are protected through the use of some form of contraception. Because of this, Table 2.5 checks the contraceptive status of the exposed group and lists those using either male or female sterilization, modern temporary methods, traditional methods, or no method. Figure 2.1 graphically shows the percent of exposed women protected through the use of contraception.

It is important to note that among the women classified as exposed, a high proportion are using either sterilization, a modern temporary method of contraception, or a traditional method. Also, because of the hierarchial sorting procedure used to create Table 2.5, there can be some overlap between categories. For example, a woman could be classified in the infecund category who also did not have sex in the past four weeks, or who did not have a period in the last six weeks. And, a woman could be classified as not having had sex in the last four weeks or a period in the last six weeks who is also using sterilization. Thus the order of the category in the table will affect the frequency of "no sex in the last 4 weeks," "no period in the last 6 weeks," "using sterilization," "using modern temporary," and "using traditionals." The categories pregnant, amenorrheic, infecund, and exposed are mutually exclusive.

The prevalence of pregnancy is 6.9 percent. These are confirmed pregnancies based on a report by a woman which is then checked for consistency against her last date of menstruation. However, some pregnancies of very early duration may not have been confirmed and hence not reported. Since the proportion of nonpregnant women who had no period in the last six weeks before interview was 3.2 percent, the level of unreported early pregnancies probably do not exceed this figure. The reported 6.9 percent of women who are currently pregnant represents a decline from the 10 percent reported by SLWFS and the 9 percent reported by SLCPS, which is in keeping with the observed declines in fertility discussed in chapter 3.

Pregnancy rates are higher among the youngest age groups, particularly women below age 30. A high proportion of

Figure 2.1
Exposure to the Risk of Pregnancy
Among Currently Married Women Aged 15–49

Pregnant
6.9%

Amenorrheic
8.8%

Infecund
9.4%

No Sex
In Last
4 Weeks 13.8%

No Period
In Last 6 Weeks 3.2%

Exposed
58.0%

Not Using a Method
11.0%

Traditional Methods
15.2%

Modern Methods
8.8%

Sterilized
23.0%

All Currently Married Women

Women Exposed
to the Risk of Pregnancy

Sri Lanka DHS 1987
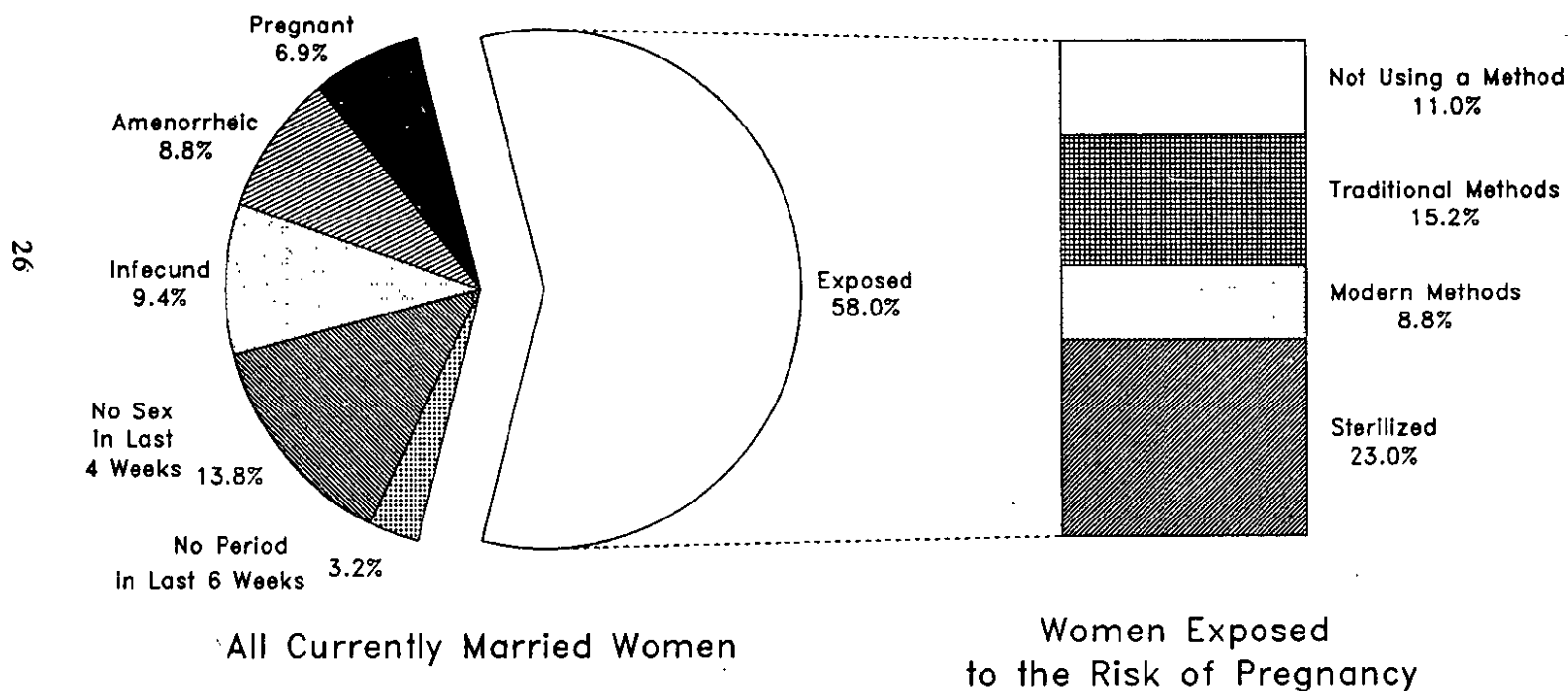
pregnancies among the youngest age groups and relatively few among those over age 30 suggests that women in Sri Lanka not only are having smaller families, as will be discussed in Chapter 3, but also are completing the process of childbearing earlier.

The overall level of infecundity in the sample is 9.4 percent. This is a lower proportion than the self reported infecundity level of 14 percent in the SLWFS. As expected. infecundity is highest (32.9 percent) among women 45-49 years and then shows a monotonic decline among younger age groups.

Among all currently married women, 57.9 percent are potentially exposed to conception but a significant proportion of these exposed women are using some form of contraception. Indeed, only 11 percent of all women are both exposed and not currently using any method of contraception. Most of these women are in the younger age categories and are probably seeking pregnancy. There are only a relatively few older women who are exposed and not currently using any method of contraception.

2.4 Breastfeeding, amenorrhea, abstinence

With the establishment of fertility surveys, and the improved possibilities for making more indepth inquiries, demographers have increasingly turned their attention to proximate determinants of fertility such as exposure to risk of conception. The SLDHS collected detailed information on postpartum abstinence and postpartum amenorrhea which is prolonged through breastfeeding.

The proportion of births in the last 36 months that are being breastfed or whose mothers are still amenorrheic, abstaining, or insusceptible to conception is shown in Table 2.6. Insusceptibility is defined as the period before mothers resume both menstruation and sexual intercourse after the birth of a child.

The proportion of children whose mothers are currently breastfeeding, amenorrheic, and abstaining from sexual relations is highest during the first two months after a child is born. Among children born in the past two months, 98 percent of the mothers were breastfeeding, 87 percent were amenorrheic, and 93 percent were abstaining from sex. Breastfeeding continues for a relatively long period in Sri Lanka and fully 81 percent of children born 10-11 months ago are still breastfed. Beyond the first year, however, there is a rapid increase in weaning and by the end of the second year less than 40 percent are still being breastfed.

Postpartum amenorrhea combined with postpartum abstinence from sex leads to a relatively high proportion of women who are

TABLE 2.6: Proportion of births in the last 36 months who are being breastfed and whose mothers are still amenorrheic, abstaining, or insusceptible by number of months since birth, SLDHS 1987.

MONTHS SINCE BIRTH	Breast-feeding	Amenorr-heic	Abstaining	Insusceptible*	Weighted number of births
< 2	97.5	87.4	92.9	97.7	108
2-3	93.6	74.9	75.1	90.8	143
4-5	91.6	50.9	38.0	65.0	137
6-7	80.0	36.0	23.7	45.1	131
8-9	85.6	37.0	21.7	46.5	114
10-11	80.8	32.4	8.1	34.7	132
12-13	71.9	17.3	13.3	26.9	128
14-15	66.5	14.3	8.8	20.7	149
16-17	69.3	14.5	6.2	18.6	135
18-19	59.0	6.6	2.8	8.5	124
20-21	48.4	3.6	7.2	10.5	138
22-23	38.8	2.2	3.9	6.1	121
24-25	40.7	1.0	5.2	6.2	133
26-27	37.8	3.1	0.6	3.1	156
28-29	34.1	1.3	2.0	3.4	119
30-31	24.6	0.0	3.5	3.5	107
32-33	27.7	0.0	3.6	3.6	135
34-35	20.2	0.0	0.8	0.8	150
Total	59.0	20.8	17.1	26.8	2358
Median	20.2	4.6	3.9	6.0	

insusceptible to conception. Indeed, approximately one third of the mothers who delivered 10-11 months prior to interview were insusceptible to conception because of amenorrhea or abstinence.

Table 2.7 examines differentials in breastfeeding, amenorrhea, abstinence, and insusceptibility. A current status estimate of the mean is used in this table and is calculated by dividing the prevalence of a condition (breastfeeding, amenorrhea, etc) by the incidence of the condition. Prevalence is defined as the number of children whose mothers are breastfeeding, amenorrheic, etc. at the time of the survey. Ignoring the slight discrepancy caused by multiple births, the number of children being breastfed is the same as the number of breastfeeding mothers.

Incidence is defined as the average number of births per month. This average is estimated by summing the number of births over the last 36 months to overcome problems of seasonality. A

TABLE 2.7: Among ever-married women, the estimated mean number of months of breastfeeding, amenorrhea, postpartum abstinence and postpartum insusceptibility by selected background characteristics, SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	MEAN NUMBER OF MONTHS OF:			
	Breast- feeding	Amenorr- hea	Abstinence	Insuscep- tibility*
AGE				
< 30	21.8	7.8	6.7	10.2
30 +	24.1	7.0	6.5	10.1
SECTOR				
Colombo	18.1	6.0	7.0	10.1
Other Urban	17.8	6.4	5.0	8.3
Rural	23.6	7.7	6.7	10.3
Estates	21.0	7.7	7.0	9.9
ZONE				
Zone 1	18.1	6.0	7.0	10.1
Zone 2	20.5	6.8	6.2	9.8
Zone 3	21.1	7.0	6.5	9.9
Zone 4	24.3	7.4	6.7	9.7
Zone 5	22.4	8.7	5.9	10.6
Zone 6	25.0	7.4	7.4	10.6
Zone 7	26.0	7.5	7.6	10.5
EDUCATION				
No education	26.9	9.2	8.7	13.0
Primary	23.6	8.0	7.5	10.9
Secondary	23.0	7.6	6.4	10.2
More than sec.	19.6	6.0	5.1	8.2
Total	22.7	7.5	6.6	10.2

* The period of insusceptibility is defined as the time between birth and the resumption of both menstruation and sexual intercourse. It is affected by both amenorrhea and postpartum abstinence.

simple division of the number of mothers breastfeeding at the time of the survey by the average number of births per month provides a current status estimate of the mean duration in months of breastfeeding. A similar calculation can be made for amenorrhea or other conditions.

Overall, the mean duration of breastfeeding is 22.7 months. This relatively long period of time affects amenorrhea which lasts on the average for seven and a half months, and when combined with 6.6 months of abstinence produces an average duration of insusceptibility of 10.2 months.

Several important differentials are also apparent in Table 2.7. The table indicates that women under age 30 breastfeed their children on the average approximately two months less than mothers over the age of 30. By sector, urban residents in Colombo as well as other cities breastfeed their children 5 to 6 months less than women in rural areas who breastfeed for an average of 23.6 months. The estates have an intermediate mean duration of breastfeeding of 21 months.

Considerable differentials in the mean duration of breastfeeding exist by the zone and level of mother's education. Zone 1, which is metropolitan Colombo, has the lowest mean duration while zones 6 and 7 which are mostly the dry areas have slightly higher mean values than other zones. By education, the main distinctions are found between mothers with no schooling, mothers with either a primary or secondary education, and mothers with more than a secondary education. Babies whose mothers have had no schooling are breastfed for a mean duration of 26.9 months. As education increases, the mean duration decreases to a low of 19.6 months for children whose mothers have a post secondary education.

The patterns for amenorrhea, abstinence, and insusceptibility generally follow those for breastfeeding, although the differentials are less pronounced.

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CHAPTER 3

Fertility

3.1 Introduction

One major objective of the SLDHS is to estimate fertility
levels, trends, and differentials.   In   the   SLDHS   survey
questionnaire, detailed information was collected from all ever-
married   women on current, cumulative, and past levels of
fertility.   Each woman was asked a series of questions about the
number of sons and daughters living with her, the number living
elsewhere, and the number who had died.   Following these
questions, a full birth history was obtained   from each woman.
Interviewers were trained to pay particular attention to the
collection of accurate dates of birth (day, month, and year) and
death.

The use of a full birth history in the SLDHS yields
extensive data on fertility and child mortality in Sri Lanka.
This chapter presents the data on fertility.   Two important
measures derived from the birth history information are the total
fertility rates (TFRs) for calendar year periods and the mean
number of children ever born (CEB) to women currently aged 45-49.

The   numerator   for   the   TFRs   consists   of   live   births
classified by (1) segments of time preceding the survey using the
date of interview and the date of birth, and (2) by age of the
mother at the time of birth (in conventional five year groupings)
using the date of birth of the mother.   The denominator is the
number of women-years lived in the specified five year age
interval for each time segment.   The tables on cumulative
fertility (children ever born) are taken from a series of
questions asked about the number of boys and girls living and not
living in the household and the number of children who have died.
This data was checked for consistency with the data from the
birth history.   When examined together with variables such as
age,   age   at   marriage,   duration   of   marriage,   and   selected
background characteristics of the mother, the TFR, CEB, and other
measures provide a fairly detailed account of current and past
fertility levels.

The   accuracy of fertility data   is affected primarily by
underreporting of births and deaths and misreporting of age.
These two problems, if substantial, can seriously affect the

standard demographic measures used to describe fertility. Underreporting, for example, affects measures which indicate how many children (the quantity) women have had, while misreporting affects measures which indicate the timing or "tempo" of childbearing. Both of these problems are less serious for recent time periods when recall of birth and death events is likely to be reasonably accurate, but more serious for distant periods. Also, because of relatively high levels of literacy and the use of documents (birth certificates and health cards) to record vital events, these two problems are probably less extensive in Sri Lanka than in many other countries.

This chapter begins with a summary of total fertility rates (TFRs) and children ever born (CEB) by background characteristics of the respondent. Trends in age-specific fertility are then examined for five-year time intervals before the survey. The data on children ever born by current age of the mother, age at first marriage, and duration since first marriage are also reviewed. The chapter concludes with tabulations of the age of mother at the time of her first birth.

Whenever appropriate, the findings from the SLDHS are compared with data from other, independent sources, most notably, the vital registration system and similar sample surveys such as the Sri Lanka World Fertility Survey (SLWFS) conducted in 1975 and the Sri Lanka Contraceptive Prevalence Survey (SLCPS) conducted in 1982. While such comparisons can suggest trends, it is always important to note that fertility estimates derived from different data bases are never entirely comparable. For example, surveys differ in coverage, sample size, data collection methods, and other areas. As we have noted earlier, the SLWFS and SLCPS selected sample areas throughout the entire country, while the SLDHS excluded areas in the north and the east.

3.2 Current and cumulative fertility

Table 3.1 summarizes current and cumulative fertility for residential sectors and survey sample zones. The table allows for an initial assessment of fertility trends. Current levels of fertility as estimated by the TFR can be compared with completed levels of fertility as estimated by the average number of children ever born (CEB) to all women currently aged 45-49. This comparison is best seen in Figure 3.1. It should be noted that the CEB measures shown in Table 3.1 and in Figure 3.1 were calculated on the basis of all women who were identified in the household schedule (including those who were never-married). In later tables, the same CEB measure will be used but calculated on the basis of ever-married or currently married women with completed interviews.

The TFR measures in Table 3.1 are presented for women aged

TABLE 3.1: Total Fertility Rates (TFR) for calendar
year periods and for five years preceding
the survey, and mean children ever born
(CEB) to all never married and ever-
married women 45-49 years (from household
schedule)* by background characteristics,
SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	1984 through 1987**	1981 through 1983	Five years prior to survey	Mean CEB women 45-49
SECTOR				
Colombo	2.1	2.3	2.2	4.3
Other Urban	2.1	2.4	2.3	4.9
Rural	2.8	3.2	2.9	5.0
Estates	3.3	3.4	3.4	4.9
ZONE				
Zone 1	2.1	2.3	2.2	4.3
Zone 2	2.3	2.7	2.4	3.8
Zone 3	2.5	2.8	2.6	3.9
Zone 4	2.6	3.0	2.7	5.0
Zone 5	3.1	3.5	3.2	5.3
Zone 6	2.7	3.6	3.0	6.1
Zone 7	3.2	3.6	3.4	6.6
Total	2.7	3.1	2.8	4.9

* All women (taken from the household schedule)
includes women ever married, currently married,
and never married.

** Includes completed months in 1987 before respondent
was interviewed, usually between one and four months.

15-49 for three time periods: (1) the three year period
immediately preceding the survey from calendar year 1984 through
1986 (plus the completed months in 1987 before a respondent was
interviewed, usually an additional one to three months), (2) the
three year calendar period 1981 through 1983, and (3) the five
year period prior to the survey, a time which overlaps with
periods 1 and 2.

Across all sectors and zones, the TFR has declined from
3.1 in the three year period 1981-83 to the current level of 2.7
in the three year period 1984-87. While a similar and consistent
trend of fertility decline is evident for each residential sector
and sample zone, there are important differences in both the
current level of fertility and the magnitude of the decline.

Figure 3.1
Children Ever Born (CEB) and Total Fertility Rates

Residence

Mean CEB:Women 45–49   TFR 1982–1986   TFR 1984–1987
(5 Yrs prior to survey)

Sri Lanka DHS 1987
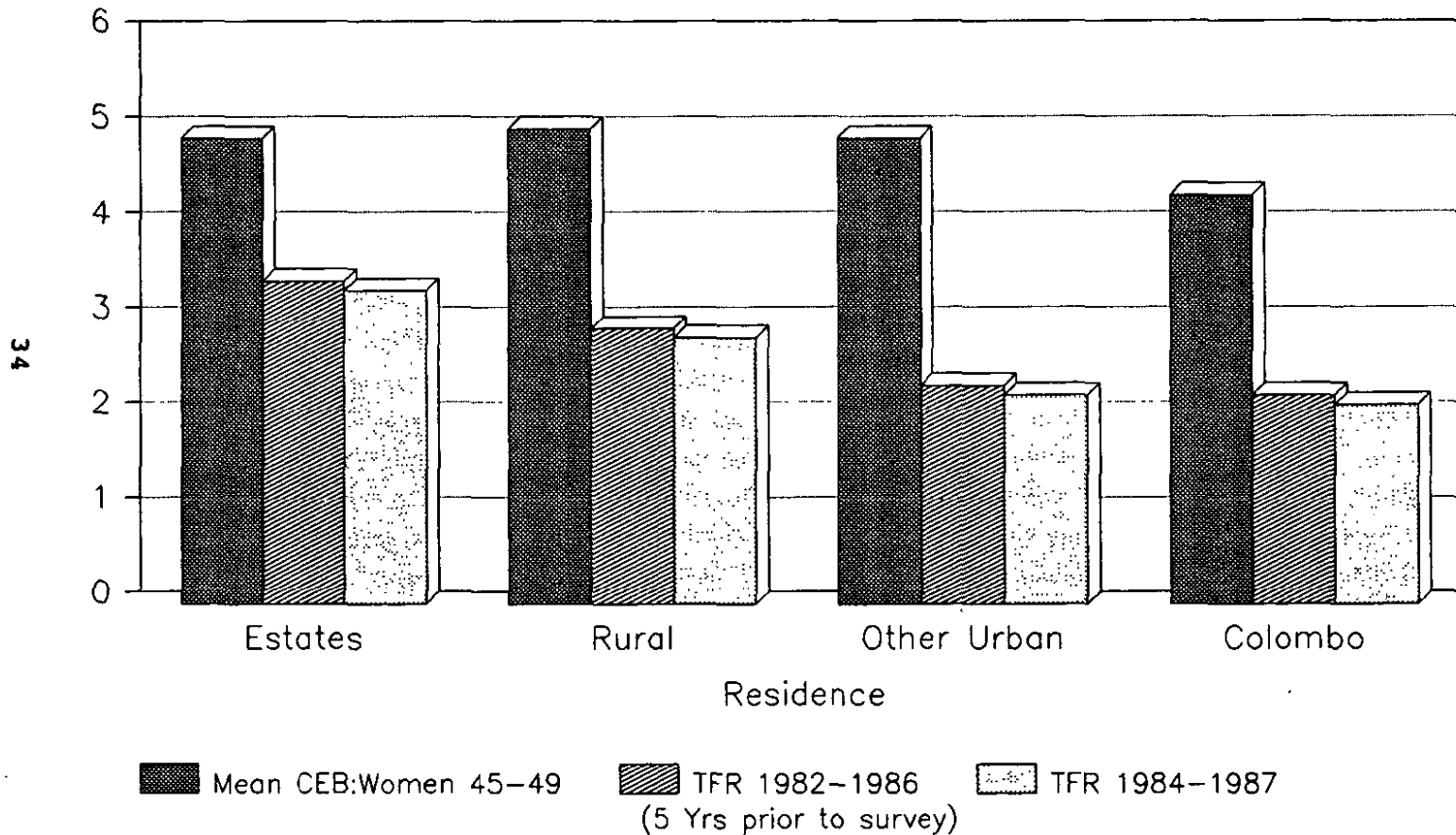
For the most recent time period, the Colombo metropolitan area and other urban areas have the lowest total fertility rate at 2.1. In contrast, the estates have the highest TFR at 3.3 with other rural areas at an intermediate level of 2.8. By zone, the highest TFRs are 3.2 in zone 7 which covers the rainfed dry areas and 3.1 in zone 5 which covers the upper south central hill country where many of the estates are located. The lowest TFR of 2.1 is in zone 1 which is the Colombo metropolitan area followed by zone 2 which consists of the Colombo feeder areas with a TFR of 2.3. At an intermediate level of 2.5 is zone 3 (the south western coastal low lands), zone 4 (the lower south central hill country) with a TFR of 2.6, and zone 6 (the irrigated dry areas) with a TFR of 2.7.

By residential sectors, the magnitude of the fertility decline between the period 1981-83 and 1984-86 has been greatest in the rural areas where the TFR dropped from 3.2 to 2.8. Since this area has the largest percentage of the country's population, it also has the largest impact on the overall level of fertility in the country.

The Colombo metropolitan area and other urban areas have also experienced a fertility decline but somewhat less than the rural areas. The total fertility rate in the estates, on the other hand, has remained virtually unchanged, dropping only slightly from 3.4 to 3.3.

The total fertility rate is a synthetic measure of current fertility which can be interpreted as the average number of births a woman would have if she survived throughout the reproductive period and she experienced the same age-specific fertility rates that all women are currently experiencing. One method of inferring possible changes in fertility is to compare current levels as indicated by the TFRs in Table 3.1 with the average number of children ever born (CEB) to women aged 45-49 shown in the last column of Table 3.1. Women 45 and over have essentially completed their childbearing and thus CEB can be considered a measure of past or completed fertility.

A comparison of the TFRs for the most recent period 1984-1987 with the average number of children ever born suggests that Sri Lanka is experiencing a transition to substantially lower levels of fertility. For all residential sectors and sample zones, the current level of fertility as measured by the TFR for the period 1984-1987 is considerably below the level of past fertility as measured by the CEB for women aged 45-49. If current age-specific fertility rates remain unchanged in the future, then new cohorts of women entering the reproductive period will have approximately 2.7 children ever born by the time they are aged 45-49 compared with 4.9 for women who are currently in this age group.

3.3 Fertility trends

The SLDHS used a complete birth history to collect fertility information and generate age-specific fertility rates (ASFR). Table 3.2 and Figure 3.2 compare the ASFRs derived from the SLDHS against similar rates obtained from other sources. The purpose of this comparison is to provide an initial examination of fertility trends. The interpretation of the data should be undertaken with caution since some of the measures are based on data from the entire country and calculated for single years while other measures are based on data from a sample and calculated for a period of several years.

Over the past two plus decades, there has been a substantial decline in the total fertility rate in Sri Lanka from 5.0 in 1963 to 2.8 in the period 1982-87. The one notable exception to this trend appears in the period towards the end of the 1970s and the early 1980s (approximately 1976 through 1981) when there was an apparent but temporary increase in fertility particularly among women aged 15-35. This increase is reflected in the age-specific rates from the 1981 SLCPS and from the Registrar General's Office for the calendar years 1980 and 1981 combined, particularly among women under age thirty. The increase is also apparent in the crude birth rates shown in Figure 3.3 for the period from 1971 through 1985.

By the period 1983-86, however, fertility began to decline once again, due almost entirely to a substantial fertility reduction among women aged 30 and over. In the 1983-86 period, the age-specific rates for these women are considerably lower than the comparable rates during earlier periods. Among women under 30, the age-specific rates from the SLDHS are essentially the same as the rates reported twelve years earlier by the SLWFS. The one exception is among the youngest SLDHS age group 15-19 which has a slightly higher age-specific fertility rate compared with the SLWFS.

The complete birth history information collected from all respondents in the SLDHS is further examined in Table 3.3 which presents age period rates by maternal age at birth. The data in Table 3.3 are also displayed in graphic form in Figure 3.4.

The schedule of rates displayed in Table 3.3 and Figure 3.4 are progressively truncated as the time before the survey increases. The SLDHS collected information from ever-married women under age 50. The further one goes back in time the less complete the age-specific fertility schedule becomes. It is not possible, for example, to estimate the fertility of women aged 45-49 for a period more than five years before the survey.

One reason to present Table 3.3 is to assess the quality of the SLDHS data. In a data array such as this, normally one would

TABLE 3.2:   A comparison of age specific fertility rates from
             various sample surveys in Sri Lanka and from the civil
             registration system.

	AGE SPECIFIC FERTILITY RATES					
AGE SPECIFIC GROUP	1963 [a]	1970 [a]	1974 SLWFS [b]	1981 SLCPS [c]	1980-1981 [d]	1982-87 SLDHS [e]
15-19	52	38	31	34	38	38
20-24	228	172	146	172	173	147
25-29	278	238	161	222	197	161
30-34	240	219	158	177	149	122
35-39	157	134	126	99	89	71
40-44	46	38	43	37	26	23
45-49	7	6	6	0	4	3
Total Fertility Rate	5.0	4.2	3.4	3.7	3.4	2.8

a.   Based on vital statistics data for 1963 and 1970, see
     D.F.S. Fernando, " A Note on Differential Fertility in
     Sri Lanka," Demography II, August, 1974.

b.   Based on SLWFS data for the calendar year 1974.

c.   Based on SLCPS data for calendar year 1982.

d.   Based on data from the Registrar General's Office for
     calendar years 1980 and 1981 combined.

e.   Based on SLDHS data for the five complete years (60 months)
     preceding the survey.

Figure 3.2
Age Specific Fertility Rates
1975 SLWFS and 1987 SLDHS

Births per 1,000 Women

1975 SLWFS

1987 SLDHS

Age Group

Sri Lanka

38
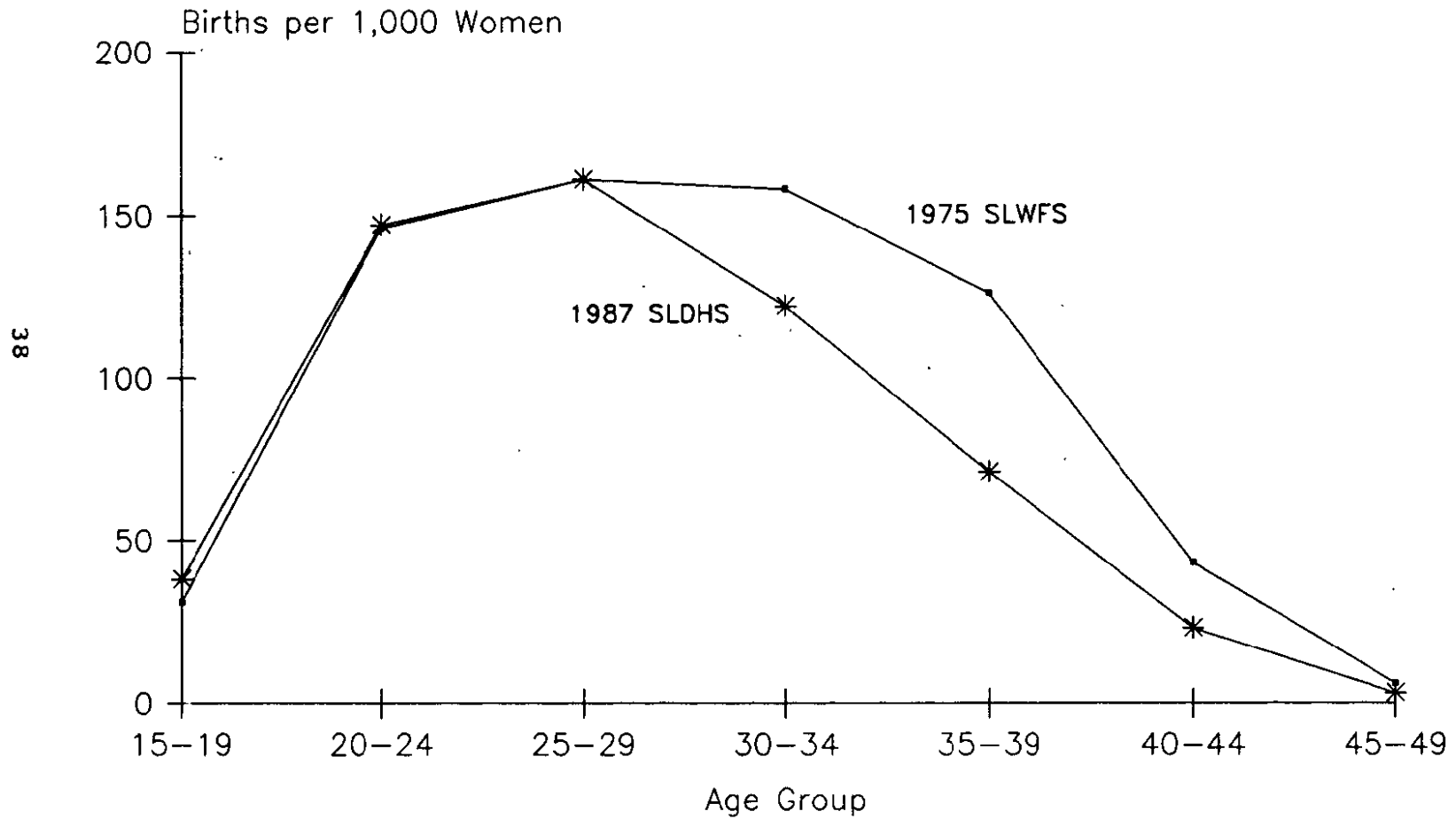
Figure 3.3
Sri Lanka Crude Birth Rates
1971 – 1985 (Registrar General)

Births per 1,000 Population
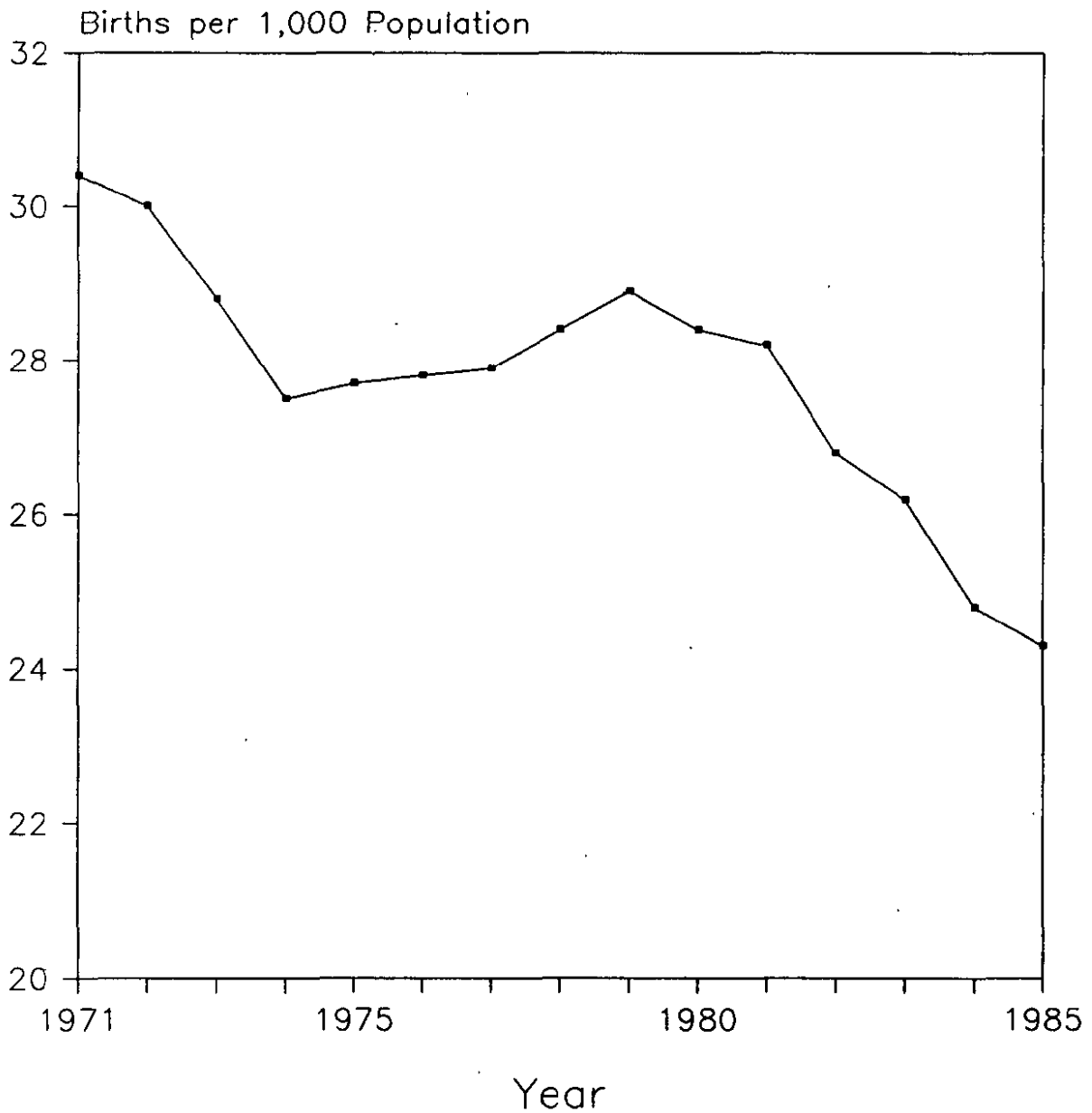
expect to find monotonic trends, that is to say, constantly increasing fertility over time. While in general these trends are apparent in the table, the exceptions occur in the period 5-9 years prior to the survey among women who gave birth at ages 15-19 and 20-24. For both of these two age groups, fertility rises in the period 5-9 years before the survey (1978-1982), declines slightly in the period 10-14 years before the survey, and then continues to increase in the more distant past. There are several possible explanations for a peaking of fertility 5-9 years prior to the SLDHS survey. Since the differences between the period 5-9 years ago and 10-14 are not that great, one possible explanation is sampling error. A second possible explanation is that births have been misdated from the past to the more recent present and/or births by older women have been omitted.

In the case of Sri Lanka, however, an equally plausible explanation and one that is consistent with the data presented in Tables 3.2 and Figure 3.3 is that fertility rose slightly in the period five to ten years prior to the survey but has now begun to decline once again. As noted earlier, the temporary increase in fertility is reflected in independent estimates derived from other surveys and from the country's vital registration system. Also, Table 2.3 presented in Chapter 2 indicates that the proportion of women married among the cohorts 15-19 and 20-24 was higher in 1981 than it 'was in either 1975 or 1987. We can conclude that the fertility trends from the SLDHS are consistent with the trends obtained from other sources. This suggests that the birth history data from the SLDHS is of reasonably good quality and a fairly accurate indicator of current and past reproductive behavior.

3.4 Children ever born

Tables 3.4 (for ever-married women) and 3.5 (for currently

TABLE 3.3: Age-period fertility rates (per 1,000 women) by maternal age at birth of child, SLDHS 1987.

MATERNAL AGE AT BIRTH	YEARS PRIOR TO SURVEY						
	0-4	5-9	10-14	15-19	20-24	25-29	30-34
15-19	38	47	44	51	70	105	(100)
20-24	147	171	168	178	236	(242)	
25-29	161	203	216	253	(274)		
30-34	122	157	185	(238)			
35-39	71	91	(114)				
40-44	23	(31)					
45-49	(3)						

( ) Indicates truncated rates.40

Figure 3.4
Period Age-Specific Fertility Rates

Births per 1,000 Women

20-24 Years Ago

15-19 Years Ago

10-14 Years Ago

5-9 Years Ago

0-4 Years Ago

Age Group

Sri Lanka DHS 1987

41
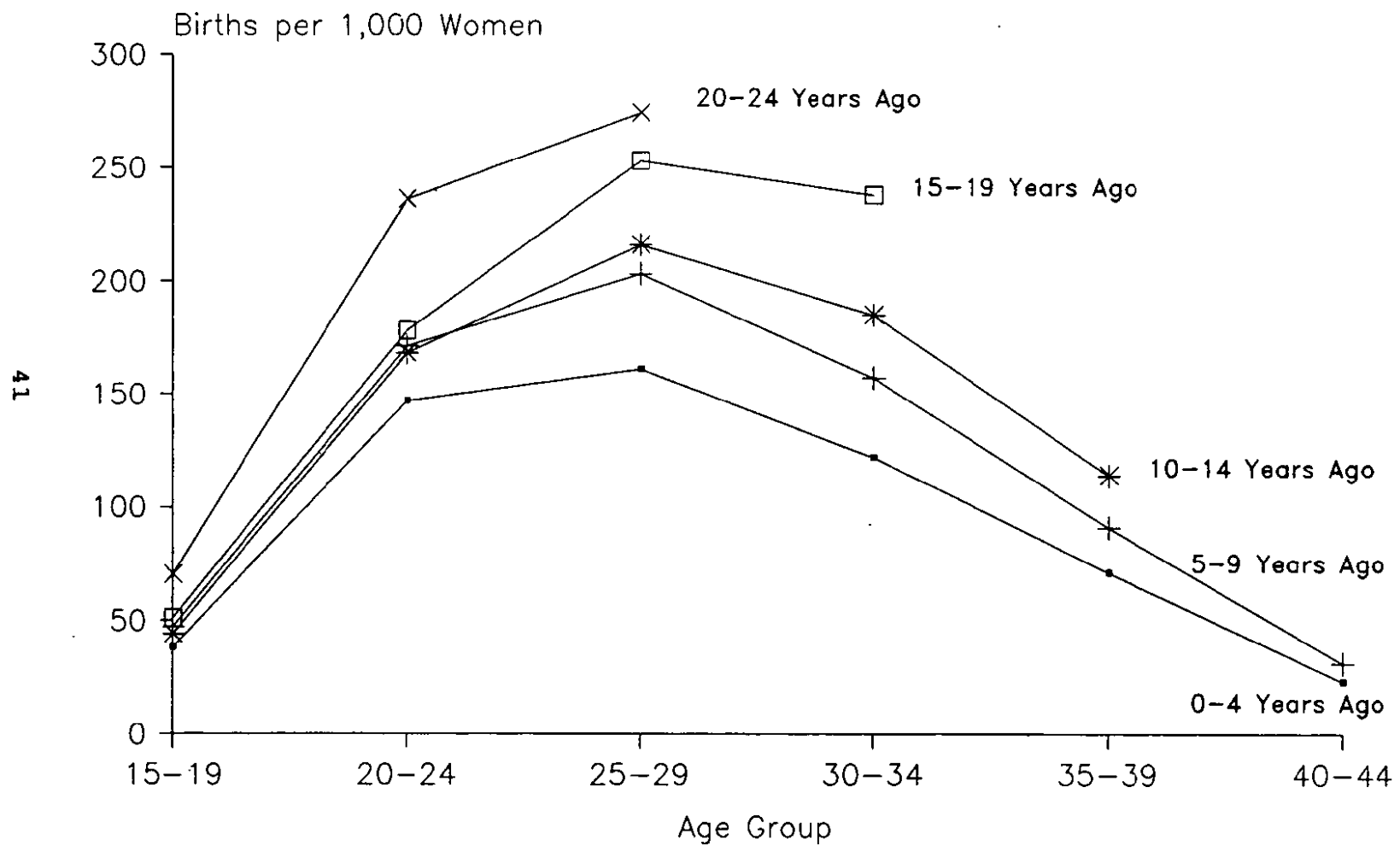
TABLE 3.4: Percent distribution of ever-married women aged 15-49 by number children ever born (CEB) according to age, SLDHS 1987 and SLWFS 1975.

CURRENT AGE	CHILDREN EVER BORN											Percent Total	Weighted Number	Mean CEB
	0	1	2	3	4	5	6	7	8	9	10+			
15-19	48.9	41.8	7.9	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	134	0.6
20-24	21.4	40.5	27.4	9.1	1.3	0.1	0.1	0.0	0.0	0.0	0.0	100	723	1.3
25-29	9.7	25.7	29.2	24.3	8.0	2.7	0.4	0.0	0.0	0.0	0.0	100	1113	2.0
30-34	5.0	14.4	26.0	26.6	15.4	7.9	3.3	0.7	0.4	0.1	0.1	100	1203	2.8
35-39	4.5	9.3	21.5	22.4	18.1	12.1	6.7	3.0	1.6	0.6	0.3	100	1131	3.3
40-44	2.8	7.0	12.3	17.9	15.5	17.0	11.2	6.8	4.6	2.3	2.6	100	922	4.3
45-49	3.3	4.7	9.1	9.1	20.1	13.4	12.5	8.7	9.0	4.2	5.9	100	639	5.1
All Ages SLDHS	8.3	17.2	21.5	19.3	12.9	8.6	5.2	2.7	2.1	1.0	1.1	100	5865	3.0
All Ages SLWFS	8.4	14.6	14.0	13.5	11.8	9.9	8.4	6.5	5.2	7.7 *	---	100	6813	3.9

* For 9+ CEB

TABLE 3.5: Percent distribution of currently married women aged 15-49 by number of children ever born (CEB) according to current age, SLDHS 1987 and SLWFS 1975.

CURRENT AGE	CHILDREN EVER BORN											Percent Total	Weighted Number	Mean CEB
	0	1	2	3	4	5	6	7	8	9	10+			
15-19	50.2	40.1	8.2	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	127	0.6
20-24	22.0	39.5	27.8	9.1	1.3	0.1	0.1	0.0	0.0	0.0	0.0	100	695	1.3
25-29	9.9	24.8	29.5	24.5	8.2	2.7	0.5	0.0	0.0	0.0	0.0	100	1071	2.1
30-34	5.2	13.7	26.4	26.5	15.5	8.0	3.4	0.7	0.4	0.1	0.1	100	1146	2.8
35-39	4.2	8.6	21.5	23.3	17.7	11.9	7.2	3.1	1.7	0.6	0.3	100	1044	3.4
40-44	2.7	6.4	12.1	18.1	15.5	17.2	11.2	6.9	4.8	2.5	2.8	100	824	4.4
45-49	2.6	4.4	9.5	9.4	21.2	13.7	12.3	8.9	7.8	4.5	5.7	100	535	5.1
All Ages SLDHS	8.5	16.8	22.0	19.7	12.9	8.5	5.1	2.7	1.9	1.0	1.1	100	5442	3.0
All Ages SLWFS	8.5	14.2	14.0	13.5	12.0	10.1	8.5	6.3	5.1	7.9*	---	100	6163	4.0

* For 9+ CEB

42

married women) show the number of children ever born by current age of the mother. These two tables are virtually identical which indicates that most marital dissolution occurs among older women who have already completed their childbearing.

Considering the entire sample, both ever-married and currently married women have had an average of 3.0 children ever born. This can be compared with the 1975 SLWFS findings of 3.9 children ever born to ever-married women and 4.0 to currently married women. Across all ages, only one-third of the women in the SLDHS have 4 or more children compared with one half of the women in the SLWFS.

Clearly, the greatest interest in these two tables centers on women aged 45-49 who have essentially completed their fertility. Table 3.6 compares the completed fertility experience of women in the SLDHS, SLCPS and SLWFS. For both ever-married and currently married women in the 45-49 age cohort, the average number of children ever born is 5.1 in the SLDHS. This is a decline from 6.0 for ever-married and 6.3 for currently married women reported by the SLWFS, and a decline from the 5.8 reported by the 1981 SLCPS for both ever-married and currently married women.

The reduction in completed fertility is reflected in the parity distribution differences between the three surveys. In the SLDHS, there most often is an increase in the proportion of women with parities 0 through 5 and a concomitant decrease in the proportions with parities 6 or higher compared with both the SLWFS and the SLCPS. This difference between the SLDHS and the other two surveys holds for both ever-married and currently married women and indicates that fewer women are moving on to higher parities than in the past.

Table 3.6 also provides an indication of primary sterility. Among currently married women 45-49, 2.6 percent in the SLDHS sample have had no children compared with 2.1 percent in SLCPS and 2.3 percent in the SLWFS sample. These percents have remained relatively constant over the past twelve years and are lower than in many other developing countries where primary sterility typically is found among 3 to 5 percent of currently married women aged 45-49.

The changes in completed fertility between the three surveys can be seen graphically in Figure 3.5 which shows parity progression rations. These ratios indicate the proportion of women at a given parity who subsequently will go on to a higher parity. For example, if the parity progression ratio at parity 2 is .90 this means that 90 percent of parity 2 women will subsequently go on to have three or more children. Typically, in non-contracepting populations parity progression ratios decline gradually while in contracepting populations there is a sharper

TABLE 3.6:   Percent distribution of ever-married and currently
             married women aged 45-49 by number of children ever
             born, 1975 SLWFS, 1982 SLCPS and 1987 SLDHS.

NUMBER OF CHILDREN EVER BORN	EVER-MARRIED WOMEN			CURRENTLY MARRIED WOMEN		
	SLWFS 1975	SLCPS 1982	SLDHS 1987	SLWFS 1975	SLCPS 1982	SLDHS 1987
0	3.2	2.8	3.3	2.3	2.1	2.6
1	5.4	5.4	4.7	3.6	5.0	4.4
2	7.8	8.0	9.1	6.4	8.5	9.5
3	7.5	8.2	9.1	6.9	8.5	9.4
4	8.8	11.0	20.1	8.5	11.0	21.2
5	10.4	12.7	13.4	11.2	13.3	13.7
6	13.3	13.2	12.5	14.4	13.3	12.3
7	11.6	9.7	8.7	11.0	8.7	8.9
8	9.3	7.1	9.0	9.7	7.3	7.8
9+	22.8	21.8	10.1	26.0	22.2	10.2
Total	100	100	100	100	100	100
Number of Women	995	536	639	817	436	535
Mean CEB	6.0	5.8	5.1	6.3	5.8	5.1

and more abrupt decline.

     Figure 3.5 indicates that in all three surveys,
approximately the same proportions of women progressed from
parity 0 to 1, 1 to 2, and 2 to 3. Thereafter, while the SLWFS
and SLCPS ratios show a gradual decline and slight separation,
the DHS ratios reveal an abrupt decline, most notable between
parity 3 and 4 and 7 and 8. The differences between the ratios
are what one would expect in a population where contraceptive
prevalence of modern methods (and in particular female
sterilization) has increased sharply and more than doubled over
the past twelve years.

3.5   Children ever born and age at marriage

     Table 3.7 permits an examination of the relationship between
age of marriage and the rate of childbearing. The data indicate
that across all marriage durations, age at first marriage has a
strong effect on fertility. The last row in the table shows that
the average number of children ever born declines from 5.6 for
women married before age 15 to 2.1 for women married between 25

Figure 3.5

Parity Progression Ratios for
1975 SLWFS, 1982 SLCPS, and 1987 SLDHS

Sri Lanka

45
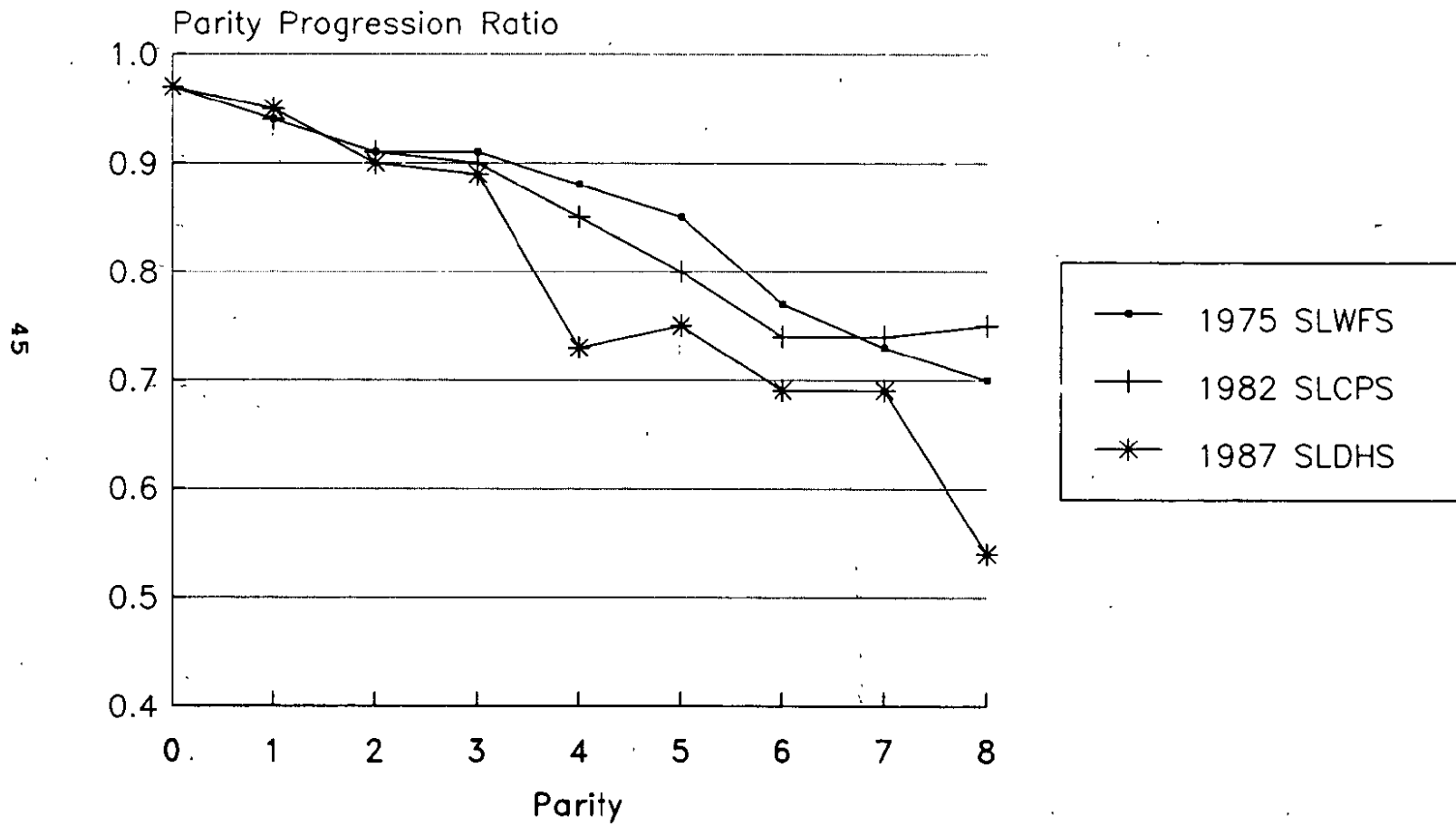
to 27 years. The reasons for this are fairly straight forward. An early age of marriage results in more years of exposure to conception and childbearing. Conversely, a late age of marriage results in fewer years of exposure before declining fecundity after age 40 and subsequent menopause.

The effect age of marriage has on fertility is far more pronounced at higher marriage durations and less so at lower marriage durations. For example, at durations 0-4 years and 5-9 years, fertility is essentially unaffected by the age at which a woman first marries. Similarly, for those married 5-9 years, age at marriage has almost no effect on the average number of children ever born. Conversely, at higher durations of marriage (15 years and over) an older age of marriage means a woman has had fewer years of exposure to conception and possibly some loss of fecundity after age 40. These two experiences combine to reduce fertility.

3.6 Age at first birth

The age at which women first give birth is an important indicator of fertility trends. A high age at first birth often is associated with an increase in the age at marriage and a subsequent decline in fertility. Conversely, an early age at first birth is often associated with high infant and maternal mortality.

Table 3.8 is a percent distribution of all women (taken from the Household Questionnaire) according to age at first birth by

TABLE 3.7: Mean number of children ever born (CEB) to ever-married women, by age at first marriage and duration since first marriage, SLDHS 1987 and CEB for all ages and durations, SLWFS 1975.

DURATION SINCE FIRST MARRIAGE	AGE AT FIRST MARRIAGE						Total all ages	
	< 15	15-17	18-19	20-21	22-24	25-27	SLDHS	SLWFS
0-4	0.8	1.0	1.0	0.9	1.0	0.9	1.0	0.9
5-9	2.4	2.3	2.3	2.3	2.3	2.0	2.3	2.5
10-14	3.3	3.4	3.2	3.1	2.9	2.7	3.1	3.7
15-19	4.0	4.3	4.1	3.8	3.4	3.5	3.8	4.9
20-24	5.2	5.1	4.6	4.5	4.0	3.6	4.6	5.7
25-29	6.1	5.7	5.4	4.9	3.9	-	5.4	6.5
30 +	7.4	6.3	5.6	-		-	6.8	6.9
All Marriage Durations SLDHS	5.6	3.8	3.2	2.9	2.6	2.1	3.1	
All Marriage Durations SLWFS	5.7	4.8	4.1	3.5	2.8	2.4*		3.9

* For age group 25-29

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TABLE 3.8: Percent distribution of all women* by age at first birth (including the category 'no birth'), according to current age, SLDHS 1987.

CURRENT AGE	No births	AGE AT FIRST BIRTH								Total percent	Weighted number	Median age at 1st birth
		<15	15-17	18-19	20-21	22-24	25-27	28-30	31+			
15-19	96.4	0.1	2.0	1.5	0.0	0.0	0.0	0.0	0.0	100	1923	**
20-24	67.0	0.5	4.8	11.1	11.1	5.4	0.0	0.0	0.0	100	1723	**
25-29	37.7	0.7	6.1	12.2	15.2	17.4	9.5	1.2	0.0	100	1613	24.7
30-34	19.2	1.0	5.2	10.6	17.9	20.7	13.9	8.3	3.0	100	1416	24.1
35-39	14.2	1.5	8.5	10.5	11.0	19.1	16.1	11.8	7.2	100	1258	24.9
40-44	9.4	5.3	12.4	12.9	13.0	17.9	13.1	6.8	9.2	100	989	23.1
45-49	6.9	4.5	18.0	13.5	15.2	16.9	10.3	7.1	7.6	100	663	21.8
All Ages	43.9	1.5	6.7	9.6	11.0	12.5	7.8	4.2	2.9	100	9585	**

* Taken from Household Questionnaire

** Omitted due to censoring

current age. While the Household Questionnaire did not record information on births to women never married, these women are assumed to have had no births. The last column shows the median age at first birth. Medians for women currently aged 15-19 and 20-24 and for the total have been omitted to avoid the censoring problem for women who have their first birth at an older age.

The median age at first birth among women 25 through 39 has fluctuated between approximately 24 years to almost 25 years. For older cohorts 40-44 and 45-49 the median age at first birth is lower at 23.1 and 21.8 years respectively. What is noteworthy in Table 3.8 is the relatively large percent of women who have given no births. Well over a third (37 percent) of women 25-29 have had no births and approximately one-fifth of women aged 30-34 have had no births.

An important health indicator for any country is the percent of women whose first birth occurs before they reach the age of 18. These women usually are classified as a high risk group because they tend to have higher infant and maternal mortality rates than women between the ages of 18 and 35. Table 3.8 indicates that the percent of women whose first birth occurred before they reached the age of 18 declines with each five year age cohort from women aged 45-49 to women aged 20-24. Among the former group, approximately 23 percent had their first child before they reached the age of 18. Among women 30-34, 6 percent had their first child before the age of 18 and among those 20-24, only 5 percent fall into this category. Clearly, the percent of womem who are at high risk because of early age at first birth has declined significantly in recent years.

Table 3.9 summarizes the median age at first birth among all women (taken from the Household Questionnaire) for different cohorts and subgroups. Urban women have a higher median age at

first birth than women in rural areas or on the estates. Among urban women, those living in "other urban" areas have a median age at first birth of 26.5 years. This is four years higher than the median among women on the estates. By zone, women in Colombo zone 1 and women in the south western coastal low lands, zone 3, have the highest median age at first birth while women in zone 7, the rain fed dry zone, have the lowest median age at first birth.

TABLE 3.9:   Median age at first birth among all women* aged 25-49
             by current age and background characteristics, SLDHS 1987.

BACKGROUND CHARACTER-ISTICS	CURRENT AGE					
	25-29	30-34	35-39	40-44	45-49	All ages 25-49
SECTOR						
Colombo	26.9	25.4	25.7	24.1	23.4	25.3
Other Urban	**	26.8	26.4	26.0	23.9	26.5
Rural	24.5	23.8	24.7	22.5	21.7	23.7
Estates	22.0	23.1	23.5	23.2	21.1	22.5
ZONE						
Zone 1	26.9	25.4	25.7	24.1	23.4	25.3
Zone 2	25.6	24.4	26.6	24.8	25.0	25.2
Zone 3	26.4	26.5	26.9	26.5	24.9	26.4
Zone 4	24.7	24.0	24.5	21.1	21.2	23.5
Zone 5	24.2	23.9	24.3	22.9	20.5	23.5
Zone 6	22.8	23.1	23.0	20.4	19.6	22.2
Zone 7	22.7	21.8	22.0	19.8	18.9	21.4
All Women	24.7	24.1	24.9	23.1	21.8	24.0

   * Taken from Household Questionnaire.

  ** Median could not be calculated because more than 50 percent of women
     in this group have not had a first birth.

CHAPTER 4

Fertility Regulation

4.1 Introduction

The data on fertility regulation, which is the subject of this chapter, is drawn from the information collected in section 3 of the SLDHS questionnaire. The questions in that section did not deviate from those in the standard DHS "A" core questionnaire used in high contraceptive prevalence countries except for a few additions designed to determine the prevalence of prolonged abstinence (rhythm or the safe period). Past surveys such as the SLWFS and the SLCPS have revealed a relatively large proportion of married women use so called traditional methods including prolonged abstinence. The SLDHS included several questions intended to provide information on this area of research and program interest.

4.2 Contraceptive knowledge

Data on contraceptive knowledge and use were collected from ever-married women aged 15-49. Knowledge of various contraceptive methods was measured in two ways. First, unprompted knowledge about specific contraceptive methods was obtained by asking each respondent if she knew of any methods a couple could use to delay or avoid pregnancy. If the respondent reported in the affirmative, she was asked to name all of the methods she knew. For every method not mentioned spontaneously, the interviewer would prompt the respondent by reading the name and a brief description of the method. The methods and description read were the following:

1. Pill   "Women can take a pill every day."

2. IUD   "Women can have a loop or coil placed inside them by a doctor or a nurse."

3. Injections   "Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months."

4.	Diaphragm, Foam, Jelly	"Women can place a sponge or suppository or diaphragm or jelly or cream inside them immediately before intercourse."
5.	Condom	"Men can use a rubber sheath during sexual intercourse."
6.	Female sterilization	"Women can have an operation to avoid having any more children."
7.	Male sterilization	"Men can have an operation to avoid having any more children."
8.	Safe Period	"Couples can avoid having sexual intercourse on certain days of each month when the woman is more likely to get pregnant."
9.	Withdrawal	"Men can be careful and pull out before climax."
10.	Norplant	"Women can have a tube inserted into their arms and avoid pregnancy for many years."
11.	Any other methods	"Have you heard of any other ways or methods that women or men can use to avoid pregnancy?"

Knowledge of contraception as used in this report is the proportion of women who spontaneously mention a method plus those who were prompted. The percent of ever-married women who know any method, any modern method, and any specific method is shown in Table 4.1.

It is clear from this table that knowledge of at least one or more methods is near universal. Indeed, knowledge of most specific methods, particularly modern methods, is also very high. For example, 98 percent of the women interviewed (the highest proportion for any single method) knew about female sterilization. Knowledge of the pill and male sterilization is also high, each method known to 91 percent or more. Except for Norplant (which is still in an experimental stage) and vaginal methods, modern methods are better known to women than traditional methods. Among the traditional methods, fewer than two thirds knew about periodic abstinence, and fewer than two fifths knew about withdrawal.

By age of woman, knowledge levels are uniformly high among all groups and there are very few outstanding differentials. As expected, the youngest age group 15-19 years and the oldest 45-49 years tend to show somewhat lower levels of knowledge particularly for temporary methods.

TABLE 4.1: Percentage of ever-married women aged 15-49 knowing any method, knowing any modern method, and knowing specific contraceptive methods, SLDHS 1987.

CURRENT AGE	PERCENTAGE OF EVER-MARRIED WOMEN WHO KNOW:													
	Any method	Any modern method*	Pill	IUD	Injectable	Diaphragm, foam, jelly	Condom	Female steril.	Male steril.	Periodic abstinence	Withdrawal	Norplant	Other	Weighted number
15-19	97.4	97.4	80.7	47.7	72.5	10.6	48.4	95.1	82.9	33.2	26.5	1.7	0.9	134
20-24	97.5	97.5	90.0	74.0	81.9	12.1	66.0	95.1	86.9	53.9	33.0	4.5	1.2	723
25-29	99.3	99.2	94.1	83.3	87.5	14.9	76.4	98.7	92.4	59.4	39.9	6.7	0.5	1113
30-34	99.5	99.5	95.2	86.7	87.5	14.6	77.7	98.8	93.9	64.5	42.4	6.1	1.8	1203
35-39	99.2	98.9	93.0	87.1	83.7	16.8	76.9	98.1	93.4	65.8	41.5	6.1	1.3	1131
40-44	99.3	99.3	93.8	84.6	81.5	15.5	72.0	98.5	90.8	63.8	36.9	5.3	2.1	922
45-49	97.3	97.0	89.1	78.1	73.8	9.6	59.1	95.4	83.8	55.5	28.6	3.8	1.4	639
All Ages	98.8	98.7	92.7	82.4	83.3	14.3	72.3	97.7	90.8	60.7	37.8	5.5	1.4	5865

* Modern methods include pill, IUD, injectables, diaphragm, foam, jelly, condom, sterilization, and Norplant.

The data on knowledge from the SLDHS is certainly not surprising. Knowledge of contraceptive methods has been high among Sri Lankan women for at least the past two decades. In 1975, SLWFS reported that 91 percent of ever-married women knew at least one method of contraception. By 1982, the SLCPS reported that 99 percent of ever-married women knew at least one method of family planning.

Table 4.2 shows the percent of currently married women who know at least one modern method of contraception cross classified by the number of living children and by selected background characteristics. The table reveals that there are no significant differentials in knowledge according to the place of current residence, socio-economic zones, or education. For instance, the level of knowledge varies in a narrow range from 97.2 percent for no schooling to 99.8 percent for women with more than a secondary education. Clearly, knowledge about contraceptives is widespread throughout the entire population of ever-married women in the reproductive ages.

4.3 Acceptability of methods

Ever-married women who have heard of a method were also asked about the main problem, if any, they perceive in using particular methods. The responses to this question are tabulated in Table 4.3.

Among women who had ever heard of a particular method, the majority either stated that there was no perceived problem in getting or using the method, or they had no opinion about the

method (as indicated by a response of don't know or not stated). Of the specific concerns mentioned, health is perceived to be a concern by over a third of the women who have ever heard about the pill; over a fourth for the IUD and female sterilization; and about a fifth for injectibles and male sterilization. Health concerns are not a perceived problem for traditional methods, although ineffectiveness and inconvenience were mentioned slightly more often for these methods than for others. Other possible concerns such as accessibility and availability of supplies, the cost of supplies, and disapproval of husband are simply not perceived problem areas for the vast majority of women in Sri Lanka.

4.4 Source knowledge

The extent to which a woman knows a source or an outlet to obtain a specific contraceptive method is an important aspect of contraceptive knowledge. For each method a respondent knew, the SLDHS asked "where would you go to obtain (the method) if you wanted to use it?" The responses to this question cross

TABLE 4.2: Percentage of currently married women aged 15-49 knowing at least one modern method, by number of living children and selected background characteristics, SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	NUMBER OF LIVING CHILDREN							
	0	1	2	3	4	5	6+	Total
SECTOR								
Colombo	96.1	99.2	100.0	100.0	100.0	100.0	100.0	99.5
Other Urban	100.0	100.0	100.0	99.3	100.0	100.0	100.0	99.8
Rural	96.2	99.0	99.5	99.7	99.6	99.0	99.1	99.1
Estates	91.8	95.2	98.4	98.4	100.0	95.8	100.0	97.2
ZONE								
Zone 1	96.1	99.2	100.0	100.0	100.0	100.0	100.0	99.5
Zone 2	95.7	100.0	99.6	99.4	100.0	100.0	100.0	99.4
Zone 3	95.9	96.6	98.7	98.2	98.9	98.2	97.8	97.8
Zone 4	95.3	99.3	99.5	100.0	100.0	97.7	98.8	99.0
Zone 5	96.8	98.2	99.3	100.0	100.0	100.0	100.0	99.2
Zone 6	100.0	100.0	100.0	99.2	100.0	100.0	99.0	99.7
Zone 7	95.5	98.9	100.0	100.0	99.0	98.5	99.1	99.1
EDUCATION								
No education	92.9	89.5	100.0	98.1	100.0	96.5	98.7	97.2
Primary	93.3	99.3	98.8	99.4	99.2	100.0	99.4	99.0
Secondary	95.6	99.2	99.7	100.0	100.0	99.1	99.0	99.2
More than sec.	99.4	100.0	99.7	100.0	100.0	98.0	100.0	99.8
Total	96.2	98.8	99.5	99.6	99.7	99.0	99.2	99.1

TABLE 4.3: Percent distribution of ever-married women aged 15-49 who have ever heard of a method by the main problem perceived in using particular methods, if any, according to method, SLDHS 1987.

	CONTRACEPTIVE METHODS									
MAIN PROBLEM	Pill	IUD	Inject- able	Diaphragm, foam, jelly	Condom	Female steril.	Male steril.	Periodic abstin- ence	With- drawal	Norplant
No problem	18.0	15.4	21.0	13.9	27.9	37.9	24.0	66.2	52.2	13.3
Husband disapproves	0.2	0.3	0.2	0.3	2.2	0.3	0.8	0.7	2.2	0.0
Health	36.1	27.2	17.5	8.6	3.9	26.0	18.3	0.1	0.5	6.3
Access/ availability	0.0	0.1	0.5	0.2	0.1	0.1	0.0	0.1	0.0	0.6
Costs too much	0.0	0.0	0.3	0.1	0.2	0.0	0.0	0.0	0.0	0.0
Not effective	1.4	5.2	1.9	2.2	3.4	2.2	1.8	7.1	7.2	0.3
Inconvenient to use	1.7	2.2	1.2	1.2	1.7	0.4	0.3	3.9	3.1	0.7
Other	0.7	1.3	0.7	1.5	0.7	1.2	0.7	0.4	0.5	1.2
DK, Not stated	41.9	48.3	56.7	72.0	59.9	31.9	54.1	21.5	34.3	77.6
Total Percent	100	100	100	100	100	100	100	100	100	100
Weighted N	5436	4833	4883	838	4237	5728	5325	3558	2218	324

classified by type of method are shown in Table 4.4.

Most women who know a method of contraception also know a source of supply for that method. This is particularly true for major methods such as the pill, IUD, injectibles, condom, and sterilization but somewhat less so for the diaphragm, foam, jelly, and Norplant.

Government hospitals and clinics, and government midwives and nurses stand out as the major source of supply women would use to obtain most modern methods of contraception. Approximately 69 percent of women who know about the pill would use a government source of supply for this method. An even higher proportion of women who know about the IUD, injectibles, and sterilization would use a government source of supply. Condoms stand out as the single exception to this. Sri Lanka has an extremely active social marketing programme and this programme probably accounts for the fact that almost 55 percent of women who know about condoms would obtain this method from a pharmacy or shop. Pharmacies and shops were also mentioned as a source for pills and for vaginal methods such as foam and jelly. Since vaginal

SUPPLY SOURCE	CONTRACEPTIVE METHODS								
	Pill	IUD	Inject-able	Diaphragm, foam, jelly	Condom	Female steril.	Male steril.	Periodic abstin-ence	Norplant
Govt. hosp. MCH center	46.0	80.1	68.5	34.7	17.8	95.4	92.0	7.6	51.1
Private doctor	3.3	2.0	15.5	7.2	1.0	1.1	1.0	2.3	5.7
Non-govt. clinic	1.6	1.4	1.9	1.8	0.8	0.8	1.2	0.9	4.3
Mobile clinic	0.8	0.8	0.5	0.6	0.3	0.1	0.3	0.6	0.3
Govt PH mid-wife, nurse	22.5	2.2	1.9	6.9	8.7	0.1	0.0	28.6	1.8
Other field source	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.8	0.0
Ayurvedic doctor	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0
Friend, relative	0.2	0.1	0.1	0.2	0.6	0.0	0.0	32.3	1.3
Pharmacy shop	13.0	0.7	0.6	18.0	54.5	0.0	0.0	0.2	2.1
Other	0.4	0.3	0.1	0.3	0.4	0.1	0.1	19.2	5.4
Nowhere	12.1	12.4	11.7	30.0	15.7	2.4	5.3	7.3	28.0
DK/Not stated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Total percent	100	100	100	100	100	100	100	100	100
Weighted N	5436	4833	4883	838	4237	5728	5325	3558	324

methods are no longer distributed by government midwives, pharmacies and shops will probably be used more frequently by women for these methods.

4.5 Ever use of contraceptives

Table 4.5 shows the changes in ever use of contraceptive methods between the 1975 SLWFS, 1982 SLCPS, and the 1987 SLDHS. The data for both the SLWFS and SLCPS excludes the northern and eastern provinces in order to make the rates comparable with the 1987 SLDHS.

TABLE 4.5:   Percent of ever-married women 15-49 who have
              ever used a contraceptive method* by type of
              method, 1975 SLWFS, 1982 SLCPS, and 1987 SLDHS.

| | PERCENT EVER USE | | |
TYPE OF METHOD	SLWFS 1975	SLCPS 1982	SLDHS 1987
Any method	46.5	69.2	71.8
Any modern method**	27.4	41.0	50.4
Any traditional method ***	30.0	46.6	44.3

*   Data from the northern and eastern provinces have been
       excluded from the SLWFS and SLCPS in order to make
       these two surveys comparable with the geographic areas
       covered by the SLDHS.

**   Modern methods are pill, IUD, injectible, diaphragm,
       foam, jelly, condoms, male and female sterilization.

***   Traditional methods include withdrawal, rhythm, and
       periodic abstinence for pregnancy avoidance purposes.

     Ever use of any method of contraception rose from 46.5 to
69.2 percent between the period 1975-1982, an increase of 49
percent.   Ever use of the two major categories of methods also
increased sharply during this period from 27.4 to 41.0 percent
for modern methods and from 30.0 to 46.6 percent for traditional
methods.   Between 1982 and the SLDHS in 1987 ever use of any
method increased only slightly from 69.2 to 71.8 percent. During
this same five year period, ever use of modern methods increased
from 41 to 50.4 percent while ever use of traditional methods
declined slightly from 46.6 to 44.3 percent.   Certainly one
possible reason for this decline is that prolonged abstinence
was not included in the 1987 SLDHS list of contraceptive methods
although it was included in the 1982 SLCPS list.

     Tables 4.6 (for ever-married) and 4.7 (for currently
married) show the percent of women who have ever used specific
methods of contraception by current age.   In both tables, for any
given age group, from the 15-19 year olds through those currently

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aged 44-49, more women have used periodic abstinence at one time or another than any other single contraceptive method. For women currently aged 30 or more the next most widely ever used method is sterilization while for those under age 30 it is either withdrawal or the pill.

In Tables 4.6 and 4.7, ever use of any contraceptive method follows an inverted 'U' pattern when examined by age. Ever use is lowest, as one might expect, among women currently aged 15-19 who are in the process of building their families. Thereafter, ever use increases to a peak in the group aged 35-39 and then begins to decline in the older age groups.

In general, this pattern of overall ever use by age is common to all specific methods except for the minor variations in the peak age of use which differs according to the method. For instance, the peak age in pill use tends to be between the ages of 25 and 34, while the peak in ever use of female sterilizations and periodic abstinence is among women between the ages of 35 and 44.

4.6   Trends in current use of contraception

Table 4.8 and Figure 4.1 provide an overview of trends in contraceptive prevalence and method use among currently married women aged 15-49. In the table and the figure, the data from the northern and eastern provinces of the country have been excluded from the 1974 SLWFS and the 1982 SLCPS in order to make all three data sets comparable.

Table 4.8 and Figure 4.1 reveal that 61.7 percent of currently married women are currently using some method of contraception. Among these users, approximately two thirds rely on a modern method and a third rely on a traditional method.

While the prevalence rate for all methods has nearly doubled since 1974, current use of all modern temporary methods (pill, IUD, Injectibles, and condom) has remained virtually constant at approximately 10 percent. Among specific modern temporary methods, pill and injectable use have increased, IUD use has declined, and condom use has fluctuated. Traditional method use increased initially between 1975 and 1982 from 14.2 to 26.0 percent but has subsequently declined to 21.1 percent in 1987 (as noted earlier, however, it is likely that changes in the prevalence of traditional method use may reflect, at least to some degree, differences in question wording between the three surveys). Undoubtedly, the major change in the contraceptive prevalence rate has been a three fold increase in sterilization use from 10.6 percent in 1975 to 29.8 percent in 1987.

Changes in method mix since 1975 are apparent in the summary

TABLE 4.6: Percent of ever-married women aged 15-49 who have ever used specific methods of contraception, by current age, SLDHS 1987.

						PERCENT EVER USED SPECIFIC METHODS							
CURRENT AGE	Any method	Pill	IUD	Injectable	Diaphragm, foam, jelly	Condom	Female steril.	Male steril.	Periodic Abstinence	With-drawal	Norplant	Other	Weighted number
15-19	32.1	11.9	3.0	1.9	0.0	1.7	1.0	0.0	13.0	9.6	0.0	0.0	134
20-24	55.4	17.0	4.1	11.4	0.0	9.1	5.9	2.2	26.9	14.3	0.1	1.0	723
25-29	71.7	17.7	7.9	9.1	0.3	9.3	17.1	5.7	37.0	19.4	0.1	0.3	1113
30-34	79.0	17.7	9.5	6.5	0.3	12.4	26.6	7.3	41.9	21.4	0.2	1.0	1203
35-39	79.8	15.2	9.6	4.3	0.2	9.9	34.4	6.9	43.8	18.7	0.0	0.7	1131
40-44	76.6	12.0	11.2	2.8	0.3	8.8	34.5	5.6	43.4	14.4	0.0	1.2	922
45-49	63.9	9.6	9.6	1.4	0.0	5.9	24.8	3.2	37.4	11.5	0.0	1.0	639
All ages	71.8	15.2	8.7	5.9	0.2	9.4	24.2	5.4	38.6	17.2	0.1	0.8	5865

TABLE 4.7: Percent of currently married women aged 15-49 who have ever used specific methods of contraception, by current age, SLDHS 1987.

						PERCENT EVER USED A SPECIFIC METHOD							
CURRENT AGE	Any method	Pill	IUD	Injectable	Diaphragm, foam, jelly	Condom	Female steril.	Male steril.	Periodic abstin.	With-drawal	Nor-plant	Other	Weighted Number
15-19	31.5	12.5	1.9	1.9	0.0	1.8	1.0	0.0	13.6	9.1	0.0	0.0	127
20-24	56.1	17.3	4.3	11.7	0.0	9.2	5.9	2.3	27.2	14.4	0.1	1.0	695
25-29	72.9	18.2	8.0	9.3	0.3	9.6	17.3	5.7	37.9	19.9	0.1	0.3	1071
30-34	80.2	18.3	9.7	6.8	0.3	12.7	26.9	7.6	42.7	21.5	0.2	1.0	1146
35-39	82.2	15.6	10.2	4.7	0.2	10.7	35.9	7.4	44.7	19.9	0.0	0.8	1044
40-44	80.6	12.0	11.8	3.1	0.3	9.0	37.0	5.8	45.3	14.5	0.0	1.4	824
45-49	69.0	11.1	9.8	1.6	0.0	7.1	26.3	3.6	40.4	12.6	0.0	1.2	535
All ages	73.9	15.8	8.9	6.3	0.2	9.9	24.9	5.7	39.6	17.8	0.1	0.9	5442

TABLE 4.8: Trends in current contraceptive use by method
among currently married women aged 15-49 from
the 1975 SLWFS, 1982 SLCPS, and 1987 SLDHS. *

	PERCENT CURRENTLY USING		
CONTRACEPTIVE METHODS	SLWFS 1975	SLCPS 1982	SLDHS 1987
Pill	1.7	2.7	4.1
IUD	5.2	2.9	2.1
Injectable	0.4	1.0	2.7
Condoms	2.3	3.3	1.9
Sterilization	10.6	22.0	29.8
Rhythm (periodic abstin.)	8.9	14.2	14.9
Withdrawal	1.6	5.1	3.4
Other	3.7	6.7	2.8
All modern temporary	9.6	9.9	10.8
All sterilization	10.6	22.0	29.8
All traditional	14.2	26.0	21.1
ALL METHODS	34.4	57.8	61.7

*   Data from the northern and eastern provinces have been
    excluded from the SLWFS and SLCPS in order to make
    these two surveys comparable with the geographic areas
    covered by the SLDHS.

Table 4.9.   This table shows the percent of currently married
users who are using specific contraceptive methods by age in
1975, 1982, and 1987.   As in the previous Table 4.8, the data in
the SLWFS and SLCPS have been made comparable with the SLDHS by
excluding the northern and eastern provinces.

It is apparent in Table 4.9 that the proportion of users
relying on modern temporary methods dropped from 27.7 percent in
1975 to 17.1 in 1982 and has remained at that level (17.4
percent) in 1987.   The proportion of users relying on
sterilization has shown an opposite trend, increasing from 30.0
percent in 1975 to 38.0 in 1982, and to the current level of 48.3
percent of all users in 1987.   Finally, while traditional method
users accounted for 41 percent of all use in 1975 and 45 percent
in 1982, they now account for only 34 percent in 1987.   Again, it
is important to note that the differences in traditional method
use may be due at least in part to questionnaire design
differences between the three surveys.

Figure 4.1
Contraceptive Prevalence by Method
among currently married women age 15-49
(excluding northern and eastern provinces)

Sterilized	Other Modern
Traditional	Not Using

Percent

Sri Lanka
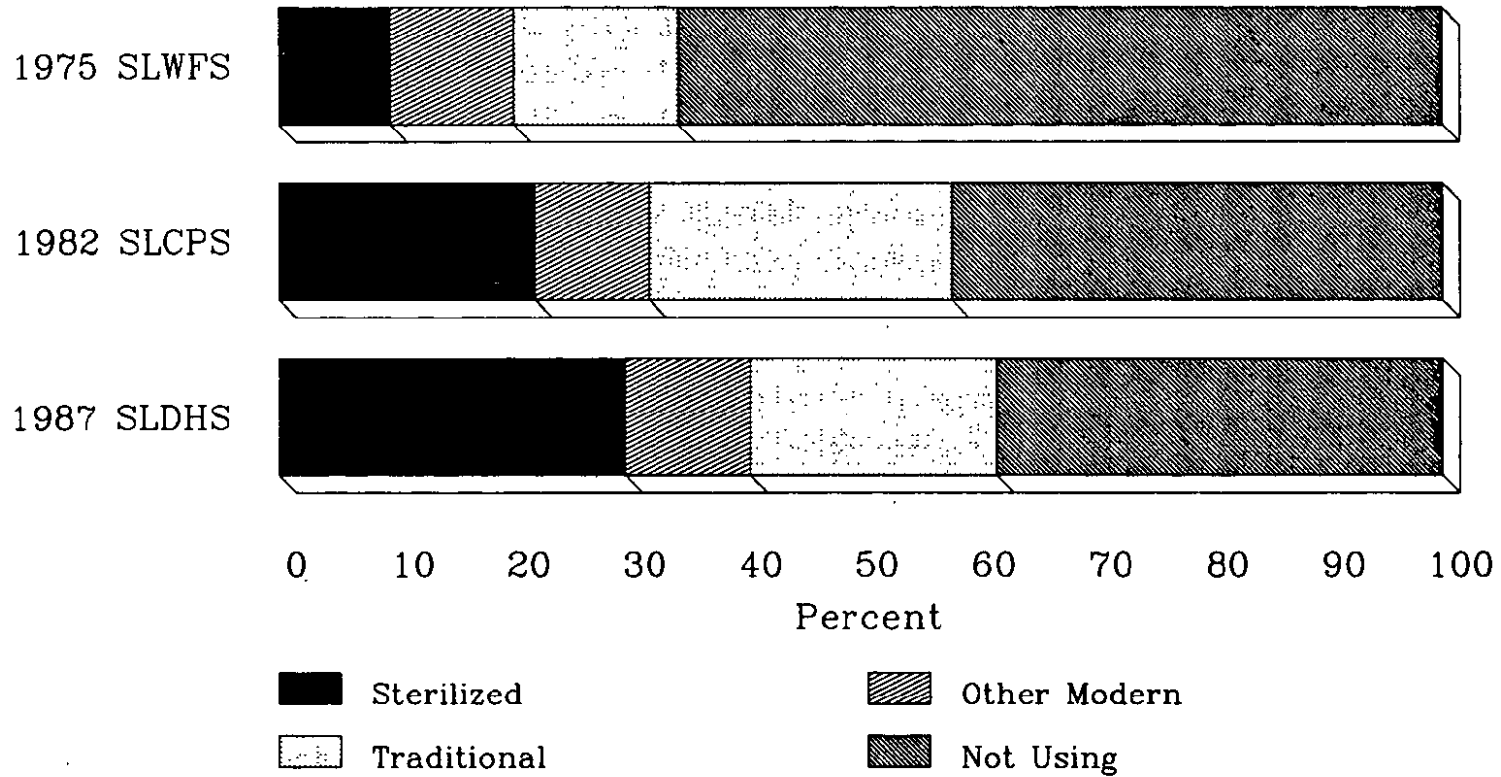
Table 4.10 and Figure 4.2 indicate that by age, there was a decline between 1975 and 1982 in the proportion of users under age 25 who were using modern methods, particularly the pill and IUD, and a increase in the proportions of users 35 and over who were relying on sterilization. For example, in 1975, 71.4 percent of currently married users aged 15-19 and 63.6 percent of users aged 20-24 were relying on a modern method of contraception. By 1982, the proportions declined substantially to 27.0 and 40.6 percent respectively for these two age groups. Conversely, in 1975 among the older age groups, 35.4 percent of those aged 40-44 and 29.4 percent of those aged 45-49 were using sterilization. By 1982 the percent relying on sterilization in these two age groups rose to 44.8 and 41.7 percent respectively.

The trend towards increasing use of sterilization continued in 1987 among all age groups, but the decline noted in 1982 among the younger age groups in the proportions using modern temporary methods was reversed. The SLDHS reveals that 54.3 percent of currently married users aged 15-19 were using some method of modern contraception. Among users aged 20-24, 60.6 percent were using a modern method. Of particular interest is the increase in pill and injectable use among women under age 25 and the decline in IUD use compared with the 1975 SLWFS.

Because of differences noted earlier in the way each of the three surveys asked questions about traditional methods and probed for responses, trends in use are somewhat difficult to interpret. For example, while both the SLWFS and SLDHS specifically asked respondents about the use of prolonged abstinence to avoid pregnancy, the SLCPS did not. Spontaneous responses about the use of prolonged abstinence were included in the category of "other" methods by the SLCPS. All three surveys did ask respondents specifically about withdrawal and periodic abstinence (safe period or rhythm) although considerably different probing techniques were used.

In reviewing the data presented in Table 4.10 on the use of traditional methods by age, there is very little difference between the three surveys in the proportions using periodic abstinence or rhythm. In all three surveys, a relatively constant one quarter of all contraceptive users rely on this method. A similar constant trend is not apparent between the three surveys with regard to the proportions using withdrawal or other traditional methods.

4.7 Current use by method.

Table 4.11 indicates that 29.8 percent of all currently married women rely on sterilization as a method of contraception. The second most widely used method is periodic abstinence (rhythm or safe period) used by 14.9 percent of the couples.

TABLE 4.9:   Among current users, changes in method mix
             between the 1975 SLWFS, 1982 SLCPS, and
             1987 SLDHS.*

	PERCENT CURRENTLY USING		
CONTRACEPTIVE METHOD	SLWFS 1975	SLCPS 1982	SLDHS 1987
ALL MODERN METHODS	58.7	55.2	65.8
Pill	4.9	4.7	6.6
IUD	15.1	5.0	3.4
Injectable	1.2	1.7	4.4
Condom	6.7	5.7	3.1
Sterilization	30.8	38.0	48.3
ALL TRADITIONAL METHODS	41.3	45.0	34.2
Rhythm	25.9	24.6	24.1
Withdrawal	4.7	8.8	5.5
Other traditional	10.8	11.6	4.5
ALL METHODS	100	100	100

* Data from the northern and eastern provinces has been
  excluded from the SLWFS and SLCPS in order to make
  these two surveys comparable with the geographic areas
  covered by the SLDHS.

These two individual methods account for 44.7 percent of all use
among currently married women. The balance 55.3 percent is
distributed among all the other methods both modern and
traditional. It is noteworthy that despite considerable probing
in the SLDHS questionnaire, only 2.8 percent of all currently
married women said they were practicing prolonged abstinence for
reasons of avoiding pregnancy.

4.8   Differentials in contraceptive method use

Table 4.12 shows the percent distribution of currently
married women by method currently using according to selected
background characteristics. Other urban areas show the highest
current use at 68.4 percent. The Colombo metropolitan area and
the rural areas have the same rate of current use at
approximately 62 percent.

The estate sector is notable in at least four respects.
First, estate women have the lowest overall prevalence rate at

Figure 4.2
Contraceptive Method Mix
Among Currently Married Users 15−49 *

1975 SLWFS   1982 SLCPS   1987 SLDHS

Contraceptive Method

■ PILL   ▨ IUD   ▦ INJECT/VAG.   ▨ CONDOM

▦ STERILIZATION   ▢ PERIODIC   ▦ WITHDRAWAL   ▭ OTHER
                     ABSTINENCE

* Excludes northern and eastern areas

51.2 percent. Second, 40 percent of estate women use sterilization, the highest among all women classified by sectors. Third, only 8 percent of estate women use traditional methods, the lowest among all sectors. Finally, less than 4 percent of estate women use modern temporary methods, again, the lowest among all sectors.

There are very few major differentials by socio economic zones which indicates that contraceptive use is pervasive throughout Sri Lanka. Overall, the lowest prevalence area is zone 5 which is not unexpected since it is dominated by the estate plantation workers. This zone also shows a high prevalence of sterilization use and a low prevalence of periodic abstinence use which is similar to the estate sector. The highest prevalence area is zone 2 which consists primarily of feeder areas for Colombo and thus contains some of the areas classified as "other urban."

There is a direct relationship between increasing education and increasing use of both modern temporary methods and traditional methods. For example, only 4.7 percent of women with no education use modern temporary methods and 10.4 percent use traditional methods. On the other hand, among women with more than a secondary education, 14.9 percent use modern temporary methods and 31 percent use traditional methods. Women with a higher education are therefore three times more likely to be using a modern temporary method or a traditional method than women with no education. Finally, there is a notable inverse relationship between education and sterilization. Almost 40 percent of women with no education or only a primary education rely on sterilization compared with only 16 percent of women with more than a secondary education.

As expected, there is a strong relationship between parity and current contraceptive method use. This is particularly evident for sterilization. At parity four or more, over 50 percent of all currently married women use sterilization. Modern temporary methods as well as traditional methods are used primarily by women with 1 to 3 children. Women with 4 or more children are less likely to use these methods.

4.9 Number of children at time of first use

As Sri Lanka has achieved a high level of contraceptive prevalence over the years, it is of interest to know the pattern of birth spacing, particularly the behavior of women with respect to the postponement of first births and the spacing of second or higher order births. Table 4.13 shows the percent distribution of ever-married women by the number of living children at the time of the first use of contraception according to current age.

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TABLE 4.10: Percent distribution of currently married users aged 15-49 by specific method of contraception according to current age, 1975 SLWFS, 1982 SLCPS, and 1987 SLDHS. *

1975 SRI LANKA WORLD FERTILITY SURVEY
CONTRACEPTIVE METHODS CURRENTLY USING

CURRENT AGE	Pill	IUD	Injectable, or vaginal methods	Condom	Female steril.	Male steril.	Periodic abstin.	With-drawal	Prolonged abstin. and other methods	Percent total
15-19	9.5	38.1	----	19.0	4.8	----	23.8	4.8	----	100
20-24	10.4	29.9	3.9	9.7	9.1	0.6	20.8	7.8	7.8	100
25-29	7.0	15.6	0.3	9.6	25.7	2.6	27.2	6.7	5.3	100
30-34	4.8	15.1	1.3	8.0	29.2	3.2	26.5	5.0	6.9	100
35-39	4.6	12.7	0.5	6.8	35.6	2.7	25.8	2.9	8.3	100
40-44	1.5	14.5	0.4	1.5	32.8	2.6	27.2	3.0	16.4	100
45-49	1.2	4.3	1.2	----	29.4	----	27.0	2.5	34.3	100
Total	4.9	15.1	1.2	6.7	28.7	2.3	25.9	4.7	10.8	100

1982 SRI LANKA CONTRACEPTIVE PREVALENCE SURVEY
CONTRACEPTIVE METHODS CURRENTLY USING

CURRENT AGE	Pill	IUD	Injectable, or vaginal methods	Condom	Female steril.	Male steril.	Periodic abstin.	With-drawal	Prolonged abstin. and other methods	Percent total
15-19	16.2	5.4	----	2.7	2.7	----	35.1	13.5	24.3	100
20-24	7.1	5.9	6.3	7.5	7.1	6.7	31.0	11.7	16.7	100
25-29	6.8	6.0	3.3	8.0	23.0	9.0	21.8	11.0	11.2	100
30-34	5.0	3.5	0.4	.6.2	33.7	8.1	26.9	8.5	7.8	100
35-39	2.0	5.8	1.3	4.9	42.8	6.0	21.1	7.3	8.9	100
40-44	3.8	4.1	0.3	4.1	40.0	4.8	23.7	7.6	11.7	100
45-49	0.7	5.6	----	2.1	39.6	2.1	22.9	4.9	22.2	100
Total	4.7	5.0	1.7	5.7	31.4	6.6	24.6	8.8	11.6	100

1987 SRI LANKA DEMOGRAPHIC AND HEALTH SURVEY
CONTRACEPTIVE METHODS CURRENTLY USING

CURRENT AGE	Pill	IUD	Injectable, or vaginal methods	Condom	Female steril.	Male steril.	Periodic abstin.	With-drawal	Prolonged abstin. and other methods	Percent total
15-19	37.5	4.2	4.2	4.2	4.2	----	25.0	16.6	4.2	100
20-24	16.3	5.8	16.7	3.4	13.9	4.4	27.9	7.8	3.7	100
25-29	12.2	4.1	8.3	2.9	30.2	8.5	25.4	5.9	2.4	100
30-34	6.3	3.0	4.0	3.4	40.3	10.7	23.8	6.4	2.1	100
35-39	3.9	1.9	1.8	3.0	48.6	8.4	23.9	6.1	2.5	100
40-44	1.5	3.6	0.5	3.2	51.6	6.5	24.1	3.6	5.4	100
45-49	1.2	4.8	0.0	1.8	46.9	6.1	19.1	1.4	18.8	100
Total	6.6	3.4	4.4	3.1	40.4	8.0	24.1	5.5	4.5	100

* Data from the northern and eastern provinces have been excluded from the SLWFS and SLCPS to make these two surveys comparable with the geographic areas covered by the SLDHS.
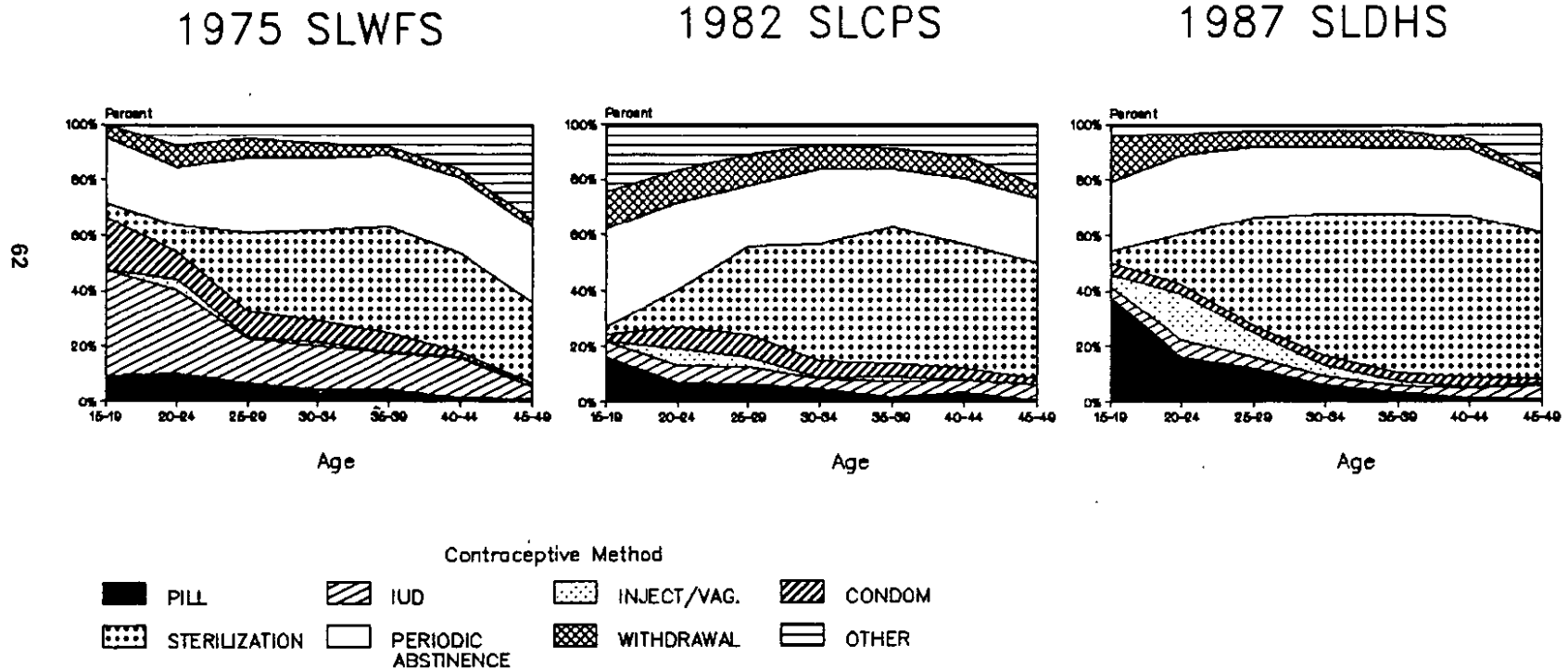
TABLE 4.11: Percent of currently married women aged 15-49 according to contraceptive method currently using by age, SLDHS 1987.

						PERCENT CURRENTLY USING:							
CURRENT AGE	Any method	Pill	IUD	Injectable	Foam, Jelly	Condom	Female steril.	Male steril.	Periodic abstin.	With-drawal	Other	Prolonged abstin.	Weighted number
15-19	20.2	7.2	1.1	0.7	0.0	0.8	1.0	0.0	5.0	3.4	0.0	1.1	127
20-24	42.3	6.9	2.4	7.1	0.0	1.5	5.9	1.9	11.8	3.3	0.0	1.6	695
25-29	57.3	7.0	2.3	4.5	0.1	1.7	17.3	4.8	14.6	3.4	0.0	1.4	1071
30-34	66.8	4.2	2.0	2.7	0.0	2.3	26.9	7.2	15.9	4.3	0.1	1.4	1146
35-39	73.8	2.9	1.4	1.3	0.0	2.2	35.8	6.2	17.6	4.5	0.0	1.8	1044
40-44	71.5	1.1	2.5	0.3	0.0	2.3	37.0	4.7	17.3	2.5	0.0	3.9	824
45-49	56.1	0.7	2.7	0.0	0.0	1.0	26.3	3.4	10.7	0.8	0.2	10.4	535
All Ages	61.7	4.1	2.1	2.7	0.0	1.9	24.9	4.9	14.9	3.4	0.1	2.8	5442

TABLE 4.12: Percent distribution of currently married women aged 15-49 by method of contraception currently using, according to selected background characteristics, SLDHS 1987.

							PERCENT CURRENTLY USING:							
BACKGROUND CHARACTER-ISTICS	Any method	Pill	IUD	Diaphragm Inject-able	foam jelly	Con-dom	Female steril	Male steril.	Periodic abstin-ence	With drawal	Other	Prolonged abstin-ence	Weighted number
SECTOR													
Colombo	62.6	3.0	0.7	3.1	0.0	3.1	24.2	5.6	18.5	2.5	0.0	2.0	521
Other Urban	68.4	5.3	3.6	1.8	0.0	2.8	22.8	6.5	20.9	2.2	0.0	2.4	364
Rural	61.9	4.4	2.3	2.8	0.0	1.8	24.7	4.3	15.0	3.8	0.1	2.7	4210
Estates	51.2	1.3	1.0	1.1	0.0	0.1	30.1	9.9	1.4	0.7	0.0	5.6	347
ZONE													
Zone 1	62.6	3.0	0.7	3.1	0.0	3.1	24.2	5.6	18.5	2.5	0.0	2.0	521
Zone 2	67.1	4.1	2.1	2.5	0.0	2.5	20.4	5.7	19.6	6.2	0.0	3.8	855
Zone 3	63.7	4.0	2.3	0.6	0.0	2.3	18.7	6.0	23.3	4.4	0.2	1.9	752
Zone 4	61.8	4.2	3.0	2.9	0.0	2.0	25.8	3.5	14.8	2.7	0.1	2.7	1245
Zone 5	57.4	5.1	2.2	2.4	0.1	1.0	28.9	5.5	6.3	2.5	0.0	3.3	1081
Zone 6	62.3	3.6	1.5	2.5	0.0	1.1	30.1	5.4	12.6	3.6	0.0	2.0	377
Zone 7	58.1	3.3	1.6	5.1	0.0	1.3	27.2	3.4	11.6	1.7	0.0	2.9	610
EDUCATION													
No education	54.3	2.1	1.3	1.1	0.0	0.2	32.9	6.3	4.4	1.7	0.0	4.3	579
Primary	63.5	3.3	2.3	1.6	0.1	0.9	33.9	5.9	9.5	2.5	0.1	3.6	1581
Secondary	62.9	5.4	1.7	3.7	0.0	1.6	23.2	5.1	15.7	3.8	0.1	2.6	1990
More than sec.	61.0	4.0	2.9	3.1	0.0	4.3	12.8	2.9	24.9	4.6	0.0	1.5	1292
PARITY													
No children	6.4	0.7	0.0	0.0	0.0	0.3	0.7	0.4	3.3	0.8	0.0	0.1	487
1 child	43.8	5.6	2.1	4.1	0.0	2.3	1.1	1.0	21.2	4.8	0.1	1.6	943
2 children	64.0	7.0	3.6	4.3	0.0	2.7	12.1	6.3	21.6	5.0	0.0	1.4	1275
3 children	77.7	4.5	1.7	2.5	0.1	2.6	37.5	7.5	14.7	3.7	0.0	3.0	1100
4 or more	75.9	1.7	1.9	1.5	0.0	1.0	47.2	5.7	9.6	1.9	0.1	5.2	1637
Total	61.7	4.1	2.1	2.7	0.0	1.9	24.9	4.9	14.9	3.4	0.1	2.8	5442

Across all age groups, approximately 6 percent of ever-married women initiated contraception before the first birth and 35 percent before the second. About half of all ever-married women initiated contraception before the birth of a third child. By age, Table 4.13 suggests that younger cohorts are more likely to begin contraceptive use before the first or second birth than older cohorts. For example, approximately 40 percent of the women between the ages of 20 and 35 initiated contraceptive use before the birth of their second child compared with 33 percent among women currently aged 35-39, 26 percent among those aged 40-44, and only 17 percent among the oldest cohort aged 44-49.

TABLE 4.13: Percent distribution of ever-married women aged 15-49 by number of living children at the time of first use of contraception by current age, SLDHS 1987.

| CURRENT AGE | Never used | NUMBER OF LIVING CHILDREN WHEN FIRST USED CONTRACEPTION | | | | | Don't know | Total percent | Weighted N |
		None	One	Two	Three	Four+			
15-19	67.9	9.8	18.7	1.4	1.0	0.0	1.4	100	134
20-24	44.6	10.3	32.3	9.1	2.8	0.7	0.2	100	723
25-29	28.3	8.9	33.9	16.9	8.8	3.0	0.2	100	1113
30-34	21.0	5.7	34.2	18.0	11.3	9.6	0.1	100	1203
35-39	20.2	3.6	29.1	17.5	11.9	17.2	0.4	100	1131
40-44	23.4	2.5	24.0	13.2	11.9	24.9	0.2	100	922
45-49	36.1	2.7	14.7	10.2	8.7	27.2	0.5	100	639
Total	28.2	5.8	28.8	14.6	9.5	12.8	0.3	100	5865

4.10 Knowledge of fertile period

The prevalence of traditional method use is relatively high in Sri Lanka compared with other countries. For the couples who practice these methods, particularly periodic abstinence (rhythm), it is important for them to know when during the ovulatory cycle a woman is most likely to conceive. Table 4.14 examines knowledge of the fertile period during the ovulatory cycle among ever users of periodic abstinence and among never users of this method.

Among women who had never used periodic abstinence, only 31 percent correctly knew that the most fertile period is during the middle of the ovulatory cycle. Among women who had ever used periodic abstinence, 64 percent correctly named the middle of the cycle as the most fertile time. While this proportion is more

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TABLE 4.14: Percent distribution of ever-married women aged 15-49 and women ever using periodic abstinence by knowledge of the fertile period during the ovulatory cycle, SLDHS 1987.

FERTILE PERIOD	KNOWLEDGE AMONG:		
	Ever users of periodic abstinence	Never users of periodic abstinence	All ever married women
During period	0.8	0.5	0.7
After period	18.4	10.9	13.8
Middle of cycle	64.0	31.2	43.9
Before period	3.1	2.1	2.5
At any time	0.0	0.3	0.2
Other response	2.0	0.9	1.3
Dont know	11.7	54.0	37.7
Total percent	100	100	100
Weighted N	2262	3603	5865

TABLE 4.15: For sterilized women, the percent distribution by age at the time of sterilization; according to the number of years since the sterilization, SLDHS 1987.

YEARS SINCE OPERATION	AGE AT STERILIZATION					Total percent	Weighted N	Median Age
	<25	25-29	30-34	35-39	40+			
< 2 years	17.8	32.1	28.6	15.1	6.3	100	507	30.0
2 - 3	15.3	31.7	31.9	15.0	6.0	100	218	30.3
4 - 5	9.4	33.5	34.3	18.9	4.0	100	245	30.9
6 - 7	12.1	30.5	36.4	21.0	0.0	100	117	30.5
8 - 9	9.6	35.6	39.7	15.2	0.0	100	146	30.6
10 + years	12.8	42.9	36.8	7.5	0.0	100	176	29.6
Total	13.9	33.6	32.7	15.2	3.9	100	1420	30.3

than double that of the never users, it indicates that over a third of all ever users of periodic abstinence are ill informed about the time of greatest risk of pregnancy.

4.11 Age at sterilization

Table 4.15 indicates that there has been relatively little change in the median age at which women obtain a sterilization operation. Among women who have obtained this operation within two years, the median age at the time of the operation was 30. This is only slightly below the median age of women who obtained the operation between 2 and 10 years ago and only slightly higher than the median of 29.6 years among those who obtained the operation 10 or more years ago.

4.12 Source of contraceptive supply and satisfaction with source

The data on the most recent source of contraceptive supply used among all current users is displayed in Table 4.16.   For supply methods, government hospitals and MCH centers were used by 27 percent of current users and government midwives and nurses by

TABLE 4.16:   For all current users of contraceptive methods the percent distribution according to most recent source of supply, by method, SLDHS 1987.

SOURCE OF SUPPLY	SUPPLY METHODS					CLINICAL METHODS				Total all methods
	Pill	Inject.	Diaphragm, foam, jelly	Condom	Total	IUD	Female steril.	Male steril	Total	
Govt hospital/ MCH center	17.4	54.4	0.0	8.9	26.9	85.4	94.8	78.2	91.7	78.2
Private doctor	11.2	28.5	100.0	3.8	15.2	4.3	2.0	1.0	2.0	4.7
Non-govt clinic	0.6	3.2	0.0	0.0	1.3	0.7	0.9	9.9	2.2	2.0
Mobile clinic	0.4	0.6	0.0	1.3	0.7	0.0	0.5	5.7	1.2	1.1
Govt PH midwife/ nurse	49.0	12.4	0.0	23.0	31.9	9.6	0.0	0.0	0.6	7.1
Other field source	0.3	0.0	0.0	1.3	0.4	0.0	0.0	0.0	0.0	0.1
Friend/Relative	4.1	0.0	0.0	13.2	4.8	0.0	0.0	0.0	0.0	1.0
Pharmacy/Shop	14.0	0.0	0.0	37.1	14.7	0.0	0.0	0.0	0.0	3.0
Other	2.6	0.0	0.0	9.6	3.3	0.0	0.0	0.0	0.0	0.7
DK/Not stated	0.5	0.9	0.0	1.8	0.9	0.0	1.9	5.3	2.3	2.0
Total percent	100	100	100	100	100	100	100	100	100	100
Weighted number	223	145	2	103	472	116	1418	271	1805	2277

another 32 percent. For clinic methods, 78 percent of current users relied on a government hospital or MCH Center and another 7 percent on government public health midwives or nurses. About 95 percent of the female sterilizations and 78 percent of male sterilizations have been performed in government facilities. The government's public health field staff were used by almost half of all pill users.

Besides government sources, private doctors are an important source for injectables. Pharmacies and shops are important sources for condoms and pills. Indeed, 37 percent of all condom users obtain their supplies from a pharmacy or shop (which is an indication of the activity of the contraceptive social marketing program) and the actual percent may be somewhat higher. It is likely, for example, that some of the friends and relatives who are listed as a source obtain their supplies from pharmacies and shops.

Current users who obtained a method or contraceptive service from a source were asked about their satisfaction with the source. Table 4.17 indicates that the vast majority, 95 percent, of all current users did not have any complaint to make against the services provided at a source of supply.

4.13   Reasons for method discontinuation

Women who discontinued any contraceptive method during the five years preceding the survey were probed for the reasons they discontinued the last method used. The results are presented in Table 4.18 according to the method discontinued and the main reason for the discontinuation.

Nearly a third of all women (32 percent) who discontinued a method did so because they wanted to become pregnant. Another 28 percent of respondents discontinued because they believe the method failed. It should be noted the SLDHS had no way of verifying method failure. Discounting male sterilization with only ten cases, method failure is the most likely reason given for discontinuation (37 percent) among users of periodic abstinence and withdrawal. Method failure is also an important reason given by 23 percent of condom users for discontinuation.

Among all women who discontinued any method in the past five years, 12 percent listed health concerns as the main reason. Among women who formerly used the pill, 38 percent said they discontinued because of health, 27 percent listed this as a reason for discontinuing the IUD, and 29 percent for discontinuing with injectables. Most other reasons for discontinuation of a method are trivial. For example, less than 1 percent discontinued because of lack of availability of supplies or accessibility to facilities or because the method

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cost too much. Also, only 3 percent discontinued because the method was judged inconvenient to use.

4.14 Attitudes towards becoming pregnant

Table 4.19 shows the percent distribution of currently married exposed women who are not using contraceptives by their attitudes towards becoming pregnant in the next few weeks according to the number of living children. Overall, 38.4 percent of these exposed nonusers reported that they would be unhappy if they became pregnant during the course of the next few

TABLE 4.17: Among current users of contraception obtaining a method at a source, the percent distribution by type of dissatisfaction with the service (if any), according to type of source last visited, SLDHS 1987.

	DISSATISFACTION WITH SERVICE								
SOURCE OF SUPPLY	No complaint	Wait too long	Staff discour tious	Service expen- sive	Desired service unavail	Other	Not stated	Total percent	Weighted number
Govt hospital/ MCH center	95.8	0.5	0.5	0.4	0.2	0.4	2.3	100	1781
Private doctor	94.7	0.0	0.0	0.9	0.0	0.8	3.6	100	108
Non-govt clinic	83.1	2.2	0.0	3.0	0.0	0.0	11.8	100	46
Mobile clinic	70.1	0.0	12.3	0.0	0.0	0.0	17.6	100	25
Govt PH midwife/ nurse	94.7	0.0	0.0	2.1	0.0	0.0	3.2	100	162
Other field personnel	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100	2
Total	95.1	0.5	0.6	0.6	0.1	0.3	2.8	100	2127

weeks while the majority, 54.4 percent, said they would be happy if they became pregnant. As one might expect, among exposed women with no children fully 95 percent would be happy if they became pregnant in the next few weeks. The percent who would be happy drops sharply to 52 percent among exposed women with one child, 35 percent among those with two children, 26 percent with three, and 13 percent with four or more children.

Table 4.20 examines the reasons for the nonuse of contraception among currently married women who 1) are exposed, 2) are not currently using a method, and 3) say they would be unhappy if they became pregnant in the next few weeks. There are only 230 currently married women who meet all the criteria for inclusion in this table. Approximately half of them are under the age of 30. The reasons for the nonuse of contraception among these women are diverse but certainly a health concern is an important factor for 17 percent of the women under age 30 and for almost 20 percent of those over age 30. Among the women under

TABLE 4.18: Percent distribution of women who have discontinued a method in the
last 5 years by main reason for last discontinuation, SLDHS 1987.

	Pill	IUD	Inject.	Condom	Male Steril.	Periodic abstin.	With-drawal	Other	Total percent
To become pregnant	28.4	25.6	20.7	38.3	0.0	36.5	31.2	15.3	32.0
Method Failed	12.9	15.7	12.0	22.9	70.6	37.4	37.3	21.9	28.0
Infrequent sex	1.5	0.0	0.0	1.9	0.0	3.5	3.8	0.0	2.4
Partner disapproved	0.4	0.5	2.5	⁻5.4	0.0	0.8	4.9	22.5	2.0
Health concerns	38.3	26.7	29.2	5.4	0.0	0.3	0.0	5.6	11.?
Availability/ accessibility	1.2	0.8	5.7	1.4	0.0	0.0	0.0	0.0	0.8
Cost too much	0.0	0.0	1.4	1.7	0.0	0.0	0.0	0.0	0.2
Inconvenient to use	3.3	4.4	1.4	3.5	0.0	3.0	5.8	0.0	3.4
To use perma-nent method	2.9	8.7	8.7	4.5	0.0	6.9	5.3	15.9	6.2
Other reasons	9.1	16.0	16.9	14.1	19.0	10.0	10.9	14.0	11.4
DK, Not stated	2.1	1.6	1.5	0.8	10.3	1.7	0.9	4.8	1.7
Total percent	100	100	100	100	100	100	100	100	100
Weighted N	311	191	117	158	10	804	204	24	1822

30, disapproval of husband, currently breastfeeding, and a lack
of knowledge about contraceptive methods are three other major
reasons for nonuse. Among women over 30, infrequent sex,
menopausal, and husband disapproves were mentioned fairly
frequently by the exposed women.

4.15   Future use

All currently married women not currently using any method
of contraception were asked about their intention to use in the
future. The responses to this question tabulated by number of
living children (including current pregnancy) are shown in Table
4.21. Data in the table are examined according to the intention
to use in the next 12 months and later.

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Among all nonusers, approximately one third have a definite intention to use contraception in the future while 48 percent have no intention to use in the future and 16 percent are undecided. Only 21 percent intend to use in the next twelve months and another 14 percent say they will use after 12 months.

As the number of living children increases from 1 through 3, the percent of current non users who intend to use in the future increases from 19 percent to 36 percent. Among those with four or more children, however, the intention to use in the next 12 months drops to 26 percent.

The women not currently using a method of contraception but who intend to use in the future were further asked which specific method they intend to use. The results are shown in Table 4.22.

More than two fifths (43.5 percent) of women who are exposed to the risk of pregnancy and who intend to use in the future

TABLE 4.19: Among currently married exposed* women not using contraception, the percent distribution by attitude toward becoming pregnant in next few weeks, according to number of living children, SLDHS 1987.

ATTITUDE TOWARDS BECOMING PREGNANT

NUMBER OF CHILDREN	Happy	Not happy	Does not matter	Not stated	Percent total	Weighted number
0	94.6	3.9	0.8	0.7	100	187
1	52.1	39.8	4.5	3.6	100	156
2	35.1	54.8	3.9	6.2	100	121
3	26.3	65.8	6.5	1.5	100	58
4 or more	13.3	72.3	7.5	6.9	100	78
Total	54.4	38.4	3.8	3.4	100	599

* Exposed to the risk of pregnancy is defined as:

-- menstruated in last six weeks and
-- had sex in last four weeks and
-- has an open interval of less than five years or, if longer used contraception during the interval.

TABLE 4.20: Among women who are exposed and not using contraception, but who would not be happy if they become pregnant, the percent distribution by the main reason for nonuse, according to current age, SLDHS 1987.

MAIN REASON FOR NONUSE	AGE		All ages
	<30	30+	
Lack of knowledge	14.4	4.5	9.6
Opposed to FP	2.6	1.2	1.9
Husband Disapproves	19.7	7.2	13.7
Others disapprove	0.4	0.0	0.2
Infrequent Sex	4.3	11.7	7.9
Breastfeeding	16.4	4.3	10.6
Menopausal	2.0	9.5	5.6
Health Concerns	17.4	19.5	18.4
No availability/access.	2.1	3.2	2.6
Religion	3.2	5.1	4.1
Inconvenient to use	1.8	3.1	2.4
Other reasons	11.0	24.3	17.4
Don't know	3.7	5.2	4.4
Not stated	1.1	1.2	1.2
Total percent	100	100	100
Weighted N	119	111	230

TABLE 4.21: Among currently married women aged 15-49 not currently using any method of contraception, the percent distribution by intention to use in the future, according to number of living children (including current pregnancy), SLDHS 1987.

INTENDS TO USE A METHOD	NUMBER OF CHILDREN					
	None	1	2	3	4+	Total
Next 12 mos	0.0	18.7	25.1	35.9	25.8	21.4
After 12 mos	18.4	15.9	17.0	11.0	4.5	13.5
Undecided when to use	0.7	3.1	3.1	4.8	2.1	2.8
Undecided if will use	32.4	17.9	9.1	4.6	4.1	13.2
No intention to use	48.5	43.3	45.0	41.5	62.3	48.0
Not stated	----	1.2	0.8	2.2	1.3	1.1
Total Percent	100	100	100	100	100	100
Weighted N	289	600	487	284	423	2084

report that they will select sterilization. Injections were mentioned by 20.6 percent of the women and pills by 10 percent. Only 9 percent of current nonusers said that they intend to use traditional methods such as the safe period or withdrawal in the future.

4.16   Family Planning messages on radio

The radio is a popular medium of communication in Sri Lanka which is owned by the state but is not widely used in the communication of family planning messages to the people. However, the Sri Lanka Family Planning Association sponsors a 15 minute programme everyday in the evening at 7:30. This programme is broadcast only in Sinhala and includes discussion on a family planning problem and advice by a medical officer. The Sri Lanka Association of Voluntary Surgical Contraception also runs a radio programme in Sinhala and Tamil.

The percent of ever-married women who have heard a radio message about family planning is shown in Table 4.23. Among all ever-married women, only 36.5 percent have ever heard family planning messages over the radio. Approximately 7 percent have heard a message once while 30 percent have heard a message more

TABLE 4.22:   Among currently married
women not currently using any method of
contraception but who intend to use
in the future, the percent distribution
by preferred method according to whether
they intend to use in the next 12 months
or after 12 months, SLDHS 1987.

	INTENDS TO USE METHOD IN:		
METHOD INTENDS TO USE	Next 12 months	After 12 months	Total
Pill	13.6	4.3	10.0
IUD	4.7	1.3	3.4
Injectables	25.1	13.5	20.6
Condom	3.3	2.0	2.8
Female steril.	34.0	58.6	43.5
Male Steril.	1.4	1.1	1.3
Safe Period	9.2	4.7	7.5
Withdrawal	1.5	1.3	1.5
Norplant	0.3	0.0	0.2
Other	0.7	0.0	0.4
Not sure	6.1	13.1	8.8
Total percent	100	100	100
Weighted N	446	282	727

than once.   As noted earlier in this section, SLDHS respondents
have universally high levels of knowledge about family planning,
suggesting that media other than the radio may be more important
sources of information about family planning.

    By place of residence, women living in urban areas outside
of metropolitan Colombo are more likely to have heard a family
planning message over the radio than women living elsewhere. The
differentials by broad socio-economic zones are not great.

Approximately a third of women in each of the zones have heard a
family planning message over the radio at least once. By
education, there is a direct relationship between having heard
family planning messages over the radio and higher education.
For example, while only 16.5 percent of those with no education
have heard messages more than once, 41.5 percent of those with
more than a secondary education have heard these messages more
than once.

Although family planning messages have been heard by
slightly over one third of all ever-married women, Table 4.24
indicates that fully 89 percent of these women believe it is
acceptable to air messages on family planning over the radio. By
age, the proportions who believe it is acceptable varies in a
rather narrow range from a low of 82 percent among those aged 15-
19 to 91 percent among those currently aged 25-29 years. By
sector and zone the differentials are also small, however, by
education, the proportions who approve of radio messages on
family planning increases with education.

TABLE 4.23: Percent distribution of ever-married women by whether
they have heard a radio message about family planning,
according to selected background characteristics,
SLDHS 1987.

| BACKGROUND CHARACTER-ISTIC | HEARD F.P. RADIO MESSAGE | | | Percent total | Weighted N |
	Never	Once	More than once		
SECTOR					
Colombo	61.5	8.3	30.2	100	551
Other Urban	54.4	8.1	37.5	100	394
Rural	64.7	6.0	29.3	100	4553
Estates	61.9	11.8	26.3	100	366
ZONE					
Zone 1	61.5	8.3	30.2	100	551
Zone 2	62.2	6.0	31.8	100	904
Zone 3	58.9	7.5	33.6	100	822
Zone 4	65.4	5.8	28.9	100	1327
Zone 5	65.0	5.9	29.1	100	1167
Zone 6	63.1	9.4	27.6	100	402
Zone 7	66.6	7.1	26.3	100	691
EDUCATION					
No education	78.3	5.3	16.5	100	657
Primary	72.8	6.0	21.2	100	1739
Secondary	59.5	7.0	33.5	100	2123
More than secondary	50.7	7.8	41.5	100	1346
Total	63.5	6.7	29.8	100	5865

TABLE 4.24:   Percentage of ever-married women believing that it is acceptable
               to have messages about family planning on the radio, by age and
               selected background characteristics, SLDHS 1987.

BACKGROUND CHARACTER-ISTICS	AGE							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
SECTOR								
Colombo	85.7	90.7	86.5	85.8	92.1	90.2	90.3	89.1
Other Urban	83.0	96.7	96.2	94.8	91.6	92.7	87.9	93.1
Rural	81.7	86.8	90.8	91.5	89.7	87.0	84.3	88.7
Estates	76.2	83.2	88.7	83.5	82.6	78.7	77.8	82.9
ZONE								
Zone 1	85.7	90.7	86.5	85.8	92.1	90.2	90.3	89.1
Zone 2	81.2	87.6	94.9	91.9	93.2	88.9	87.0	91.1
Zone 3	100.0	88.8	90.0	90.7	86.4	95.3	90.1	90.4
Zone 4	72.0	81.6	88.6	91.5	86.4	88.4	80.5	86.5
Zone 5	85.3	94.4	93.4	93.9	94.3	80.1	86.3	91.0
Zone 6	85.3	87.6	93.4	93.3	90.2	85.0	82.4	89.6
Zone 7	78.4	81.2	85.6	84.4	85.4	81.2	77.4	83.0
EDUCATION								
No education	69.1	79.0	78.2	81.3	74.5	81.1	71.9	77.2
Primary	81.1	80.4	85.8	83.5	88.7	84.1	82.5	84.4
Secondary	83.5	91.1	92.9	95.0	91.4	89.0	92.9	92.1
More than sec.	100.0	94.5	96.0	94.2	93.9	94.7	92.2	94.5
Total	81.5	87.3	90.6	90.7	89.6	87.4	84.7	88.7

CHAPTER 5.

Fertility Preferences

5.1 Introduction

This chapter addresses three questions regarding the stated preferences of women for future childbearing: 1) How many more children are desired? 2) What is the desired timing for having the next child? 3) How many children are considered ideal for a family? Answers to these questions are designed to provide an assessment of the need for family planning contraceptive services.

The SLDHS also examines two further issues: 1) To what extent do unwanted or mistimed pregnancies occur? 2) What effect would the prevention of such pregnancies have on the fertility rate? Given that the explicitly stated population policy of the Government of Sri Lanka is to provide the services necessary for couples to have the number of children they desire at the time they desire, understanding childbearing preferences has important program implications.

Interpretation of data on fertility preferences, however, has always been the subject of controversy. Survey questions have been criticized on the grounds that answers are misleading because: 1) they reflect ephemeral views which are held with weak intensity and little conviction; and 2) they do not take into account the effect of social pressures or the attitudes of other family members, particularly the husband, who may exert a major influence on reproductive decisions.

The first objection probably is less important in Sri Lanka than in other countries. The high contraceptive prevalence rate can probably be taken as an indicator of a strong and conscious desire to control reproductive behavior. Thus it is not unreasonable to attach some interpretive weight to the findings concerning the stated childbearing preferences of women in Sri Lanka. Furthermore, unlike most previous surveys, the SLDHS attempts to measure the intensity of views by confirming the desire to have or not to have another child.

The second objection is correct in principle. In practice,

however, its importance is doubtful. For instance, the evidence from surveys in which both husbands and wives are interviewed suggests that there is no radical difference between the views of the two sexes.

The inclusion of women who are currently pregnant complicates the measurement of views on future childbearing. For these women, the question on desire for more children is rephrased to refer to desire for another child, after the one they are currently expecting. To take into account pregnant women, the results are classified by number of living children, including the current pregnancy as equivalent to a living child. In addition, the answers of pregnant women on preferred waiting time before the next birth presumably include the remaining gestation period of the current pregnancy and are thus not strictly comparable with the answers of non-pregnant women.

Women who have been sterilized for contraceptive purposes also require special analytic treatment. The general strategy in this chapter is to classify them as wanting no more children. The validity of this assumption can be ascertained by referring to the distribution of answers to the special question for sterilized women on change of mind since the operation.

5.2 Desire for more children

Data concerning the desire for more children and the certainty of preferences among currently married women in the sample by the number of living children is given in Table 5.1. This table is based on a series of questions which were designed to obtain information on the attitudes of women towards having another child. About 29 percent say they definitely want another child while 31 percent say they definitely do not want another child. Overall, those who state that they do not want more children, whether they are certain of their desire or not, plus women who have no regret about being sterilized constitute 59 percent of all currently married women.

Among all currently married women, 2.7 percent regret being sterilized and want more children. Another 1.5 percent regret being sterilized but are unsure whether they want more children. While these percentages appear small in relation to all currently married women, when the denominator is all sterilized women, 14 percent expressed some regret about being sterilized.

As one might expect, among women with no living children, 91 percent definitely want a child in the future, and among women with one living child, 76 percent want another. Thereafter, the percent wanting another child drops sharply to 29 percent among women who currently have two children and to 9 percent among women who currently have three children. Conversely, the

TABLE 5.1: Percent distribution of currently married women aged 15-49 by desire for more children and the certainty of their preference, according to number of living children, SLDHS 1987.

DESIRE FOR MORE CHILDREN AND CERTAINTY OF PREFERENCE	NUMBER OF LIVING CHILDREN *							
	None	1	2	3	4	5	6+	Total
HAVE ANOTHER:								
Definitely	91.3	75.5	29.1	9.1	4.7	1.2	0.8	29.1
Not sure	1.9	2.7	2.5	0.7	0.5	0.7	0.0	1.5
UNDECIDED	3.5	6.3	10.2	4.4	2.1	1.5	0.7	5.2
WANT NO MORE								
Definitely	1.2	10.5	32.7	38.9	39.2	40.0	46.0	30.7
No sure	0.4	2.8	7.1	3.2	2.1	2.1	1.2	3.5
NOT ESTABLISHED	0.0	0.5	0.7	0.9	1.8	2.1	0.8	0.9
STERILIZED:								
Regret, want more	0.8	0.8	3.8	3.8	3.5	2.5	0.9	2.7
Regret, no more	0.4	0.3	0.8	2.3	2.3	2.2	3.3	1.5
No regret	0.6	0.8	13.1	36.7	43.8	47.8	46.5	25.0
Not stated	0.0	0.1	0.4	0.7	1.5	1.5	0.8	0.7
Total	100	100	100	100	100	100	100	100
Weighted N	320	1014	1303	1138	704	461	503	5442

*Includes current pregnancy

proportion who definitely do not want another increases rapidly from 11 percent among women with one living child to 33 percent among women with two children. At parity three and higher, over 85 percent of women are either sterilized or state that they want no more children.

Table 5.2 examines the desire for more children and the desired timing of the next birth among currently married women. The marginal percentages in this table are somewhat different from those in the previous table because women are classified according to their desired timing for the next birth. This table allows for an examination of the total potential need for contraceptive services. Until very recently, family planning programmes in Sri Lanka focussed on women who want no further children and thus are potential clients for sterilization. Spacing methods have not been widely used as was pointed out in Chapter 4. This situation has now begun to change. The importance of spacing has been reinforced by recent evidence that short birth intervals are harmful to the welfare of children.

Figure 5.1 summarizes the findings on fertility preferences. A remarkably high 35 percent of currently married women want no more children while another 30 percent are already sterilized. Together, these two groups constitute 65 percent of all currently married women. The 35 percent who are not sterilized but say they want no more children are potential clients for sterilization. The 18 percent of all currently married women who want a child after two or more years are either currently using a contraceptive method or are potential clients for spacing methods.

Table 5.2 also shows that among currently married women with no children, 82 percent want a child within the next two years, however, this percent drops sharply to 23 among women with one child and to only 9 percent among women with two children. Among women with one child, 55 percent want to delay the next birth two or more years. The relationship between fertility preferences and parity is graphically shown in Figure 5.2.

In Table 5.3 the desire for more children is examined in relation to current age of women. As age increases, there is a monotonic increase in the percent of currently married women who want no more children, and a monotonic decrease in the percent who want another child. These relationships are best seen in Figure 5.3

Table 5.4 examines the women who want no more children, including sterilized women, by selected background variables and number of living children. The percent who want no more children or who are already sterilized increases rapidly from 16 percent at parity one to slightly over 60 percent at parity two and reaches a peak of about 96 percent at parity four and higher.

TABLE 5.2: Percent distribution of currently married women aged 15-49 by desire for more children, according to number of living children, SLDHS 1987.

DESIRE FOR MORE CHILDREN	NUMBER OF LIVING CHILDREN *							Total
	None	1	2	3	4	5	6+	
Wants no more	1.9	14.0	42.3	43.4	41.5	42.5	47.3	35.3
sterilized	1.8	2.0	18.1	43.4	51.1	53.9	51.5	29.8
Wants another within 2 yrs.	81.8	22.9	9.1	2.6	2.0	0.5	0.8	12.2
Wants another after 2+ yrs.	7.6	55.1	23.4	7.6	3.2	1.5	0.0	18.4
Wants another D.K. when	4.6	2.5	1.1	0.6	0.3	0.0	0.0	1.2
Unsure of preferences	2.4	3.2	5.7	2.0	1.6	1.1	0.5	2.9
Not established	0.0	0.3	0.3	0.3	0.3	0.6	0.0	0.3
Total	100	100	100	100	100	100	100	100
Weighted N	320	1014	1303	1138	704	461	503	5442

* Includes currently pregnant women

Figure 5.1
Fertility Preferences
Among All Currently Married Women
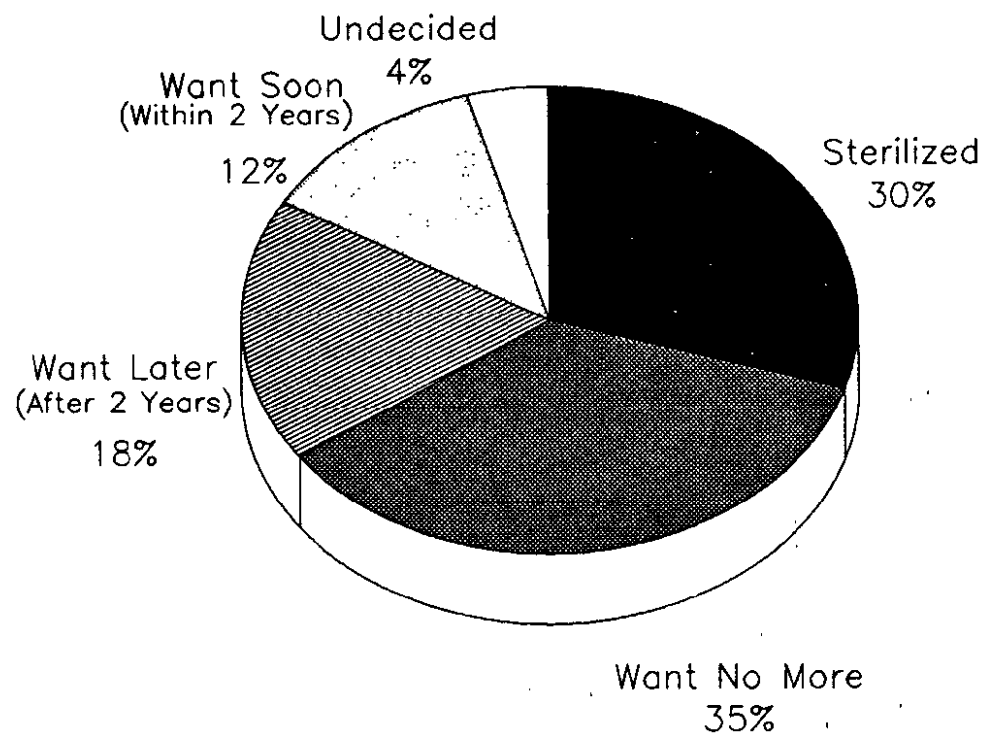## Age 15-49

Undecided
4%

Want Soon
(Within 2 Years)
12%

Sterilized
30%

Want Later
(After 2 Years)
18%

Want No More
35%

82

Figure 5.2
Fertility Preferences by Parity
Among Currently Married Women Age 15-49

Sri Lanka DHS 1987
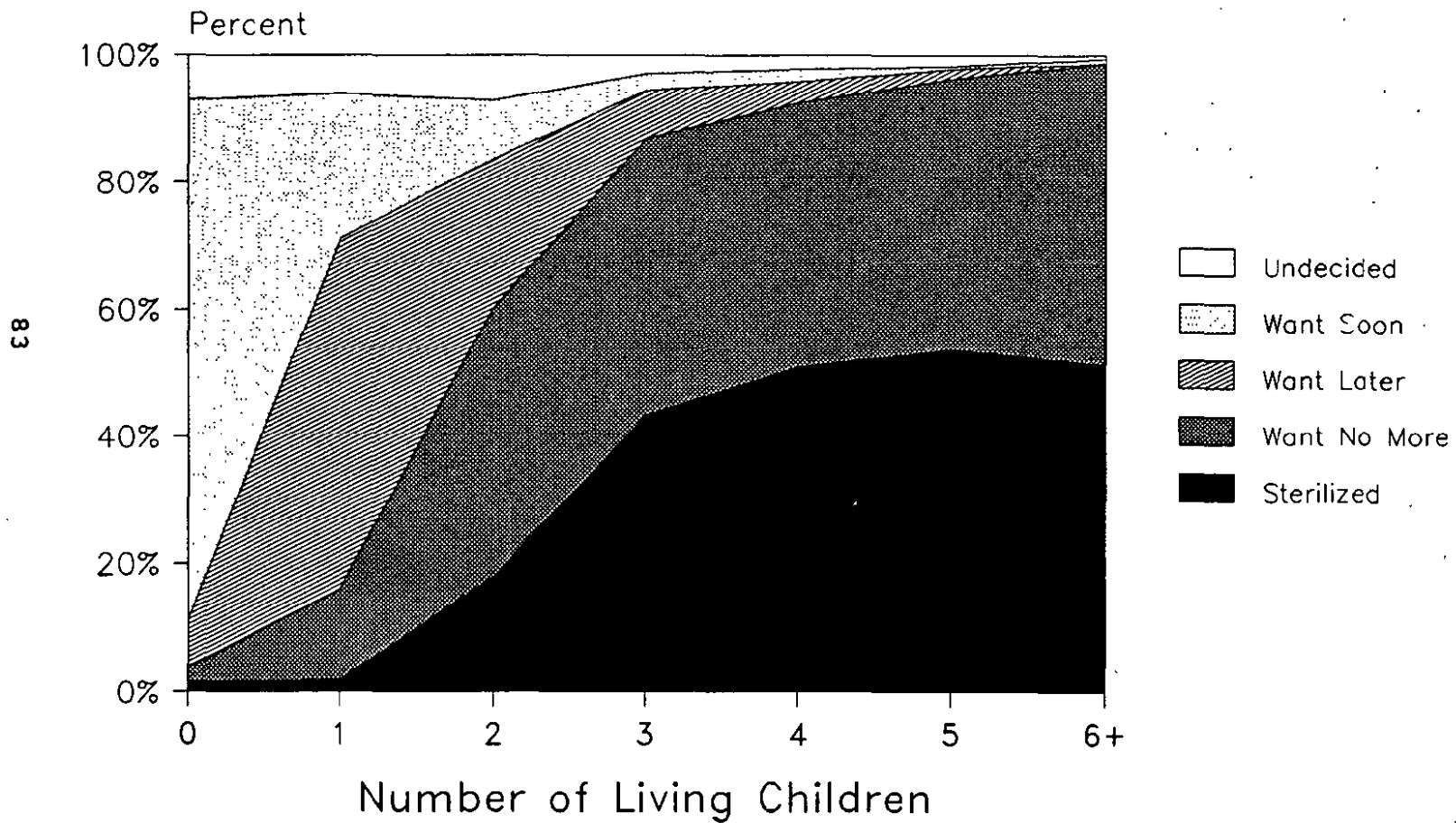
TABLE 5.3: Percent distribution of currently married women aged 15-49 by desire for more children, according to age, SLDHS 1987.

DESIRE FOR MORE CHILDREN	CURRENT AGE							
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Total
Wants no more	9.6	19.4	26.9	33.3	36.1	46.9	63.3	35.3
Sterilized	1.0	7.8	22.1	34.1	42.0	41.6	29.6	29.8
Wants another within 2 yrs.	24.1	17.7	14.9	12.3	11.6	7.7	4.3	12.2
Wants another after 2+ yrs.	57.7	48.9	31.4	15.9	5.9	1.3	0.1	18.4
Wants another D.K. when	3.2	3.0	0.7	0.6	1.6	0.5	0.9	1.2
Unsure of preferences	3.7	2.9	3.9	3.7	2.7	1.5	1.1	2.9
Not established	0.7	0.3	0.1	0.2	0.2	0.5	0.6	0.3
Total	100	100	100	100	100	100	100	100
Weighted N	127	695	1071	1146	1044	824	535	5442

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Figure 5.3
Fertility Preferences by Age
Among Currently Married Women

Percent

Legend:
- Undecided
- Want Soon
- Want Later
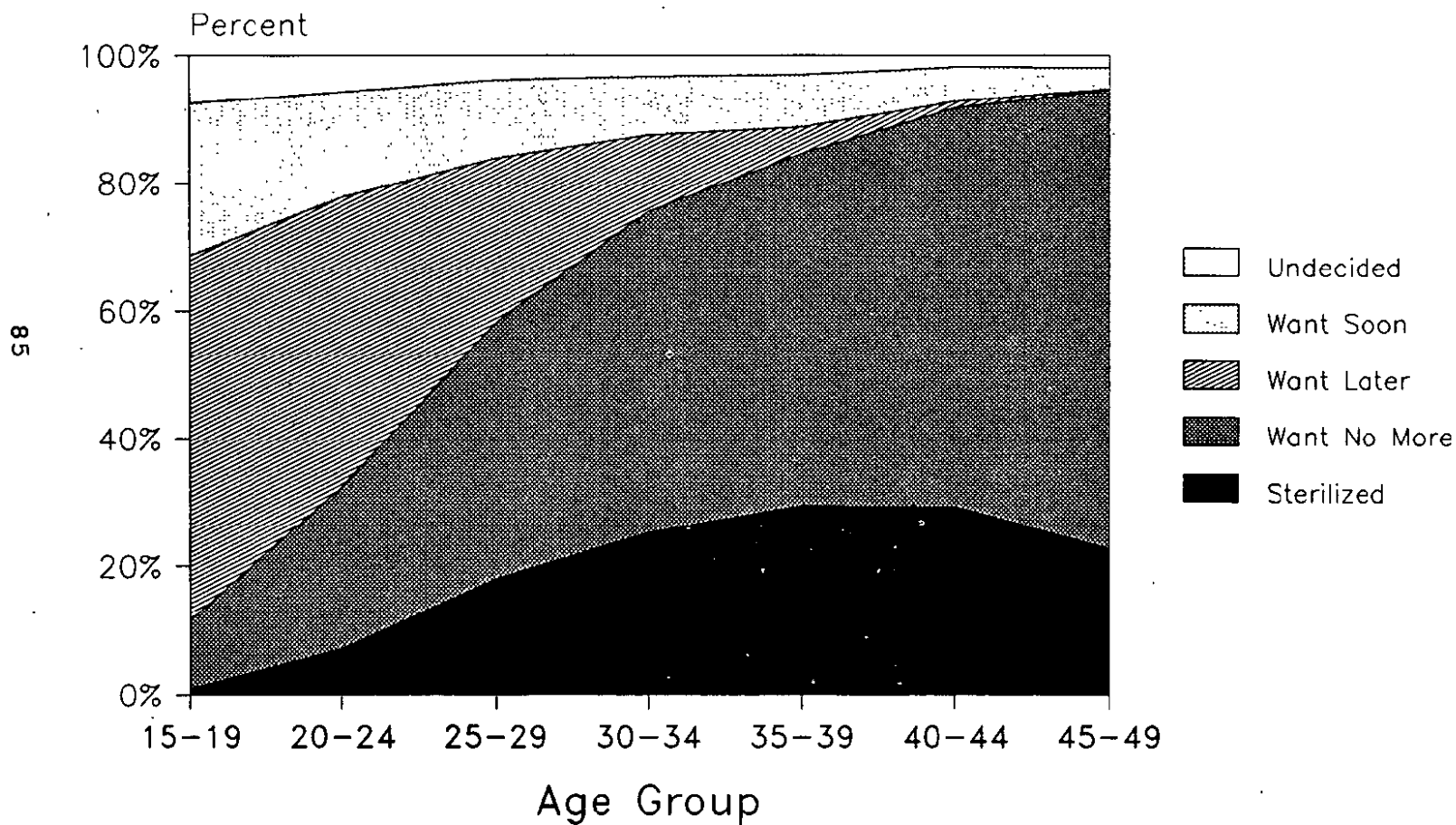- Want No More
- Sterilized

Age Group

Sri Lanka DHS 1987

TABLE 5.4:   Percent of currently married women who want no
more children (including sterilized women) by
number of living children* and selected
background characteristics, SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	NUMBER OF LIVING CHILDREN					
	None	1	2	3	4+	Total
SECTOR						
Colombo	0.0	19.4	70.3	92.9	97.1	66.2
Other Urban	0.0	11.8	69.0	89.4	98.2	68.6
Rural	3.5	15.7	57.6	85.6	95.0	64.5
Estates	11.8	17.0	65.7	89.8	97.9	66.8
ZONE						
Zone 1	0.0	19.4	70.3	92.9	97.1	66.2
Zone 2	0.0	16.0	67.7	93.3	98.5	65.6
Zone 3	5.9	17.6	64.0	84.9	96.4	64.1
Zone 4	5.1	15.2	55.2	84.6	94.2	63.5
Zone 5	2.5	16.4	57.5	90.2	96.0	65.7
Zone 6	3.0	12.3	50.0	76.4	95.1	65.3
Zone 7	9.6	12.6	51.8	79.3	93.3	66.7
EDUCATION						
No education	9.4	22.1	63.7	83.2	95.0	72.7
Primary	3.2	18.3	60.3	89.4	95.9	75.1
Secondary	4.1	15.5	59.3	88.5	95.6	63.9
More than sec.	1.8	14.1	61.0	82.1	94.5	51.3
Total	3.6	16.0	60.4	86.9	95.5	65.1

* Includes current pregnancy

This general pattern of increase is evident for all sectors,
zones, and educational levels.   Indeed, the differentials by
background characteristics are relatively small.

5.3   Women in need of family planning

Table 5.5 examines the need for family planning
contraceptive services among currently married women. Women are
considered to be in need if they are fecund and not contracepting
and either want no more births or want to postpone the next birth
for two or more years.   Included in this definition are some
women who are not immediately at risk of a pregnancy and thus not
immediately in need of contraceptive services, i.e., women who
are currently pregnant, not menstruating, or not sexually active.
The women included in the numerator for the percentages in this

table are now or will be in the near future in need of family planning services in order to avoid an unwanted or unplanned pregnancy.

Overall, Table 5.5 indicates that 23 percent of currently married women are in need of family planning services. Eleven percent or about half of the 23 percent in need say they want no more children while approximately 12 percent say they want to postpone the next birth or they are undecided about the next birth.

The second half of Table 5.5 examines the percent of women who are in need and who also say that they intend to use a method of contraception in the future. Twelve percent of the currently married women fall into this category and these women are equally divided between women who want no more children and women who want to postpone the next birth or are undecided. The former represent women who will probably accept sterilization while the latter are women who will probably use spacing methods.

TABLE 5.5: Among currently married women, the percent who are in need of family planning*, and the percent who are in need and plan to use a contraceptive method in the future, by background characteristics, SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	IN NEED OF FAMILY PLANNING			IN NEED AND INTENDS TO USE CONTRACEPTION		
	Wants no more children	Wants to postpone/ undecided**	Total in need	Wants no more children	Wants to postpone/ undecided**	Total in need
SECTOR						
Colombo	11.0	11.9	22.9	5.4	5.3	10.7
Other Urban	7.9	7.1	15.0	3.8	1.1	4.9
Rural	11.4	11.7	23.1	6.7	6.3	12.9
Estates	10.7	14.3	25.0	5.7	6.2	11.9
ZONE						
Zone 1	11.0	11.9	22.9	5.4	5.3	10.7
Zone 2	9.1	9.1	18.2	4.8	4.5	9.3
Zone 3	12.0	9.5	21.5	7.1	3.7	10.7
Zone 4	9.5	11.5	21.0	5.2	6.1	11.3
Zone 5	12.6	12.5	25.1	8.3	6.5	14.8
Zone 6	10.5	12.8	23.3	5.6	7.7	13.3
Zone 7	13.6	15.2	28.8	7.3	7.9	15.2
EDUCATION						
No education	12.1	11.3	23.4	6.8	5.3	12.1
Primary	11.4	9.6	21.0	6.3	4.4	10.9
Secondary	11.5	12.2	23.7	7.0	6.2	13.2
More than sec.	9.6	13.2	22.8	4.9	7.2	12.2
Total	11.1	11.6	22.7	6.3	5.8	12.1

* Women in need are defined as fecund, not currently contracepting and who want no more births or want to postpone the next birth for at least two or more years.

** Includes undecided about whether to have another birth or about timing for the next birth.

By sector, zone, and educational level the differentials in Table 5.5 are relatively small. Fewer women in other urban areas are in need of family planning services than women in other sectors and fewer say that they plan to use contraception in the future. This is probably because more of these women are already currently using a method of contraception.

5.4   Ideal number of children

One indicator of family size norms in Sri Lanka is the mean ideal number of children desired. In the SLDHS, the ideal number of children desired was obtained by asking one of two questions. Women who had no living children were asked "If you could choose exactly the number of children to have in your whole life, how many would that be?" For women with children the question was varied slightly, "If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?" Table 5.6 shows the responses to these questions.

The mean ideal number of children desired, presented at the bottom of the table, is identical for ever-married and currently married women. On the average, women in Sri Lanka say they would like to have 3.1 children. This number is almost exactly equal to the 3.0 mean number of children ever born to ever married women 15-49 reported in Chapter 3. It is also a drop from the 3.8 mean ideal number of children reported in 1975 by

TABLE 5.6:   Percent distribution of ever-married women by ideal number of children according to number of living children (including any current pregnancy), SLDHS 1987.

IDEAL NUMBER OF CHILDREN DESIRED	NUMBER OF LIVING CHILDREN							All ever married women
	None	1	2	3	4	5	6+	
None	0.3	0.2	0.0	0.1	0.0	0.0	0.2	0.1
1	3.9	8.8	2.3	1.4	0.7	0.1	0.5	2.9
2	54.4	54.4	45.2	16.5	17.5	10.0	4.6	31.1
3	26.1	24.2	35.5	54.8	23.3	28.8	17.5	32.9
4	7.8	5.5	11.1	15.5	38.5	18.3	21.5	15.9
5	1.0	1.4	2.5	5.4	7.2	21.5	17.2	6.4
6 +	1.0	0.6	0.6	1.5	4.0	8.4	14.8	3.3
Non-numeric answer	5.6	5.0	2.9	5.0	8.9	12.9	23.9	7.5
Total Percent	100	100	100	100	100	100	100	100
Mean ideal No. for ever-married	2.5	2.4	2.7	3.1	3.5	3.9	4.5	3.1
Mean ideal No. for current marr.	2.5	2.4	2.7	3.1	3.5	4.0	4.5	3.1
Weighted N	349	1115	1368	1204	768	502	558	5865

TABLE 5.7: Mean ideal number of children for ever-married women by
current age and selected background characteristics, SLDHS 1987.

BACKGROUND CHARACTER-ISTICS	CURRENT AGE							ALL ages	TOTAL
	15-19	20-24	25-29	30-34	35-39	40-44	45-49		
SECTOR									
Colombo	2.6	2.2	2.4	2.5	2.9	3.1	3.7	2.8	2.8
Other Urban	2.1	2.4	2.4	3.1	2.9	3.4	3.8	3.0	3.0
Rural	2.5	2.6	2.8	3.1	3.2	3.5	3.7	3.1	3.1
Estates	2.6	2.8	3.0	3.0	3.3	3.7	4.5	3.3	3.3
ZONE									
Zone 1	2.6	2.2	2.4	2.5	2.9	3.1	3.7	2.8	2.8
Zone 2	2.1	2.4	2.5	2.9	2.7	3.1	3.1	2.8	2.8
Zone 3	2.1	2.4	2.5	2.8	2.8	3.2	3.6	2.9	2.9
Zone 4	2.6	2.7	2.9	3.0	3.2	3.7	3.8	3.1	3.1
Zone 5	2.6	2.6	2.8	3.2	3.4	3.7	4.2	3.2	3.2
Zone 6	2.7	2.9	3.0	3.4	3.5	4.0	4.1	3.4	3.4
Zone 7	2.6	2.8	3.0	3.4	3.6	3.8	4.0	3.3	3.3
EDUCATION									
No education	2.9	2.7	3.0	3.5	3.7	3.9	4.5	3.5	3.5
Primary	2.6	2.6	2.9	3.3	3.4	3.8	4.1	3.3	3.3
Secondary	2.4	2.6	2.7	3.0	3.0	3.2	3.3	2.9	2.9
More than Sec.	2.1	2.4	2.5	2.7	2.7	3.1	3.1	2.7	2.7
TOTAL	2.5	2.6	2.7	3.0	3.1	3.5	3.8	3.1	3.1

the SLWFS. For those women with fewer than three children, the mean ideal number is slightly higher than the actual number of children. For women with more than three children, the mean ideal number is less than the actual number.

Differences by current age, sector, zone, and educational level in the mean ideal number of children desired are shown in Table 5.7. This table indicates that younger women are more likely than older women to consider between 2 and 3 children as ideal. In all sectors, zones, and educational levels, women under age 30 have a mean ideal number of children below the national average of 3.1 while women over 30 tend to have an ideal that is higher than the national average. By sector, women in the capitol city of Colombo have the lowest mean ideal number of children while women on the estates have the highest. By zone, the differences vary from an ideal of 3.4 in zone 6 to a low of 2.8 in zones 1 and 2. By educational level, there is a consistent decline within any given age group in the mean ideal number of children desired as education increases.

5.5 Fertility planning and the status of births

In the SLDHS, women were asked a series of questions for each child born in the last five years and any current pregnancy to determine whether the particular pregnancy was planned, unplanned but wanted at a later time, or unwanted. The purpose

of these questions is to gauge the degree to which couples successfully control their fertility. The questions require the respondent to recall accurately her wishes at one or more points in the past five years. There is of course always the possibility of rationalization, an unwanted pregnancy may well become a cherished child.

Table 5.8 is a birth-based rather than a woman-based table. It shows the percent of all births in the past five years (including any current pregnancy) that were wanted among women who were not using contraception during the interval and among those who were using contraception. The response categories listed under the heading "contraceptive interval" require some

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TABLE 5.8: Percent distribution of all births (including current pregnancy) in last five years by contraceptive practice of mother and whether birth was wanted, by birth order, SLDHS 1987.

CONTRACEPTIVE PRACTICE AND DESIRE FOR BIRTH	BIRTH ORDER				All births
	1	2	3	4+	
Non Contraceptive Interval					
Wanted birth then	76.3	36.0	33.7	28.2	46.4
Wanted birth later	9.4	16.9	15.7	13.7	13.6
Did not want birth	0.7	2.5	5.4	20.0	6.4
Contraceptive Interval					
Wanted birth then	8.4	22.8	22.9	11.4	15.8
Wanted birth later	2.4	16.1	13.4	8.4	9.6
Did not want birth	0.5	3.8	7.3	16.9	6.3
Desire not stated	2.4	1.9	1.5	1.4	1.9
Total percent	100	100	100	100	100
Weighted N	1380	1214	856	975	4424

explanation. A birth that falls into the category "wanted birth later," or the category "did not want birth" represents a contraceptive failure. That is to say, these are births to women who said they were using a contraceptive method when they became pregnant. A birth that falls into the category "wanted birth then" represents a birth to a woman who was using contraception during the interval but stopped for the purpose of becoming pregnant.

Among all 4424 births in the last five years, 62 percent were wanted then, 23 percent were wanted later, and 13 percent were not wanted. Women who have four or more living children are

the most likely to report an unwanted birth. Almost 16 percent of the births occurred to women who said they were using a method when they became pregnant. Whether these births are due to true method failures or to inappropriate method use cannot be determined from the data.

Table 5.9 is similar to the previous table but restricted to births that occurred in the past 12 months. Since the information in this table is limited to 12 months, it is probably a more reliable and certainly a more current estimate of unwanted and mistimed pregnancies. The estimates, however, are remarkably similar to those obtained for the five year period. Overall, 61 percent of the 814 births in the last 12 months were wanted, 26 percent were wanted later, and about 13 percent were not wanted. Almost 70 percent of first and second order births are wanted at the time of the birth compared to 47 percent of third or higher order births. Third or higher order births are far more likely to be unwanted than first or second order births.

TABLE 5.9: Among women having a birth
in the last 12 months, the percentage
wanting a child then, later, or wanting
no more children, by birth order,
SLDHS 1987.

DESIRE FOR LAST BIRTH	BIRTH ORDER OF CHILD		
	1-2	3+	Total
Wanted then	69.6	47.1	60.7
Wanted later	23.8	28.2	25.6
Not Wanted	5.4	23.4	12.5
Not stated	1.2	1.2	1.2
TOTAL	100 493	100 320	100 814

Table 5.10 presents another indicator of wanted fertility. In this table, the impact of preventing unwanted births can be estimated by computing total wanted fertility rates. These rates express the level of fertility that theoretically would result if all unwanted births were prevented. Comparison of actual rates with wanted rates indicates the potential demographic impact of preventing unwanted births.

TABLE 5.10: Total wanted fertility rates and total fertility rates for all women 15-49 for five years preceding the survey, by background characteristics, SLDHS 1987.

	Total Fertility Rates	
	Real	Wanted
SECTOR		
Colombo	2.2	1.9
Other Urban	2.3	1.9
Rural	2.9	2.4
Estates	3.4	3.2
ZONE		
Zone 1	2.2	1.9
Zone 2	2.4	2.0
Zone 3	2.6	2.1
Zone 4	2.7	2.4
Zone 5	3.2	2.8
Zone 6	3.0	2.4
Zone 7	3.4	2.6
Total	2.8	2.4

The wanted fertility rates are calculated in exactly the same manner as the conventional age-specific fertility rates presented in Chapter 3, except that births classified as unwanted are omitted from the numerator; the remainder can be cumulated to form a wanted total fertility rate which is analogous to the conventional total fertility rate. The wanted fertility rate can be interpreted as the total number of wanted births a woman would bear by age 50, if she experienced the wanted age specific fertility rates for the past 5 years. The wanted fertility rate may be a better indicator of desired fertility than answers to questions concerning ideal family size. The answers respondents give to questions about wanted births presumably take into account the balance between sons and daughters already born and survivorship considerations. Ideal family size responses, on the other hand, presumably refer to surviving children and may assume an ideal distribution of sons and daughters.

One further difference between the two measures needs to be noted. The wanted fertility rate takes observed fertility as the starting point and thus it can never be larger than the actual total fertility rate. Total ideal sizes, however, can and often are larger than the number of children born.

Table 5.10 suggests that if all unwanted fertility were prevented, the total fertility rate would drop from 2.8 to 2.4. This represents a relatively modest decline of approximately 14 percent in the TFR and suggests that most couples in Sri Lanka are successful at planning the number of children they desire.

By sector, Colombo and other urban areas have the lowest real and wanted fertility. Indeed, wanted fertility is below replacement levels. Although the estates have the highest real and wanted fertility, there is only a 6 percent difference between these two measures, the lowest for any sector. By zone, Colombo (zone 1) and the Colombo feeder areas in zone 2 have the lowest real and wanted fertility, while zones 5 and 7 have the highest.

CHAPTER 6.

Mortality and Health

6.1 Background

The focus in this chapter is on infant and child mortality and other key indicators of child health. The health status of children is an important factor influencing population dynamics in Sri Lanka. Accurate estimates of infant and child mortality are essential for making population projections. Information on immunization coverage, nutritional status, and utilization of services helps health planners and program administrators locate population groups at high risk, evaluate the effect of on-going programs, and make appropriate changes for improving services.

This chapter begins with an analysis of infant and childhood mortality for various calendar year periods. Next, attention turns to sources of prenatal care and to key indicators of child health such as immunization coverage and the treatment of diarrhea. The chapter concludes with an analysis of the anthropometric measurements (height and weight) which were taken on children 3 through 36 months of age.

6.2 Infant and child mortality levels

Estimates of male and female infant and child mortality for three different time periods are shown in Table 6.1 and summarized graphically in Figure 6.1.   Each time period covers five calendar years except for the period 1982-87 which includes the months in 1987 which preceded the interview of a respondent, usually a period of one to three months.

During the most recent time period 1982-1987, 25 infants for every 1,000 live births die during the first year of life, and 35 out of every 1000 live births die before reaching their fifth birthday.   These levels of infant and child mortality are very low compared with most other developing countries.

Table 6.1 also indicates that over the past ten years, Sri Lanka has experienced a substantial reduction in infant and child mortality.   Between the periods 1972-76 and 1982-87, infant mortality ($1q0$) declined 37 percent, child mortality ($4q1$) 51 percent and under five mortality ($5q0$) 41 percent.   This

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TABLE 6.1: Infant and childhood mortality estimates
for selected periods of time between 1972
and 1987, by sex of child, SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	TIME PERIOD			PERCENT DECLINE
	1972-77	1977-81	1982-87*	1972-76 to 1982-87
Males				
Infant mortality	48.5	48.0	31.2	36
Child mortality	16.4	10.5	9.8	40
Under 5 mortality	64.2	58.0	40.6	37
Females				
Infant mortality	31.1	30.2	18.8	40
Child mortality	22.4	10.6	9.2	59
Under 5 mortality	52.9	40.4	27.8	47
Total infant mortality	40.1	39.2	25.4	37
Child mortality	19.4	10.6	9.5	51
Under 5 mortality	58.7	49.3	34.6	41

* Rates presented include exposure during 1987 up to
the calendar month preceding the survey.

represents a remarkable achievement over a relatively short
period of time. Second, while males in general tend to have
higher mortality rates during the first five years of life, the
percent decline in infant mortality is approximately equal for
males and females, 36 percent and 40 percent respectively. This
is not the case with child mortality. In the period 1972-77,
female child mortality was 22.4 per 1,000 compared with 16.4 for
males during this period. By 1982-87, female child mortality
dropped by 59 percent to 9.2 per thousand while male mortality
dropped by 40 percent to 9.8 per thousand.

The decline in infant mortality reflected in SLDHS data is
also evident in figures issued by the Registrar General.
Averaging over a five year period, the infant mortality rate
reported by the Registrar General for the periods 1972-76 and
1977-81 is 46 and 36 deaths per one thousand live births,
respectively. The Registrar General's rate for the earlier
period is higher than the 40 per thousand estimated by SLDHS.
This would suggest that the SLDHS underestimated infant deaths
for the period 1972-76. On the other hand, for the period
1977-81 the rate reported by the Registrar General is slightly
lower than the 39 per thousand obtained by the SLDHS. This would
suggest that registration of infant deaths is not complete. For
the most recent period 1982-87, the SLDHS shows an infant
mortality rate of 25.4 per thousand. The provisional rate from
the Registrar General for 1984, the last year available, is 23.1
per thousand.

While Table 6.1 is useful for examining mortality trends
over time, the relatively short five year periods used to

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Figure 6.1
'nfant Mortality Rates
Over Time and by Residence

Deaths per 1000
Live Births

5-Year Period   Residence (1977-1987)
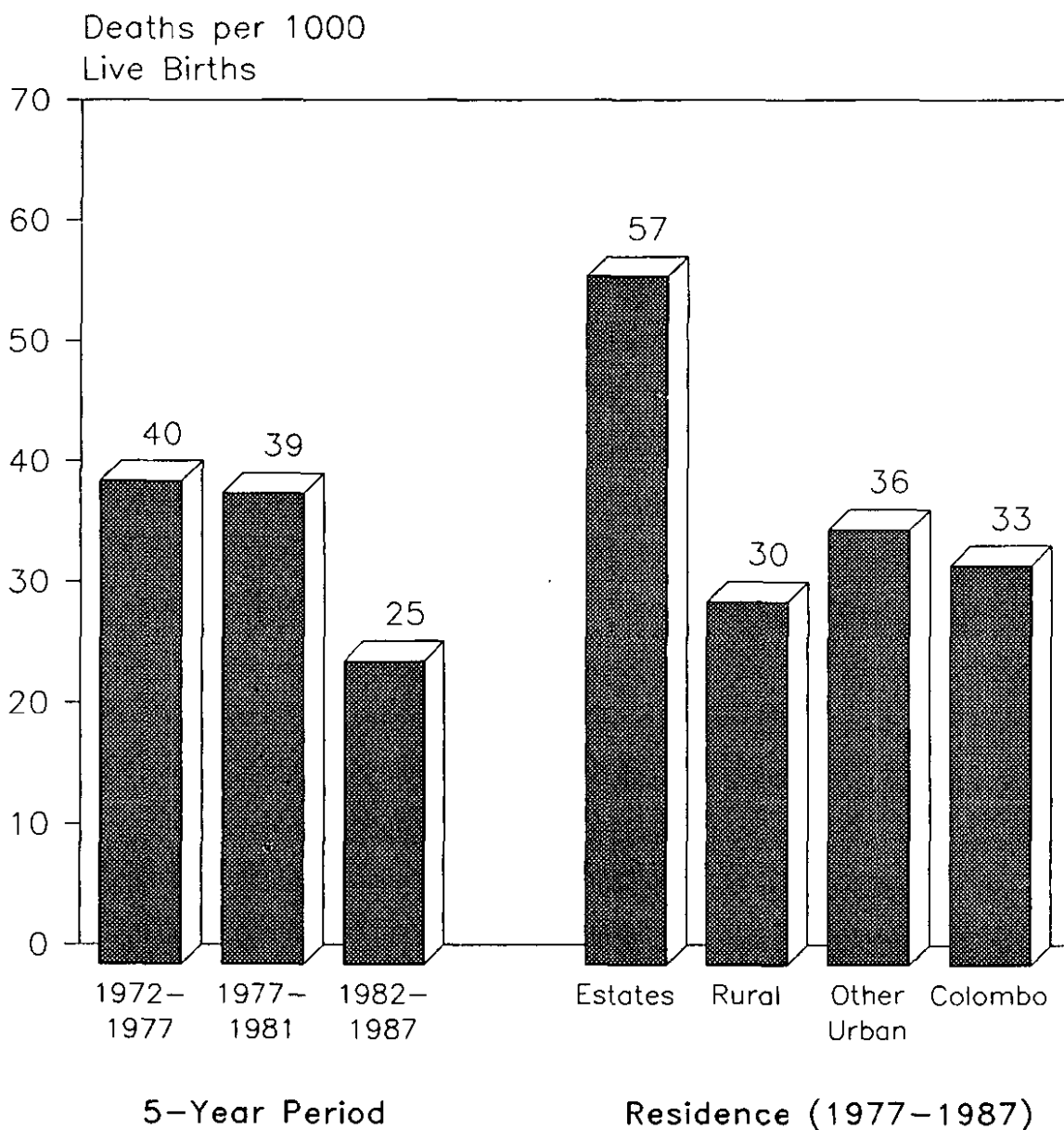
Sri Lanka DHS 1987

calculate the rates do not yield sufficient cases for the analysis of differentials other than sex. For an examination of differentials, Table 6.2 is more appropriate because the mortality experience of various groups are averaged over a ten year period (1977-1987).

Table 6.2 presents mortality rates for socio economic groups of the population. A striking statistic in this table is the high level of mortality for the estates among children under five. The ten year infant mortality rate for the estates is 58 deaths per 1000 live births which is almost double the rate of 30 deaths per 1000 in rural areas. The child and under 5 mortality rates for the estates are also far higher than in other sectors.

By socio-economic zones, mortality tends to be highest in zone five where many of the estates are located. By education, there is a monotonic decline in mortality as education increases. The infant mortality rate among children born to mothers with no education (52 per 1000) is two and a half times higher than the rate among children born to mothers with more than a secondary education. Similarly, both the child and under five mortality

TABLE 6.2: Socioeconomic differentials in infant and child mortality for the ten year period 1977-1987,* SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	Infant mortality (1q0)	Child mortality (4q1)	Under five mortality (5q0)
SECTOR			
Colombo	32.8	6.8	39.4
Other Urban	36.5	4.3	40.6
Rural	29.9	10.3	39.9
Estates	57.5	16.5	73.1
ZONE			
Zone 1	32.8	6.8	39.4
Zone 2	32.5	6.4	38.7
Zone 3	30.2	6.6	36.5
Zone 4	26.9	12.9	39.5
Zone 5	41.5	9.0	50.1
Zone 6	33.0	11.0	43.6
Zone 7	28.4	15.8	43.8
MOTHER'S EDUCATION			
No education	52.3	20.0	71.3
Primary	33.8	9.4	42.9
Secondary	32.0	9.3	41.1
More than sec.	19.7	6.5	26.0
Total	32.4	10.0	42.1

* Rates presented reflect mortality conditions through early 1987. Deaths and exposure of children cover the period 1977 through the month preceding the month of interview.

rate of children born to mothers with no education is between two
and a half to three times higher than the rate of children born
to mothers with more than a secondary education.

Table 6.3 examines demographic differentials in infant and
child mortality over the ten year period from 1977 through
February 1987. As expected, male mortality is higher than female
mortality. By mother's age at birth of child, the infant
mortality rate also conforms to the expected pattern. Mortality
is marginally higher among children born to mothers under the age
of 20 but distinctly higher among children born to mothers over
the age of 35. Higher birth order is also associated with higher
infant, child and under five mortality. Children whose birth
order is first, second, or third have approximately the same
level of mortality. Mortality increases rapidly at birth orders
of four and above. Finally, mortality is related to the length
of the previous birth interval. For example, the infant
mortality is 43 per 1000 among children born less than two years
after the next oldest sibling but drops to 25 per 1000 when the
previous birth interval is 2 to 3 years.

TABLE 6.3: Demographic differentials in infant and child
mortality for the ten year period 1977-1987,*
SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	Infant mortality (1q0)	Child mortality (4q1)	Under five mortality (5q0)
SEX OF CHILD			
Male	39.5	10.1	49.2
Female	24.7	10.0	34.4
MOTHER'S AGE AT BIRTH			
Less than 20	34.4	14.2	48.1
20-29	33.3	8.7	41.7
30-34	24.7	12.2	36.7
35+	39.9	9.7	49.3
BIRTH ORDER			
1	30.8	9.0	39.5
2-3	29.6	8.5	37.8
4-6	37.1	12.7	49.4
7 +	(46.9)	(16.5)	(62.6)
PREVIOUS BIRTH INTERVAL **			
Less than 2 yrs.	43.3	8.9	51.7
2-3 years	24.5	11.7	35.9
4 or more years	30.1	8.8	38.7
Total	32.4	10.0	42.1

* Rates presented include exposure during 1987 up to
the calendar month preceding the survey.

** Based on births of order two and higher.

( ) Denotes fewer than 500 cases.

Table 6.4 shows the mean number of children ever born, the mean surviving, the mean dead, and the proportion of children dead by age of ever-married women. Women who are 15-19 years and those above 40 have the highest proportion of children who have died. The proportion of children who have died is lowest among women who are currently aged 20-24.

TABLE 6.4: Mean number of children ever born, surviving and dead, and percent dead among ever born children by age of ever-married women, SLDHS 1987.

AGE OF WOMAN	Mean ever born	Mean surviving	Mean dead	Percent dead
15-19	0.62	0.58	0.04	5.99
20-24	1.29	1.26	0.03	2.56
25-29	2.05	1.97	0.08	3.99
30-34	2.78	2.65	0.13	4.64
35-39	3.34	3.17	0.17	5.19
40-44	4.32	4.01	0.31	7.12
45-49	5.08	4.68	0.40	7.84
All Ages	3.01	2.84	0.17	5.72

6.3 Prenatal care, tetanus toxoid injections, and assistance at delivery

Effective prenatal care, protection against tetanus, and assistance at delivery by a trained medical practitioner can have a powerful effect on reducing infant and maternal mortality. Tables 6.5, 6.6, and 6.7 present the data related to these topics.

Table 6.5 reveals that for approximately 97 percent of all births in the five year period, prenatal care was received by the mother from either a doctor (33 percent), a doctor and a midwife (62 percent) or a midwife alone (2 percent). By age of mother, there are essentially no differences in type of prenatal care between women under age 30 and those over age 30. By sector, women in the Colombo area and on the estates are more likely to receive prenatal care from a doctor alone than are women in other areas. This is probably related to the greater availability or accessibility of doctors in these two areas. Colombo has a higher ratio of doctors per 100,000 population than any other area in the country, and women on the estates have access to doctors at estate managed clinics.

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TABLE 6.5:   Percent distribution of births in the last 5 years*
              by type of prenatal care received by mother, by
              background characteristics, SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	TYPE OF PRENATAL CARE RECEIVED				Percent Total	Weighted number of births
	Doctor only	Doctor and midwife	Midwife only	No care		
AGE						
< 30	33.2	61.5	1.8	3.5	100	2136
30 +	33.6	61.7	1.3	3.4	100	1770
SECTOR						
Colombo	49.0	45.7	1.4	3.9	100	307
Other Urban	34.7	62.3	1.6	1.4	100	235
Rural	29.9	65.0	1.7	3.4	100	3094
Estates	53.8	40.5	0.8	4.9	100	270
ZONE						
Zone 1	49.0	45.7	1.4	3.9	100	307
Zone 2	20.6	75.1	2.8	1.5	100	525
Zone 3	28.2	67.7	1.7	2.4	100	537
Zone 4	31.9	64.8	1.6	1.8	100	850
Zone 5	35.4	59.9	1.1	3.6	100	876
Zone 6	44.0	51.5	0.4	4.0	100	279
Zone 7	35.5	54.5	1.6	8.4	100	532
EDUCATION						
No education	46.5	37.6	2.5	13.5	100	391
Primary	35.8	58.9	1.8	3.6	100	1151
Secondary	29.2	67.6	1.3	2.0	100	1465
More than sec.	31.2	65.9	1.5	1.4	100	899
Total Births	33.3	61.6	·1.6	3.4	100	3906

* Includes births in the period 1-59 months prior to the survey.

TABLE 6.6:   Percent of births in the 12 months preceding the survey whose mothers received tetanus toxoid injections, by selected background characteristics, SLDHS 1987.

| BACKGROUND | DOSES RECEIVED | | Weighted |
CHARACTERISTICS	One	Two	N
AGE			
< 30	17.0	64.8	541
30 +	15.7	68.5	273
SECTOR			
Colombo	17.4	67.4	74
Other Urban	18.1	61.2	46
Rural	16.4	66.1	647
Estates	16.5	67.3	47
ZONE			
Zone 1	17.4	67.4	74
Zone 2	14.8	66.1	113
Zone 3	14.7	70.6	118
Zone 4	21.6	59.8	174
Zone 5	13.7	65.5	172
Zone 6	16.1	61.2	57
Zone 7	16.6	73.5	106
EDUCATION			
No education	26.0	54.0	72
Primary	20.3	58.9	234
Secondary	14.8	68.9	305
More than sec.	11.6	74.1	204
Total Births	16.6	66.0	814

TABLE 6.7: Percent distribution of births in the period 1-59 months prior to the survey by type of assistance mother received during delivery, by selected background characteristics, SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	CARE RECEIVED FROM:					No care	Percent total	Wtd. no. births
	Doctor	Nurse	Midwife	Relative	Other			
AGE								
< 30	12.0	73.8	6.7	5.0	2.1	0.3	100	2136
30 +	15.6	74.5	5.2	3.6	0.7	0.3	100	1770
SECTOR								
Colombo	38.7	59.9	0.8	0.0	0.6	0.0	100	307
Other Urban	20.3	70.5	5.9	1.1	2.2	0.0	100	235
Rural	10.7	77.0	6.4	3.9	1.7	0.4	100	3094
Estates	12.8	60.1	8.7	18.4	0.0	0.0	100	270
ZONE								
Zone 1	38.7	59.9	0.8	0.0	0.6	0.0	100	307
Zone 2	19.1	76.3	3.9	0.2	0.4	0.2	100	525
Zone 3	12.7	77.4	4.9	4.8	0.0	0.2	100	537
Zone 4	10.3	81.1	5.3	2.4	0.6	0.3	100	850
Zone 5	10.8	70.2	7.5	8.1	3.2	0.2	100	876
Zone 6	9.9	77.7	8.7	2.9	0.9	0.0	100	279
Zone 7	6.7	70.3	9.8	8.6	3.6	1.0	100	532
EDUCATION								
No education	5.0	63.9	11.3	15.6	3.8	0.4	100	391
Primary	7.6	76.1	8.4	5.1	2.2	0.6	100	1151
Secondary	12.3	79.0	4.5	3.0	1.1	0.1	100	1465
More than sec.	27.4	68.1	3.2	0.8	0.3	0.2	100	899
Total Births	13.6	74.1	6.1	4.4	1.5	0.3	100	3906

By education, contrary to what one might expect, women with no education are more likely to rely on a doctor alone than women with a higher education. This is probably because many of the women with no education work on the estates where they also have greater access to doctors at clinics.

Neonatal tetanus, which is a major cause of infant mortality in many developing countries, can be prevented through tetanus toxoid injections. Two injections are recommended for mothers who have not previously been inoculated. In the SLDHS, all mothers who gave birth in the 12 months preceding the survey were asked if they had received one or two doses of tetanus toxoid during the pregnancy. The responses to this question are obviously dependent on the mother's ability to recall events during pregnancy accurately and to distinguish tetanus toxoid injections from other injections.

The data on tetanus toxoid injections are shown in Table 6.6. For 66 percent of all births in the twelve months preceding the survey, the mother received two doses of tetanus toxoid. Among the 16.6 percent of mothers who received only one dose, it is likely that at least some of them were protected by two doses during an earlier pregnancy and the one injection for the most recent pregnancy represents a booster shot.

The relatively high proportion of women who have received tetanus toxoid injections indicates fairly good coverage of women by the health services system in Sri Lanka. Moreover, there are very few outstanding differentials in coverage except by education. As one might expect, the proportion of women who have received two doses increases with education.

Given the high proportions of women who receive prenatal care from a trained medical practitioner and tetanus toxoid injections, it is not entirely surprising that Table 6.7 reveals an equally high proportion of all births in the last five years, 94 percent, were assisted by a trained medical person, either a doctor, nurse, or midwife. By age of mother there is essentially no difference between women under age 30 and those over age 30 in the proportions receiving care from a medically trained person. By sector, 39 percent of births in Colombo in the past five years were assisted by a doctor compared with 20 percent in other urban areas, 11 percent in rural areas, and 13 percent on the estates. By zone, women in the Colombo area (zone 1) are far more likely to have a birth assisted by a doctor than are women in other zones. As expected, there is a monotonic increase in the proportion of births assisted by a doctor as education increases.

6.4 Immunization

An important indicator of child health status in a country is the proportion of children protected through immunization against potentially life threatening diseases. WHO's Expanded Programme of Immunization (EPI) recommends that between the first and 9th month of life, infants should be fully immunized against diphtheria, pertussis, neonatal tetanus, polio, tuberculosis, and measles. In Sri Lanka, a national immunization program began in 1961 but was expanded significantly by the EPI effort which started in 1978. The EPI seeks to immunize children with BCG, three doses of DPT, three doses of oral Polio vaccine, and measles vaccine. Vaccination against measles was introducted in 1978 but did not achieve countrywide coverage until 1985.

All mothers in the SLDHS with children under five years of age were asked if their children had health cards. If the mother could show the interviewer the card, the dates of all immunizations received were recorded. Table 6.8 shows the

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TABLE 6.8: Among all children under 5 years of age*, percent with a health card; and among children with a health care, percent who have received specific immunizations and percent who are fully immunized (BCG, DPT3, Polio3, Measles), SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	Percent of children with health card	AMONG CHILDREN WITH HEALTH CARDS, PERCENT IMMUNIZED WITH:									Weighted N of children with health cards
		BCG	DPT1	DPT2	DPT3	Polio1	Polio2	Polio3	Measles	Full coverage	
AGE IN MONTHS											
1 - 5	78.5	97.0	33.3	7.8	0.0	32.3	7.8	0.0	0.0	--	290
6 - 11	87.1	99.5	10.6	31.8	55.3	10.4	31.5	55.0	22.4	22.4	320
12 - 23	82.1	99.1	2.1	4.0	93.4	1.9	4.3	93.1	68.5	67.3	636
24 - 35	78.6	98.2	1.3	3.1	94.3	1.2	3.3	94.1	69.0	67.8	609
36 - 59	69.6	97.7	2.7	3.0	92.8	2.5	3.3	92.3	44.6	42.9	1055
SECTOR											
Colombo	74.9	95.8	7.6	5.3	74.5	7.2	5.7	73.4	42.2	41.4	226
Other urban	80.1	97.1	6.1	6.9	82.4	6.1	6.9	82.4	53.1	50.7	183
Rural	78.9	98.7	6.0	7.0	80.1	5.7	7.1	79.9	47.3	46.5	2381
Estates	47.2	96.0	7.7	7.6	81.5	6.9	7.6	80.7	65.3	60.9	120
ZONE											
Zone 1	74.9	95.8	7.6	5.3	74.5	7.2	5.7	73.4	42.2	41.4	226
Zone 2	81.9	97.7	7.2	5.3	81.9	7.2	5.6	81.4	53.1	51.0	423
Zone 3	80.1	98.4	5.4	7.9	79.6	5.2	8.1	79.4	40.0	38.6	425
Zone 4	82.4	99.2	6.0	6.2	80.7	5.2	6.4	80.5	48.0	47.2	678
Zone 5	68.8	97.8	5.9	7.7	79.8	5.8	8.0	79.3	50.8	49.6	581
Zone 6	81.1	99.7	6.5	6.1	82.9	6.5	5.9	82.9	51.5	50.7	220
Zone 7	69.2	98.5	5.6	9.0	78.0	5.6	8.8	78.0	48.7	48.2	358
EDUCATION											
No education	62.4	95.5	6.1	9.1	72.6	6.6	9.1	71.7	42.8	40.6	233
Primary	72.3	98.1	7.6	8.5	76.5	6.8	8.9	76.0	44.5	43.3	814
Secondary	79.6	98.4	5.8	6.0	81.6	5.7	6.0	81.4	46.8	45.7	1134
More than sec	83.0	99.2	5.3	5.8	83.4	5.1	5.9	83.2	55.6	54.8	730
Total	76.5	98.3	6.2	6.9	79.9	5.9	7.0	79.6	48.0	46.9	2910

* Includes births in the period 1-59 months prior to the survey.

percent of all children under 5 years who have a health card; and among the children with health cards, the percent who have received specific immunizations and are fully immunized.

Fully 77 percent of all children under age 5 in Sri Lanka have a health card available and an even higher 87 percent of children in the crucial age category 6 through 11 months have a health card. These proportions are very high compared with many other countries and indicate that the vast majority of children in Sri Lanka are being reached by the health system. There are, however, some important differentials by sector. For example, less than half of all children under five on the estates have a health card compared with 75 percent in Colombo, 80 percent in other urban areas, and 79 percent in rural areas. While the absence of a health card does not necessarily imply that a child has received no immunizations, it probably does indicate that the child has had less contact with the formal health care system and thus is more likely not to have been immunized than children with health cards. By zone, almost 70 percent of children in all

zones have health cards.   The proportion of children with a
health card increases with education of the mother.

Among the 77 percent of all children under five years of age
with a health card, an extremely high 98 percent have been immun-
ized with BCG, 80 percent with three doses of DPT, and 80 percent
with three doses of polio.   While only 48 percent of these chil-
dren have been immunized against measles, this probably reflects
the fact that the measles program did not achieve national
coverage until 1985.

Table 6.9 presents the same data on immunization as Table
6.8 except the age of children is limited to those between 12
through 23 months.   All of the children in this critical age
group should be immunized.   While the individual cell numbers in
this table are relatively small, the overall picture for children

TABLE 6.9:   Among all children 12-23 months of age, the percent with a health card, and among children with
              a health card, the percent who have received specific immunizations and the percent fully
              immunized (BCG, DPT3, Polio3, measles), by background characteristics, SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	Percent of children with health cards	AMONG CHILDREN 12-23 MONTHS WITH HEALTH CARDS, PERCENT IMMUNIZED FOR:									Weighted N of children with health cards
		BCG	DPT1	DPT2	DPT3	Polio1	Polio2	Polio3	Measles	Full coverage	
SECTOR											
Colombo	82.4	96.4	5.4	3.6	89.3	5.4	3.6	89.3	64.3	62.5	48
Other Urban	91.7	93.9	7.6	0.0	89.4	7.6	0.0	89.4	66.7	63.7	32
Rural	83.5	99.8	1.2	4.4	94.0	1.0	4.6	93.8	68.8	68.0	528
Estates	56.5	96.6	6.1	1.7	92.2	6.1	3.4	90.5	71.9	66.8	27
ZONE											
Zone 1	82.4	96.4	5.4	3.6	89.3	5.4	3.6	89.3	64.3	62.5	48
Zone 2	87.4	97.8	4.4	0.0	94.5	4.4	0.0	94.5	73.3	72.2	88
Zone 3	85.1	100.0	1.3	10.0	88.7	1.3	10.0	88.7	62.5	61.3	92
Zone 4	87.5	100.0	2.0	1.0	96.9	1.0	2.0	95.9	66.3	66.3	132
Zone 5	76.6	99.3	1.4	3.8	94.8	1.4	4.1	94.5	70.3	68.2	136
Zone 6	90.7	100.0	0.0	3.4	96.6	0.0	3.4	96.6	68.3	67.1	54
Zone 7	71.8	99.0	1.0	7.2	89.7	1.0	7.2	89.7	73.1	72.1	85
EDUCATION											
No education	65.7	98.9	6.6	1.1	90.2	6.6	4.5	86.8	56.7	55.6	41
Primary	79.0	98.8	4.0	8.0	87.0	3.3	8.0	87.0	59.7	59.1	177
Secondary	84.8	98.8	1.4	3.5	94.7	1.4	3.7	94.5	67.5	65.1	240
More than sec.	86.8	100.0	0.0	1.3	98.7	0.0	1.3	98.7	81.3	81.3	178
Total	82.1	99.1	2.1	4.0	93.4	1.9	4.3	93.1	68.5	67.3	636

in this age group suggests that a very high proportion are being
reached by the immunization efforts of health authorities.   This
is evident in Figure 6.2.   Fully 82 percent of children 12-23
months have health cards, 99 percent have been immunized with
BCG, 93 percent with DPT3 and Polio3, and 69 percent with
measles.   Full immunization coverage (BCG, DPT3, Polio3, and
measles) has been received by 67 percent of all children 12-23
months with health cards.   This rate of full coverage will

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Figure 6.2
Immunization Coverage Among
Children 12–23 Months with Health Cards

Percent

Legend:
- 1 Dose
- 2 Doses
- Fully Immunized

X-axis categories: BCG, DPT, Polio, Measles, All Diseases

Sri Lanka DHS 1987
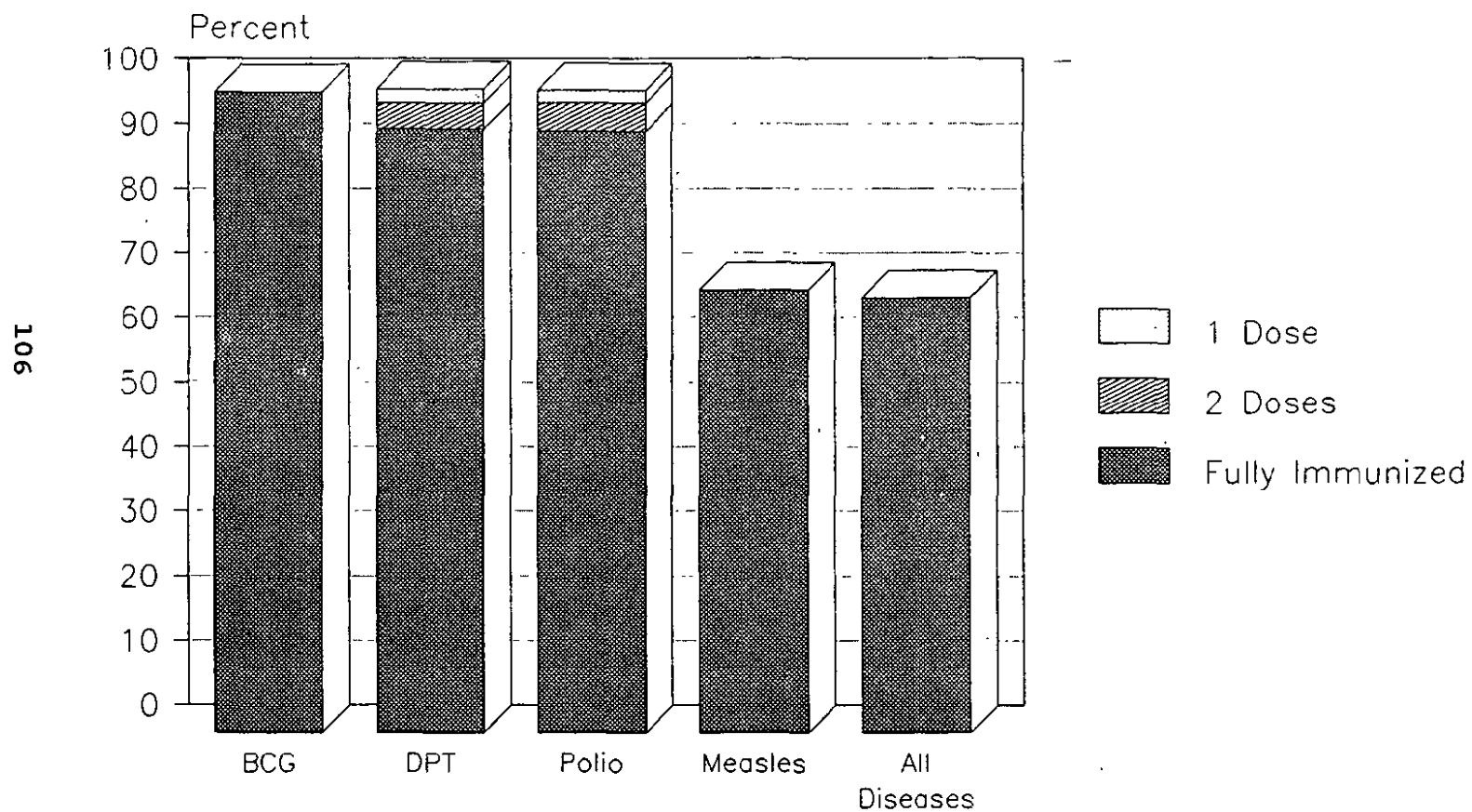
TABLE 6.10: Among children under 5 years of age*, the percent having an episode of diarrhea 24 hours or two weeks preceeding the survey by selected background characteristics, SLDHS 1987.

BACKGROUND CHARACTER-ISTICS	PERCENT OF CHILDREN WITH DIARRHEA IN PAST:		Weighted number
	24 hours	2 weeks**	
AGE IN MONTHS			
1 - 5	4.8	11.0	369
6 - 11	4.4	11.2	368
12 - 23	3.1	9.7	774
24 - 35	1.6	5.0	775
36 - 59	0.7	2.2	1517
SEX			
Male	2.3	6.5	1995
Female	1.9	5.4	1807
SECTOR			
Colombo	1.1	5.7	302
Other Urban	1.7	8.3	229
Rural	2.3	6.0	3018
Estates	1.7	4.7	255
ZONE			
Zone 1	1.1	5.7	302
Zone 2	1.7	4.9	516
Zone 3	2.0	6.3	530
Zone 4	2.8	5.9	822
Zone 5	1.8	4.8	844
Zone 6	3.2	8.0	272
Zone 7	2.0	8.1	517
EDUCATION OF MOTHER			
No education	3.6	10.3	373
Primary	2.1	7.0	1125
Secondary	1.4	4.9	1425
More than se	2.6	4.7	880
Total	2.1	6.0	3803

* Includes births in the period 1-59 months prior to the survey.

** Includes 24 hour period.

probably increase rapidly in the coming years as more children are protected against measles. It is likely that the high rate of immunization coverage in Sri Lanka coupled with a high proportion of women who receive prenatal care and assistance at delivery from a trained medical person has contributed significantly to the reduction in infant mortality noted earlier in this chapter.

6.5 Treatment of diarrhea

Diarrheal disease is a major cause of infant and child morbidity and mortality in Sri Lanka. Most often, mortality from diarrheal disease is the result of rapid dehydration which could be prevented through the proper use of oral rehydration salt solution (ORS). In Sri Lanka, a national Control of Diarrhoeal Disease (CDD) program was implemented in 1983 and achieved widespread coverage by 1987. The State Pharmaceutical Corporation produces "Jeevanee", an oral rehydration salt preparation. The Ministry of Public Health as well as many private groups have been active in teaching women how to use Jeevanee and/or prepare a home rehydration solution consisting of water, sugar, and salt.

In the SLDHS, mothers with children under five years were asked if the child had diarrhea in the last 24 hours. If they responded negatively, they were then asked if the child had diarrhea in the last 2 weeks. Table 6.10 shows that 2 percent of all children under five had diarrhea in the past 24 hours and 6 percent had diarrhea in the past two weeks.

These figures appear low and should be interpreted with care. The measurement of diarrheal disease is subject to several methodological difficulties. First, the prevalence of this disease is seasonal with more cases during the monsoon than the dry season. Second, there is a definitional problem. In the SLDHS the term "diarrhea" was not defined for the mother. Thus each mother was required to interpret the meaning of the word for herself. How one mother defines diarrhea may be different from another. A third problem relates to the time reference period used. While it is likely that most mothers will know whether their child had diarrhea in the past 24 hours, it is also likely that some of them may forget about a child who had diarrhea in the past two weeks.

The effect these factors have on either increasing or decreasing the rates presented in Table 6.10 is not known. The primary reason SLDHS collected data on the presence of diarrhea among children was not to obtain a prevalence figure, but rather, to examine treatment practices which are shown in Table 6.11 and Figure 6.3.

Among the six percent or 229 children with diarrhea in the past two weeks, Table 6.11 shows the proportion of children whose mother consulted a medical facility when the child had diarrhea. The table also shows the type of treatment the mother or someone else (such as a medical facility) gave the child. It should be noted that women were able to specify more than one type of treatment for children with diarrhea.

While the numbers in individual cells are small, overall a very high proportion (73 percent) of children who had diarrhea in the past two weeks were taken to a medical facility for treatment. Among the treatments the children were given by their mothers or by someone else, the largest proportion listed fall into the category of "other." This category includes tablets, injections, syrups, and changes in diet. However, approximately 40 percent of the children received either ORS packets or an ORS home solution. Only 8 percent of the children received no treatment, but among this group there are several outstanding differentials. Children 1 through 5 months of age are the most likely to have received no treatment for an episode of diarrhea. Also, children on the estates are far more likely to receive no treatment than children in other areas.

Although ORS use was not widely promoted until 1987, Table 6.12 indicates that 70 percent of all mothers with children under age five have heard about Jeevanee or UNICEF salt rehydration packets. Knowledge shows a monotonic increase with education from 40 percent among women with no education to 87 percent among women with more than a secondary education. By sector, 82 percent of women in Colombo know about ORS packets and 79 percent know in other urban areas. The proportion who know in rural areas is also high at 70 percent but drops to a low of 43 percent among women on the estates.

6.6   Anthropometric measurements of length and weight

A unique feature of the SLDHS was obtaining anthropometric weight and height measurements on all respondents' children 3 through 36 months of age. (Although the word height is used throughout this report the more accurate word is length since all children were measured in a supine position). The validity of these measurements is a function of several factors. Certainly one of the most important is the ability of the measurers. As noted in Chapter 1, the SLDHS devoted considerable time and resources to training 18 anthropometric measurers who accompanied interviewer teams to the field and collected height and weight measurements. Trainees were accepted as measurers for the SLDHS if they reached a required level of accuracy. The trainees were tested twice, once at the end of their training and again midway through the survey, to record the accuracy of their measurements. One measurer failed to meet the established standards on the

Figure 6.3

Treatment for Diarrhea by Residence

Among Children under 5 with Diarrhea in the Last Two Weeks

Percent

Place or Type of Treatment

■ Colombo   ▨ Other Urban   ☐ Rural   ▩ Estates

Sri Lanka DHS 1987
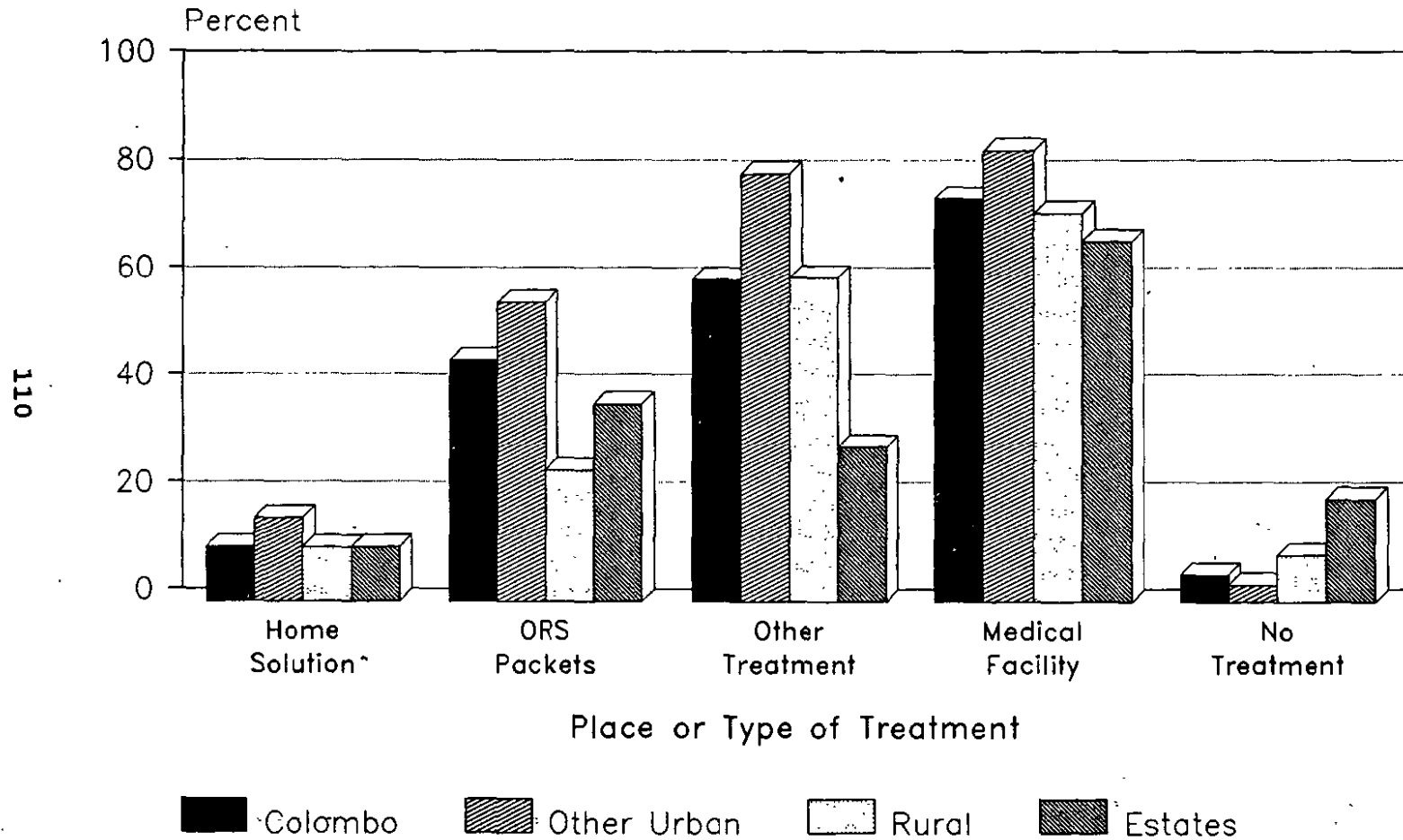
first test and was assigned to other work. The second test revealed that the average error among measurers who underestimated length was 2.7 millimeters while the average error among those who overestimated length was 1.9 millimeters. These errors are well below the cutoff value of 5 millimeters suggested as "unsatisfactory" by the United Nations. Tests on weight measurements showed that the measurers were accurate to within 100 grams.

A second important factor affecting the validity of anthropometric data is the accuracy of a child's reported age. While age in years is sufficient for most demographic analysis,

TABLE 6.11: Among children under 5 years of age* who had diarrhea in the past two weeks, the percentage consulting a medical facility and the percentage receiving different treatments** as reported by the mother, according to background characteristics, SLDHS 1987.

BACKGROUND CHARACTER- ISTIC	No treatment received	Consulted a medical facility	ORS packets	ORS home solution	Other*** treatment	Weighted number of children with diarrhea
AGE IN MONTHS						
1 - 5	28.0	58.6	12.4	7.3	41.5	41
6 - 11	7.0	73.5	32.9	12.6	64.9	41
12 - 23	3.2	77.7	37.2	14.2	61.0	75
24 - 35	4.7	73.0	32.1	6.6	70.1	39
36 - 59	2.7	80.7	23.8	7.1	64.0	33
SEX						
Male	7.1	76.1	29.4	11.8	62.2	130
Female	10.3	69.4	29.0	8.5	57.7	98
SECTOR						
Colombo	5.0	75.0	45.0	10.0	60.0	17
Other Urban	3.1	84.0	55.7	15.5	79.7	19
Rural	8.6	72.3	24.4	9.9	60.3	181
Estates	19.1	67.1	36.8	10.0	28.8	12
ZONE						
Zone 1	5.0	75.0	45.0	10.0	60.0	17
Zone 2	3.9	61.5	30.8	26.9	69.2	26
Zone 3	10.3	62.0	17.3	7.0	58.6	33
Zone 4	11.2	80.5	22.2	11.2	55.5	48
Zone 5	13.3	74.4	38.0	0.0	47.7	41
Zone 6	2.7	77.2	17.2	5.7	74.4	22
Zone 7	6.3	77.0	37.2	14.7	66.5	42
EDUCATION						
No education	9.9	76.9	39.0	7.4	48.7	39
Primary	7.0	76.4	24.4	9.5	61.4	79
Secondary	7.8	71.3	34.3	14.5	63.6	70
More than sec	11.0	67.0	20.6	7.8	63.1	41
Total	8.4	73.2	29.2	10.4	60.2	229

* Includes births in the period 1-59 months prior to the survey.

** Women were able to specify more than one treatment received for children with diarrhea.

*** Includes tablets, injections, syrups, and changes in diet.

age in months is required for accurate anthropometric assessment. For example, a child can be classified as severely malnourished if his or her reported age is greater by just a few months than the child's true age. In the SLDHS, therefore, interviewers were instructed to seek documentary evidence of age whenever this was possible. In the entire group of children who were measured, only two lacked information on the month of birth. These two cases have not been included in the analysis.

Figure 6.4 shows the number of children aged 3 through 36 months who were weighed and measured. To the extent that age heaping occurs in a data set, one normally would expect to see it at months 12, 18, 24, 30 and 36. It is apparent in examining Figure 6.4 that there is no discernible pattern of age heaping among the children who were weighed and measured in Sri Lanka.

TABLE 6.12: Among mothers with children under 5*, the percent who know about ORS** by educational level and selected background characteristics, SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	EDUCATION LEVEL				
	No educ.	Primary	Second	More than second.	Percent total
SECTOR					
Colombo	***	71.7	86.2	82.9	81.9
Other Urban	***	65.6	76.5	91.9	78.5
Rural	37.4	61.1	72.9	86.4	70.1
Estates	38.2	35.8	70.0	***	43.1
ZONE					
Zone 1	***	71.7	86.2	82.9	81.9
Zone 2	***	61.8	81.4	84.8	77.9
Zone 3	39.8	63.3	76.8	86.3	72.9
Zone 4	33.4	55.3	65.0	85.3	65.1
Zone 5	40.7	53.5	69.1	90.5	63.6
Zone 6	***	65.3	75.7	93.6	75.8
Zone 7	31.4	60.5	74.3	83.8	64.9
Total	40.3	59.3	74.4	86.5	69.9

* Includes births in the period 1-59 months prior to the survey.

** Oral Rehydration Solution

*** Denotes fewer than 20 cases.

This is encouraging and certainly one indication that the age data as reported in months are at least free from biases associated with heaping.

A total of 2,203 children (unweighted cases) were identified between the ages of 3 and 36 months. Of these children, 19 or 1 percent had a grossly improbable height and\or weight recorded. These cases represent errors of measurement or data entry or both and have been excluded. Another 97 children or 4.4 percent were neither weighed nor measured for height because the mother refused or the child was not present at the time of measurement. Finally, another 82 children or 3.7 percent have been excluded because they have height recorded but no weight. Height was always the first measurement taken and these cases represent children who began to cry or struggle so much during the height measurement that either the measurer or the mother withdrew the child from being weighed. A total of 2005 children or 1995 weighted cases are available for analysis in the following tables.

For comparative purposes, the nutritional status tables in this report use the reference population defined by the U.S. National Center for Health Statistics and accepted by the U.S. Centers for Disease Control and the World Health Organization. Four standard indices of physical growth present data that describe the nutritional status of children 3 through 36 months in Sri Lanka:

o Height-for-age

o Weight-for-height

o Height-for-age by weight-for-height

o Weight-for-age

Each index provides somewhat different information on the nutritional status of children. Height-for-age is a measure of linear growth. A child who is 2 or more standard deviations (SD) below the mean of the reference population in terms of height-for-age is considered short for his/her age ("stunted") or chronically malnourished. A second important index which describes current nutritional status is weight-for-height. A child who is 2 or more standard deviations from the mean of the reference population in terms of weight-for-height is described as thin for his/her age ("wasted") or acutely malnourished. The third important index is height-for-age by weight-for-height. This cross tabulation (known as a Waterlow table) yields an indicator of children who are both short (stunted) and thin (wasted). The indicator serves to identify those children who are currently the most severely malnourished. The fourth index,

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Figure 6.4
Age of weighed and measured children

Age in months

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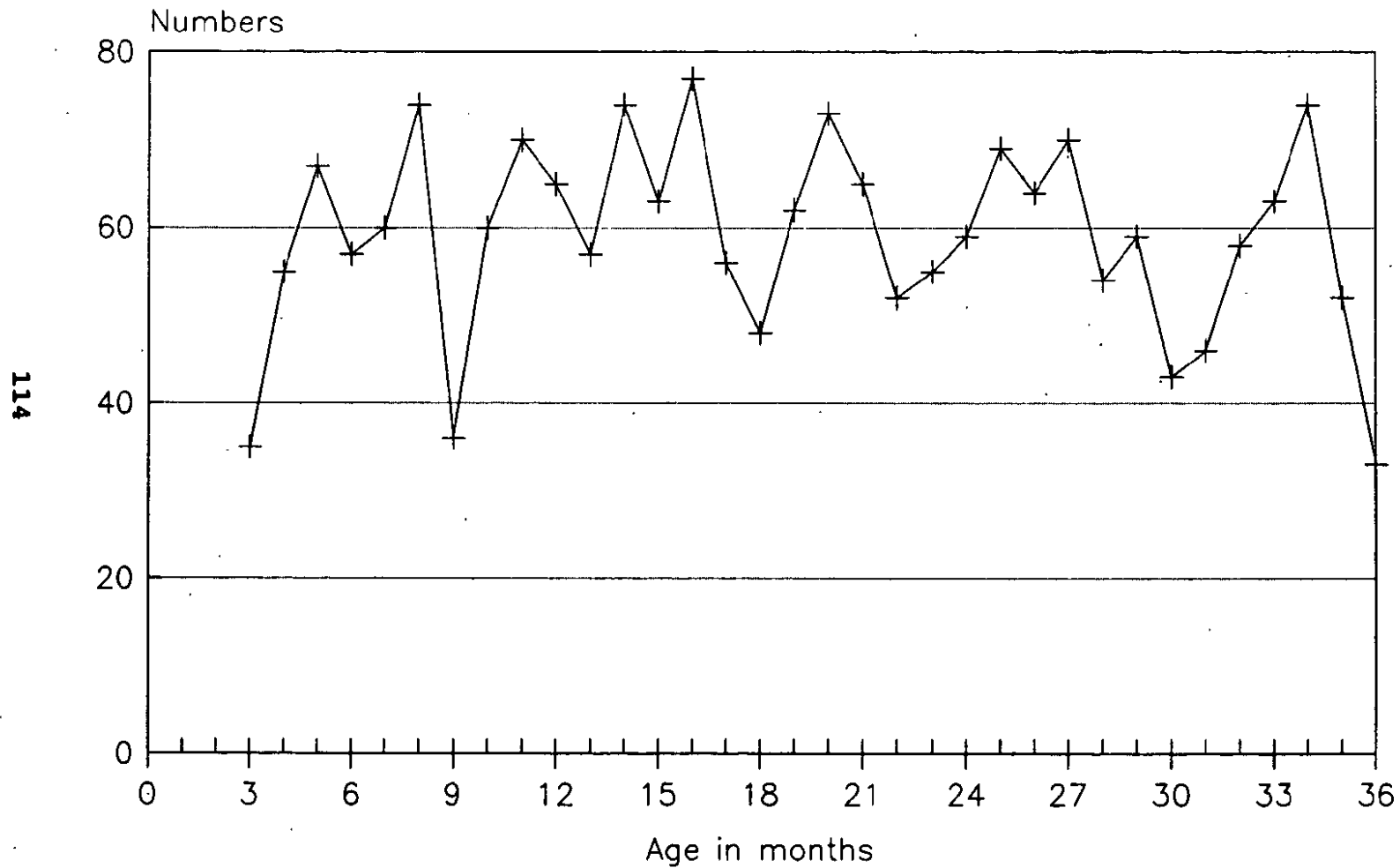
weight-for-age, is widely used in institutional based programs to monitor the nutritional status of children on a longitudinal basis. Its value as an indicator of nutritional status is less apparent when only a single measurement is available from a survey because weight varies seasonally. Weight-for-age is included in this report because it may provide a useful reference for clinical weight programmes.

The terms "stunted" and "wasted" are merely descriptive. Stunting is a measure of chronic undernutrition that indicates growth retardation. It is typically associated with poor economic conditions. Severe stunting is a relatively gradual process that represents the accumulated effects of malnutrition over a number of years. Wasting, on the other hand, can develop rapidly. Usually, a child will double its height during the first year of life but treble its weight. The term wasting refers to inadequate food intake which results in thinness or a deficit in tissue and fat mass compared to the amount expected in a healthy, well-fed child. There are a number of factors which can precipitate wasting such as infection and disease (most commonly diarrheal disease) and seasonal variations in food supply.

6.7 Height-for-age

Table 6.13 shows the percent of children aged 3-36 months who fall into various standard deviation categories away from the mean of the standard reference population in terms of height-for-age. In a large, healthy and well-fed population of children there is always some variation in height-for-age. The variation approximately follows a normal distribution with 2.3 percent of children expected to be low in height for their age, that is, -2SD or more from the mean of the reference population, and another 2.3 percent expected to be tall in height-for-age, that is, + 2SD or more from the mean of the reference population.

Among the 1,995 children in Table 6.13, 27.5 percent are -2SD or more below the mean of the reference population. These children are stunted or chronically undernourished. Stunting is evident in equal proportions among males and females, but by other background characteristics, there are several outstanding differentials. By age, children become progressively more stunted between 3 months and 36. This is clear in Figure 6.5 which shows the mean height-for-age of children 3-36 months compared with the international reference population.

Stunting is also associated with shorter birth intervals. But by far, the most outstanding differentials are by sector and education of mother. Sixty percent of the children on the estates exhibit signs of chronic undernutrition. This is a prevalence of stunting that is more than twice that found in rural areas outside the estates and about three times higher than

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that found in urban areas. The high proportion of chronically undernourished children on the estates compared to other areas is apparent in Figure 6.6 and is probably one important contributing factor to the high estate infant mortality rate noted earlier. Stunting is also directly related to the education level of the mother. Figure 6.7 indicates that 50 percent of the children whose mothers have no education are stunted, compared with only 15 percent among children whose mothers have more than a secondary education.

TABLE 6.13: Percent distribution of children aged 3-36 months, by standard deviation category of height-for-age using the international NCHS/CDC/WHO reference population, according to background characteristics, SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	STANDARD DEVIATIONS FROM NCHS/CDC/WHO REFERENCE					Percent total	Weighted number of children 3-36 months
	-2.00 or more	-1.00 to -1.99	-0.99 to +0.99	+1.00 to +1.99	+2.00 or more		
SEX							
Male	26.4	35.8	35.8	1.5	0.5	100	1063
Female	28.8	34.2	35.2	1.3	0.4	100	931
AGE IN MONTHS							
3 - 5	7.8	19.8	63.9	6.3	2.1	100	158
6 - 11	15.2	39.4	43.2	1.9	0.3	100	353
12 - 23	31.1	36.8	30.6	1.0	0.6	100	735
24 - 36	34.0	34.5	30.8	0.7	0.0	100	748
PREVIOUS BIRTH INTERVAL							
< 2 years	31.8	33.5	32.7	1.8	0.1	100	388
2-3 years	31.7	33.6	32.9	1.1	0.7	100	628
4 years or more	24.2	35.1	38.2	1.5	1.0	100	355
First births	21.5	37.2	39.5	1.7	0.1	100	596
Twins	44.4	40.7	14.8	0.0	0.0	100	27
SECTOR							
Colombo	21.8	27.6	47.6	2.9	0.0	100	146
Other Urban	16.3	31.5	50.3	1.9	0.0	100	118
Rural	26.2	36.8	35.2	1.3	0.5	100	1600
Estates	60.0	25.4	12.5	1.7	0.4	100	130
ZONES							
Zone 1	21.8	27.6	47.6	2.9	0.0	100	146
Zone 2	18.9	34.1	44.7	2.3	0.0	100	259
Zone 3	22.2	38.8	37.3	0.4	1.2	100	291
Zone 4	21.9	34.6	40.4	2.5	0.6	100	437
Zone 5	42.1	33.7	23.9	0.2	0.1	100	451
Zone 6	24.8	39.3	34.2	1.7	0.0	100	144
Zone 7	30.9	36.5	30.3	1.3	1.0	100	266
EDUCATION OF MOTHER							
No education	50.5	29.4	18.9	0.7	0.5	100	179
Primary	34.3	38.0	25.7	1.2	0.8	100	579
Secondary	25.0	34.6	38.8	1.4	0.2	100	735
More than sec.	15.4	34.2	47.9	2.0	0.5	100	503
ALL CHILDREN	27.5	35.0	35.5	1.5	0.5	100	1995

6.8 Weight-for-height

Weight-for-height is a measure of recent nutritional status.
Children who are -2SD or more below the mean of the reference
population are considered thin for their age (wasted) or acutely
undernourished. The weight-for-height index measures body mass
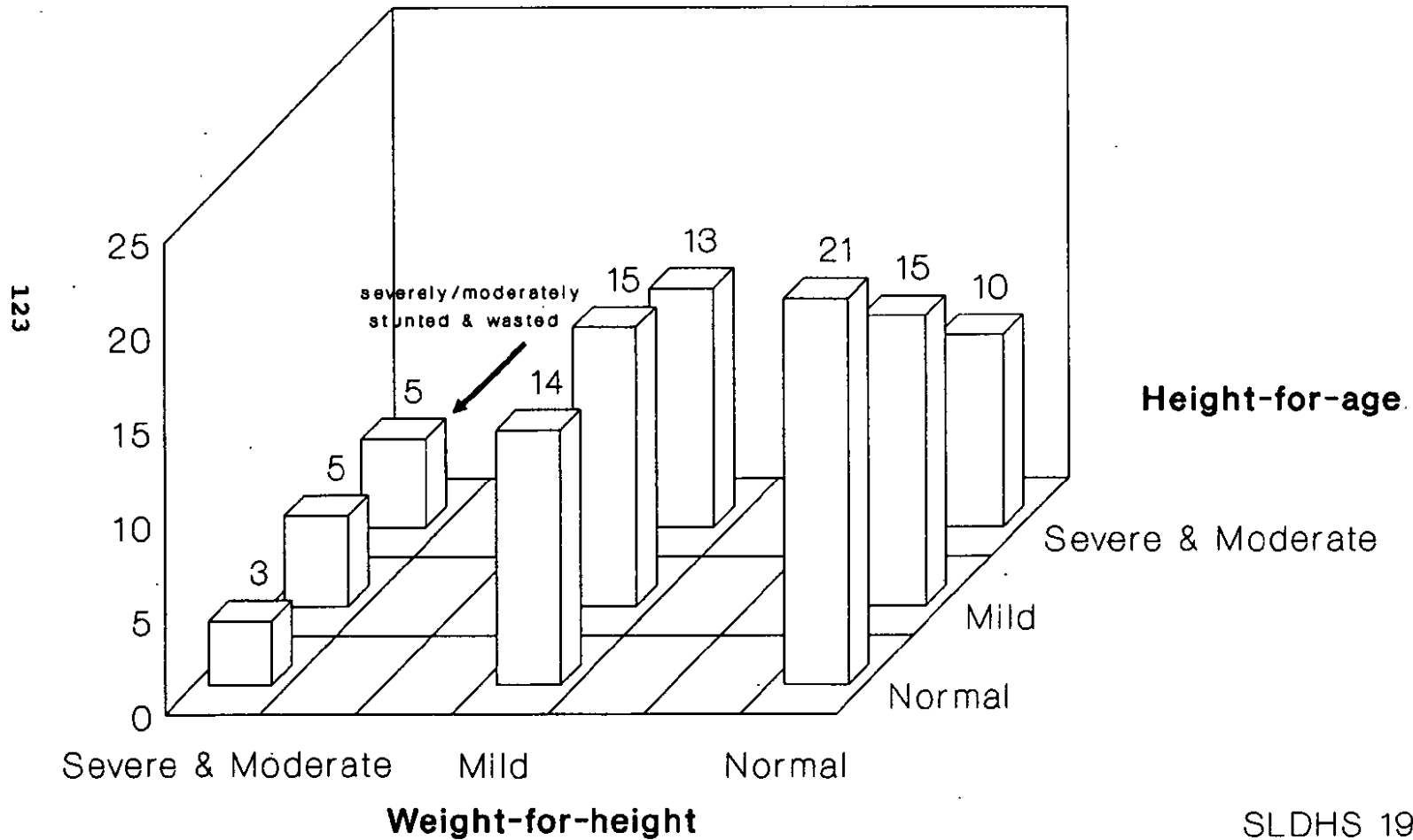in relation to body length. Since age is not a variable included

TABLE 6.14: Percent distribution of children aged 3-36 months, by standard deviation
category of weight-for-height using the international NCHS/CDC/WHO reference
population, according to background characteristics, SLDHS 1987.

BACKGROUND CHARACTER- ISTICS	STANDARD DEVIATIONS FROM NCHS/CDC/WHO REFERENCE					Percent total	Weighted number of children 3-36 months
	-2.00 or more	-1.00 to -1.99	-0.99 to +0.99	+1.00 to +1.99	+2.00 or more		
SEX							
Male	12.4	40.4	45.3	1.7	0.2	100	1063
Female	13.5	41.6	42.1	2.7	0.1	100	931
AGE IN MONTHS							
3 - 5	1.9	18.9	71.5	7.0	0.7	100	158
6 - 11	3.9	32.2	58.6	5.3	0.0	100	353
12 - 23	19.3	42.5	36.9	1.0	0.2	100	735
24 - 36	13.3	48.3	37.6	0.7	0.0	100	748
PREVIOUS BIRTH INTERVAL							
< 2 years	11.4	45.0	40.2	3.4	0.0	100	388
2-3 years	14.9	40.8	42.7	1.4	0.2	100	628
4 years or more	11.9	35.1	49.6	3.0	0.5	100	355
First births	12.3	42.3	43.8	1.6	0.0	100	596
Twins	19.3	38.2	36.8	5.7	0.0	100	27
SECTOR							
Colombo	13.4	31.2	52.9	2.4	0.0	100	146
Other Urban	10.2	39.5	45.6	3.9	0.8	100	118
Rural	13.6	41.9	42.3	2.1	0.1	100	1600
Estates	7.1	42.2	49.8	1.1	0.0	100	130
ZONES							
Zone 1	13.4	31.2	52.9	2.4	0.0	100	146
Zone 2	11.0	42.4	43.2	3.0	0.4	100	259
Zone 3	12.3	40.1	44.8	2.4	0.4	100	291
Zone 4	15.5	42.9	39.5	2.2	0.0	100	437
Zone 5	9.9	39.8	48.3	2.0	0.0	100	451
Zone 6	11.9	44.5	40.6	2.6	0.4	100	144
Zone 7	16.8	43.1	39.1	1.0	0.0	100	266
EDUCATION OF MOTHER							
No education	15.2	38.8	44.7	1.4	0.0	100	179
Primary	13.8	41.6	42.7	1.7	0.2	100	579
Secondary	12.5	42.2	43.0	2.1	0.1	100	735
More than sec.	11.8	39.4	45.7	3.0	0.1	100	503
ALL CHILDREN	12.9	41.0	43.8	2.2	0.1	100	1995

in this measure, weight-for-height is not influenced by any
possible misreporting of age by the mother.

Table 6.14 shows the percent of children who fall into
various standard deviation categories away from the mean of the
reference population. Overall, approximately 13 percent of the
children 3 through 36 months are acutely undernourished. By sex,
there is essentially no difference between male and female
children in terms of the percent wasted. The age of the child,
however, does make a considerable difference. Acute
undernutrition increases sharply from 4 percent of children aged
6 through 12 months to 19 percent among children aged 12 through
23 months. The differentials by birth interval are less well
defined. By sector, the estates have the lowest proportion of
children who are acutely undernourished. In part, this is
because the estates also have the highest proportion of children
who are chronically undernourished, that is, short for their age.
Many of these children will appear to have a normal relationship
between body mass and body length when age is not considered.
For example, a stunted three year old may have the appearance of
a healthy two year old when only weight-for-height is considered.
The low proportion of acutely undernourished children also is
apparent in zone 5 where many of the estates are located. By
education of the mother, there is a monotonic decline in wasting
as education increases.

6.9   Height-for-age by weight-for-height.

The relationship between stunting and wasting, or chronic
undernutrition and acute undernutrition is shown in Table 6.15
and Figure 6.8. This table is a cross tabulation of height-for-
age by weight-for-age and indicates that 5 percent of all
children aged 3 through 36 months are both stunted and wasted.
These children fall -2SD or more below the mean of the reference
population in terms of their height-for-age and their weight-for-
height. They are clearly the most severely undernourished.

6.10   Weight-for-age

Table 6.16 shows the percent of children aged 3-36 months
who fall into various standard deviation categories away from the
mean of the reference population in terms of weight-for-age.
Because weight-for-age is a composite index which reflects long
term chronic undernutrition and recent acute undernutrition, it
does not provide information beyond that already presented in the
tables on height-for-age and weight-for-height. It does not
distinguish between a child who is underweight because of
thinness from one who is underweight because of shortness. Also,
because loss of body weight (as well as gain) can occur rapidly
and show seasonal fluctuations, a single point estimate of

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Figure 6.5

AVERAGE HEIGHT OF CHILDREN (3-36 MONTHS) COMPARED TO THE INTERNATIONAL REFERENCE

S.D.'s from International Reference

International
Reference
Mean

Age of children in months

Sri Lanka DHS 1987

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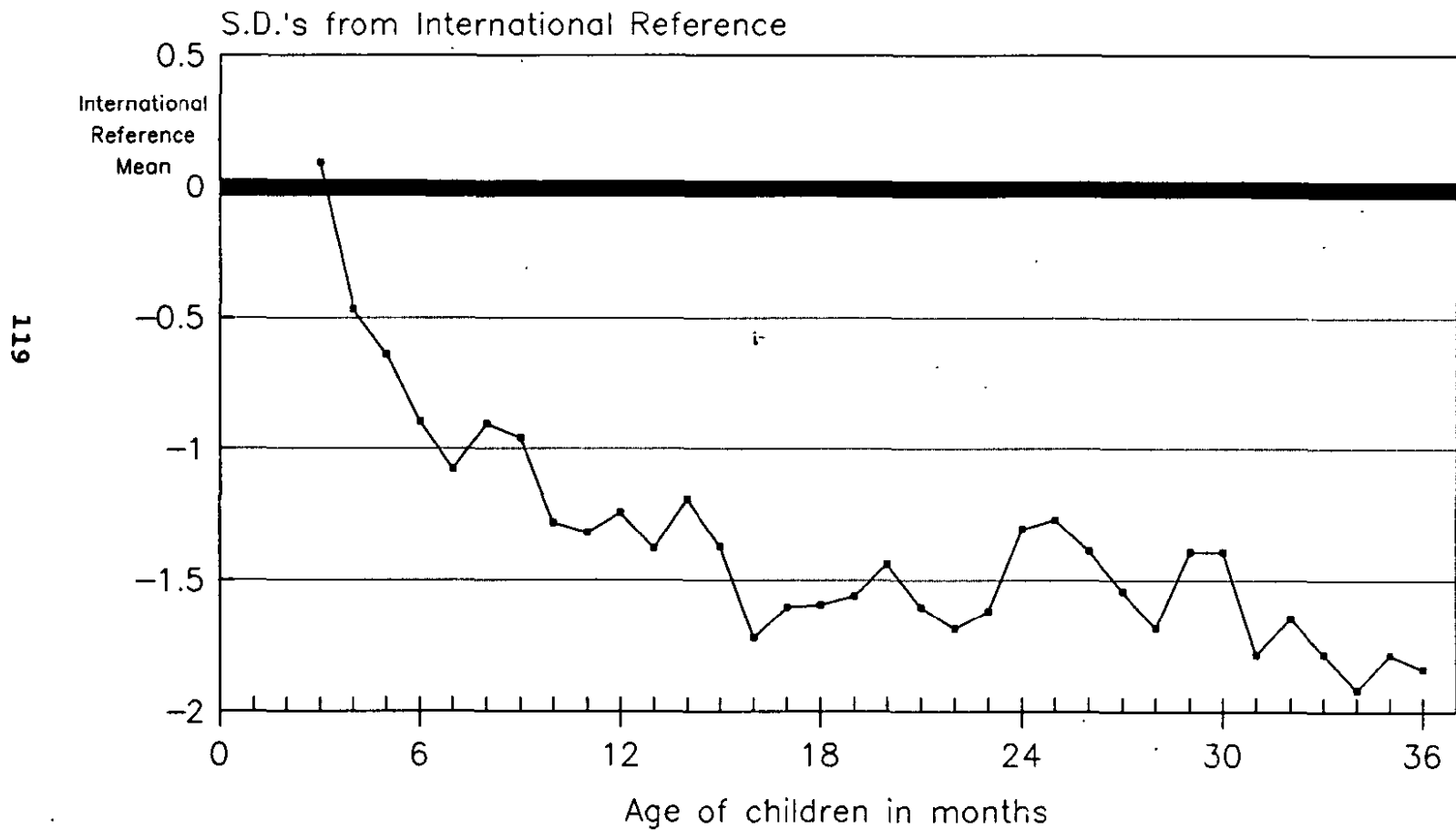
FIGURE 6.6
STUNTING AMONG CHILDREN (3—36 MONTHS)
BY SECTOR

Standard deviations*

■ <=−2 ▦ −1.9 to −1.0 □ −0.9 to 0.9 □ >= 1.0

stunted

Estates Rural Other Urban Colombo

International Stand.

SECTOR
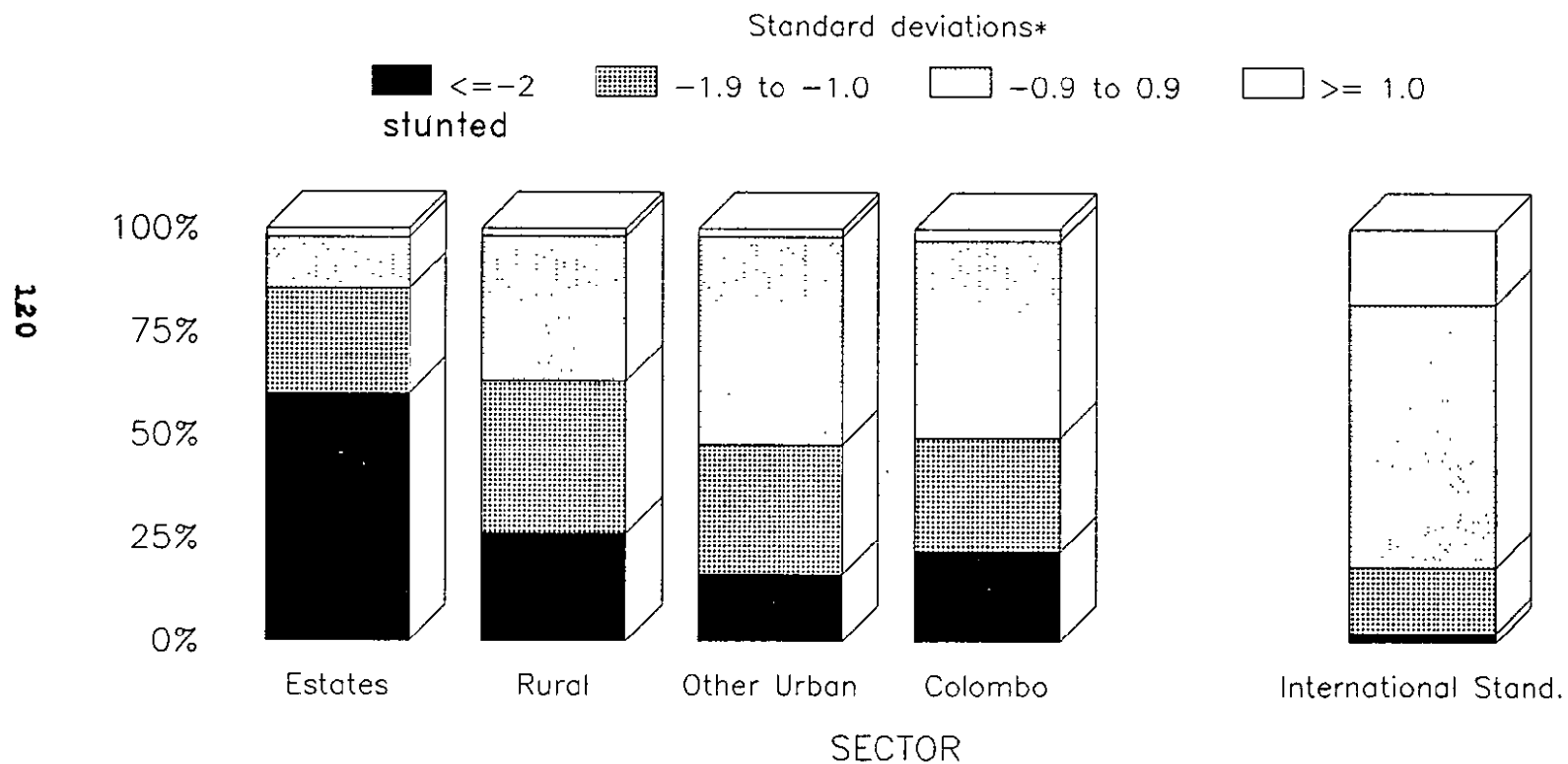
Sri Lanka DHS 1987

* Standard deviations from the
international reference for Height/Age

FIGURE 6.7
STUNTING AMONG CHILDREN (3—36 MONTHS)
BY EDUCATION OF MOTHER
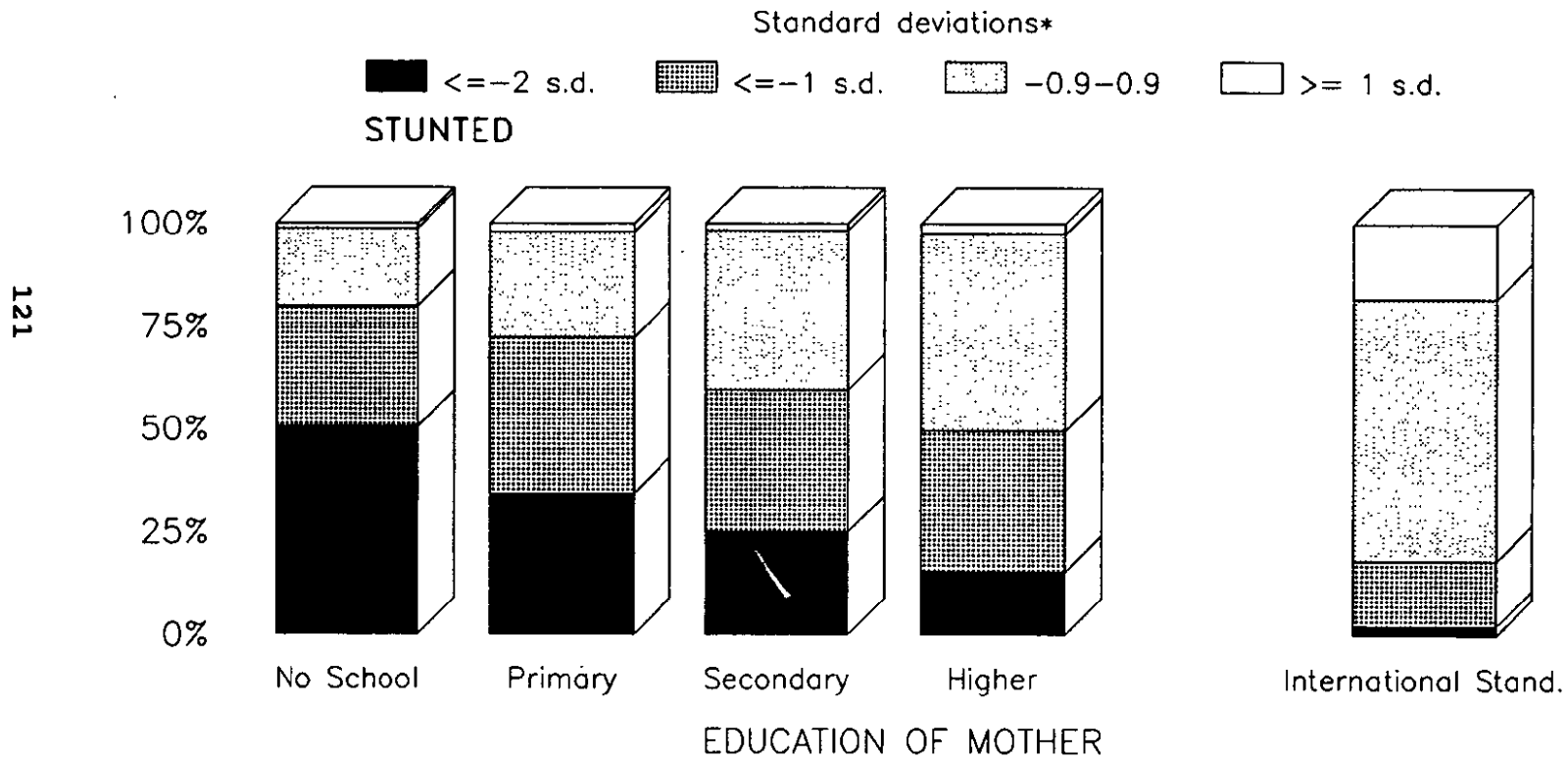
Sri Lanka DHS 1987

* Standard deviations from
international reference for Height/Age

TABLE 6.15: Among children aged 3-36 months, the percent in each height for
age standard deviation category by each weight for height standard
deviation category (Waterlow classification) using the NCHS/WHO/CDC
international reference population, SLDHS 1987.

HEIGHT FOR AGE STANDARD DEVIATIONS FROM NCHS/WHO/CDC REFERENCE POPULATION	WEIGHT FOR HEIGHT STANDARD DEVIATIONS FROM NCHS/CDC/WHO REFERENCE					
	-2.00 or more	-1.00 to -1.99	-0.99 to +0.99	+1.00 to +1.99	+2.00 or more	Percent total
-2.00 or more	4.7	12.7	9.6	0.6	0.0	27.5
-1.00 to -1.99	4.8	14.8	14.9	0.5	0.0	35.0
-0.99 to +0.99	3.3	12.8	18.3	1.1	0.1	35.5
+1.00 to +1.99	0.0	0.6	0.9	0.0	0.0	1.5
+2.00 or more	0.1	0.1	0.1	0.0	0.0	0.5
Percent total N = 1995	12.9	41.0	43.8	2.2	0.1	100.0

Figure 6.8
Crosstabulating Weight-for-Height
& Height-for-Age (Waterlow Table)

SLDHS 1987

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TABLE 6.16: Percent distribution of children aged 3-36 months, by standard deviation category of weight-for-age using the international NCHS/CDC/WHO reference population, according to background characteristics, SLDHS 1987.

| BACKGROUND CHARACTER- ISTICS | STANDARD DEVIATIONS FROM NCHS/CDC/WHO REFERENCE | | | | | Percent total | Weighted number of children 3-36 months |
	-2.00 or more	-1.00 to -1.99	-0.99 to +0.99	+1.00 to +1.99	+2.00 or more		
SEX							
Male	37.6	37.4	24.3	0.8	0.0	100	1063
Female	38.6	36.6	23.0	1.7	0.2	100	931
AGE IN MONTHS							
3 - 5	3.7	23.3	64.1	8.1	0.7	100	158
6 - 11	23.4	42.2	33.0	1.4	0.0	100	353
12 - 23	42.5	38.7	18.1	0.6	0.1	100	735
24 - 36	47.9	35.7	16.2	0.2	0.0	100	748
PREVIOUS BIRTH INTERVAL							
< 2 years	41.6	35.0	22.5	0.8	0.1	100	388
2-3 years	40.9	38.3	19.2	1.5	0.0	100	628
4 years or more	32.4	36.2	28.7	2.4	0.3	100	355
First births	35.6	37.9	26.1	0.4	0.0	100	596
Twins	51.9	25.9	22.2	0.0	0.0	100	27
SECTOR							
Colombo	27.6	36.5	32.9	2.9	0.0	100	146
Other Urban	26.5	44.7	26.8	2.1	0.0	100	118
Rural	38.7	36.6	23.6	1.1	0.1	100	1600
Estates	52.9	35.4	11.3	0.0	0.4	100	130
ZONES							
Zone 1	27.6	36.5	32.9	2.9	0.0	100	146
Zone 2	32.2	37.5	28.4	1.9	0.0	100	259
Zone 3	34.1	38.1	26.2	1.2	0.4	100	291
Zone 4	37.1	36.4	25.6	0.9	0.0	100	437
Zone 5	45.2	36.3	17.8	0.7	0.1	100	451
Zone 6	35.5	41.9	21.8	0.9	0.0	100	144
Zone 7	44.8	35.2	19.0	1.0	0.0	100	266
EDUCATION OF MOTHER							
No education	52.8	34.0	13.2	0.0	0.0	100	179
Primary	44.5	34.9	19.3	1.1	0.3	100	579
Secondary	36.1	39.2	23.5	1.2	0.0	100	739
More than sec.	28.2	37.4	32.6	1.8	0.0	100	503
ALL CHILDREN	38.1	37.0	23.7	1.2	0.2	100	1995

weight-for-age can sometimes prove difficult to interpret particularly when compared with other estimates obtained at different time periods. Most often weight-for-age is a measure used in clinical, longitudinal weight programmes. The data on weight-for-age from the SLDHS is presented because it may provide a useful reference for these programmes.

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APPENDIX A.   ESTIMATES OF SAMPLING ERROR

The results from sample surveys are affected by two types of errors: (1) nonsampling error and (2) sampling error. Nonsampling error is due to mistakes made in carrying out field activities, such as failure to locate and interview the correct household, errors in the way questions are asked, misunderstanding of the questions on the part of either the interviewer or the respondent, data entry errors, etc.   Although efforts were made during the design and implementation of the Sri Lanka Demographic and Health Survey to minimize this type of error, nonsampling errors are impossible to avoid entirely and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically.   The sample of women selected in the SLDHS is only one of many samples of the same size that could have been selected from the same population, using the same design.   Each one of these samples would have yielded results somewhat different from the sample that was actually selected.   The variability observed between all possible samples constitutes sampling error, which, although it is not known exactly, can be estimated from the survey results.

Sampling error is usually measured in terms of the "standard error" of a particular statistic (mean, percentage, etc.), which is the square root of the variance of the statistic across all possible samples of equal size and design.   The standard error can be used to calculate confidence intervals within which one can be reasonably sure the true value of the variable for the whole population falls.   For example, for any given statistic calculated from a sample survey, the value of that same statistic as measured in 95 percent of all possible samples of identical size and design will fall within a range of plus or minus two times the standard error of that statistic.

If simple random sampling had been used to select women for the SLDHS, it would have been possible to use straightforward formulas for calculating sampling errors.   However, the SLDHS sample design depended on stratification, stages, and clusters and consequently, it was necessary to utilize more complex formulas.   The computer package CLUSTERS was used to assist in computing the sampling errors with the proper statistical methodology.

The CLUSTERS program treats any percentage or average as a ratio esimate, $r = y/x$, where both x and y are considered to be random variables. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

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$$var\ (r) = \frac{1-f}{x^2} \sum_{h=1}^{H} \frac{m_h}{m_h-1} \sum_{i=1}^{m_h} \left(z_{hi}^2 - \frac{z_h^2}{m_h} \right)$$

in which, $z_{hi} = y_{hi} - r\,x_{hi}$, and $z_h = y_h - rx_h$,

where h   represents the stratum and varies from 1 to H,

       mh   is the total number of EAs selected in the h-th stratum,

       yhi   is the sum of the values of variable y in cluster i in the h-th stratum,

       xhi   is the sum of the number of cases (women) in cluster i in the h-th stratum,

       f   is the overall sampling fraction, which is so small that the CLUSTERS program ignores it.

In addition to the standard errors, CLUSTERS computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of one indicates that the sample design is as efficient as a simple random sample and a value greater than one indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design.

Sampling errors are presented in Table A.1 for 32 variables considered to be of major interest. Results are presented for the whole country, for urban and rural areas, for three age groups, and for the seven zones. For each variable, the type of statistic (mean, proportion) and the base population (all women, currently married women) are given in Table A.1. For each variable, Table A.1 presents the value of the statistic, R, its standard error, SE, the actual number of cases, N, the weighted number of cases, WN, the DEFT value, and the relative standard error, SE/R. In addition to these indicators, for the entire country ROH and the 95 percent confidence limits, R-2SD and R+2SD are presented. ROH is is a measure of homogeniety. A value of ROH closer to zero indicates more homogeniety in the cluster.

In general, the sampling errors for the country as a whole are small, which means that the SLDHS results are reliable. For example, for the variable children ever born, the overall average from the sample is 3.009 and its standard error is 0.030. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., 3.009 +- (2 * 0.030), which means that there is a high probability (95 percent) that the true average number of children ever born for all Sri Lankan women falls within the interval of 2.949 to 3.069. This same type of calculation can be made for any other of the variables listed.

TABLE A.1: List of variables with sampling errors

	VARIABLE	INDICATOR	BASE GROUP
RESI	Urban Residence	Proportion	All women
EDUC	Secondary or more	Proportion	All women
CMAR	Currently married	Proportion	All women
EXPOS	Exposed to pregnat	Proportion	Current married
CCEB	Children ever born	Mean	All women
CSUR	Children surviving	Mean	All women
PRG	Current pregnant	Proportion	Current married
KWMD	Knows modern method	Proportion	Current married
EVUS	Ever use method	Proportion	Current married
CUUS	Current use	Proportion	Current married
USPL	Pill use	Proportion	Current married
USEST	Female sterelization	Proportion	Current married
USAB	Abstinence use	Proportion	Current married
USTR	Traditional use	Proportion	Current married
WNT	Wants more children	Proprotion	Current married
DELAY	Wants delay next child 2 or more years	Proportion	Current married
IDEA	Ideal family size	Mean	Current married
BREA	Breastfeeding interval	Mean	All women
AMENO	Amenorrhea interval	Mean	All women
ABSTI	Post-partum abstinence	Mean	All women
NCEB	Children ever born	Mean	All women 45-49
ATTE	Medical attention last birth	Proportion	Children under five
TETA	Received tetanus	Proportion	Children under five
DIAR	Diarrhea last 2 weeks	Proportion	Children under five
DIATRE	Any diarrhea treatment	Proportion	Children with diarrhea last 2 weeks under five
KIDBCG	Received BCG	Proportion	Children 12-23 months
DPT123	Received DPT (3 dosis)	Proportion	Children 12-23 months
POL123	Received Polio (3 dosis)	Proportion	Children 12-23 months
MEAS	Received measles	Proportion	Children 12-23 months
WCARD	With health card	Proportion	Children 12-23 months
FINMU	Fully immunized	Proportion	Children 12-23 months with health card

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	R	SE	N	WN	DEFT	ROH	SE/R	R-2SE	R+2SE
RESI	.161	.005	5865.0	5864.5	1.112	.017	.033	.150	.172
EDUC	.591	.010	5865.0	5864.5	1.519	.093	.016	.572	.611
CMAR	.928	.004	5865.0	5864.5	1.091	.013	.004	.921	.935
EXPOS	.580	.007	5449.0	5441.9	1.011	.002	.012	.566	.593
CCEB	3.009	.030	5865.0	5864.5	1.086	.013	.010	2.948	3.069
CSUR	2.837	.028	5865.0	5864.5	1.070	.010	.010	2.781	2.892
PRG	.069	.004	5449.0	5441.9	1.099	.016	.055	.062	.077
KWMD	.991	.002	5449.0	5441.9	1.362	.066	.002	.987	.994
EVUS	.739	.007	5449.0	5441.9	1.137	.023	.009	.725	.752
CUUS	.617	.008	5449.0	5441.9	1.144	.024	.012	.602	.632
USPL	.041	.003	5449.0	5441.9	1.232	.040	.081	.034	.048
USEST	.249	.007	5449.0	5441.9	1.268	.047	.030	.234	.264
USAB	.177	.005	5449.0	5441.9	1.055	.009	.031	.166	.187
USTR	.211	.006	5449.0	5441.9	1.061	.010	.028	.199	.223
WNT	.318	.008	5449.0	5441.9	1.213	.036	.024	.303	.333
DELAY	.184	.006	5449.0	5441.9	1.124	.020	.032	.173	.196
IDEA	3.051	.023	5441.0	5424.0	1.338	.061	.007	3.005	3.096
BREA	22.702	.388	5865.0	5864.5	1.028	.004	.017	21.927	23.478
AMENO	7.543	.313	5865.0	5864.5	1.088	.013	.041	6.918	8.169
ABSTI	6.624	.317	5865.0	5864.5	1.115	.017	.048	5.991	7.258
NCEB	5.082	.113	5865.0	5864.5	1.078	.011	.022	4.855	5.309
ATTE	.134	.007	5865.0	5864.5	1.174	.027	.053	.120	.148
TETA	.132	.007	5865.0	5864.5	1.122	.018	.050	.119	.146
DIAR	.058	.004	5865.0	5864.5	1.075	.011	.070	.050	.066
DIATRE	.756	.033	5865.0	5864.5	1.153	.013	.044	.689	.822
KIDBCG	.991	.003	5865.0	5864.5	.925	-.009	.003	.985	.998
DPT123	.934	.010	5865.0	5864.5	1.055	.007	.011	.913	.955
POL123	.931	.011	5865.0	5864.5	1.103	.014	.012	.909	.953
MEAS	.685	.022	5865.0	5864.5	1.175	.025	.032	.642	.729
WCARD	.821	.015	5865.0	5864.5	1.074	.010	.018	.792	.851
FINMU	.673	.022	5865.0	5864.5	1.162	.023	.032	.630	.717

	R	SE	N	WN	DEFT	SE/R	R	SE	N	WN	DEFT	SE/R
RESI	1.000	.000	642.0	551.4	.000	.000	.116	.014	921.0	904.1	1.334	.122
EDUC	.755	.017	642.0	551.4	1.019	.023	.772	.018	921.0	904.1	1.322	.024
CHAR	.945	.009	642.0	551.4	.950	.009	.946	.008	921.0	904.1	1.122	.009
EXPOS	.526	.015	607.0	521.4	.724	.028	.607	.015	871.0	855.1	.892	.024
CCEB	2.684	.081	642.0	551.4	1.084	.030	2.614	.053	921.0	904.1	.925	.020
CSUR	2.556	.076	642.0	551.4	1.087	.030	2.491	.049	921.0	904.1	.917	.020
PRG	.064	.011	607.0	521.4	1.132	.175	.063	.008	871.0	855.1	.929	.121
KWMD	.995	.003	607.0	521.4	.991	.003	.994	.003	871.0	855.1	1.191	.003
EVUS	.792	.017	607.0	521.4	1.002	.021	.814	.014	871.0	855.1	1.083	.018
CUUS	.626	.017	607.0	521.4	.867	.027	.670	.014	871.0	855.1	.907	.022
USPL	.030	.006	607.0	521.4	.844	.196	.041	.007	871.0	855.1	1.015	.166
USEST	.242	.018	607.0	521.4	1.034	.074	.204	.015	871.0	855.1	1.086	.073
USAB	.204	.016	607.0	521.4	.950	.076	.234	.012	871.0	855.1	.811	.050
USTR	.229	.018	607.0	521.4	1.060	.079	.296	.013	871.0	855.1	.818	.043
WNT	.285	.021	607.0	521.4	1.133	.073	.301	.017	871.0	855.1	1.063	.055
DELAY	.165	.014	607.0	521.4	.903	.083	.160	.013	871.0	855.1	1.051	.082
IDEA	2.750	.052	608.0	522.2	1.125	.019	2.756	.032	892.0	875.7	.852	.012
BREA	18.083	.891	642.0	551.4	.680	.049	20.495	1.074	921.0	904.1	1.073	.052
AMENO	6.138	.822	642.0	551.4	.925	.134	6.941	.632	921.0	904.1	.846	.091
ABSTI	6.968	1.026	642.0	551.4	1.070	.147	6.182	.724	921.0	904.1	.975	.117
NCEB	4.639	.346	642.0	551.4	1.212	.075	4.033	.221	921.0	904.1	1.063	.055
ATTE	.380	.031	642.0	551.4	1.064	.081	.187	.021	921.0	904.1	1.132	.110
TETA	.193	.021	642.0	551.4	.893	.109	.180	.018	921.0	904.1	1.004	.099
DIAR	.055	.010	642.0	551.4	.805	.174	.048	.009	921.0	904.1	.961	.184
DIATRE	.800	.097	642.0	551.4	1.083	.121	.846	.076	921.0	904.1	1.067	.089
KIDBCG	.964	.026	642.0	551.4	1.050	.027	.978	.016	921.0	904.1	1.011	.016
DPT123	.893	.036	642.0	551.4	.872	.040	.945	.020	921.0	904.1	.810	.021
POL123	.893	.036	642.0	551.4	.872	.040	.945	.020	921.0	904.1	.810	.021
MEAS	.643	.055	642.0	551.4	.858	.085	.733	.051	921.0	904.1	1.094	.070
WCARD	.824	.047	642.0	551.4	1.014	.057	.874	.030	921.0	904.1	.911	.034
FINMU	.625	.052	642.0	551.4	.801	.083	.722	.051	921.0	904.1	1.085	.071

	R	SE	N	WN	DEFT	SE/R	R	SE	N	WN	DEFT	SE/R
RESI	.114	.016	711.0	821.5	1.371	.143	.050	.002	984.0	1327.2	.358	.050
EDUC	.593	.017	711.0	821.5	.902	.028	.573	.026	984.0	1327.2	1.672	.046
CHAR	.916	.011	711.0	821.5	1.074	.012	.938	.009	984.0	1327.2	1.176	.010
EXPOS	.601	.018	651.0	752.2	.924	.030	.579	.015	923.0	1244.9	.935	.026
CCEB	2.749	.085	711.0	821.5	1.149	.031	3.057	.051	984.0	1327.2	.750	.017
CSUR	2.613	.084	711.0	821.5	1.215	.032	2.886	.046	984.0	1327.2	.721	.016
PRG	.086	.013	651.0	752.2	1.170	.150	.060	.008	923.0	1244.9	1.089	.142
KWMD	.978	.007	651.0	752.2	1.261	.007	.990	.004	923.0	1244.9	1.352	.004
EVUS	.784	.017	651.0	752.2	1.068	.022	.727	.013	923.0	1244.9	.887	.018
CUUS	.637	.024	651.0	752.2	1.253	.037	.618	.017	923.0	1244.9	1.032	.027
USPL	.040	.007	651.0	752.2	.976	.188	.042	.009	923.0	1244.9	1.432	.224
USEST	.187	.015	651.0	752.2	.977	.080	.258	.019	923.0	1244.9	1.334	.075
USAB	.252	.016	651.0	752.2	.948	.064	.175	.013	923.0	1244.9	1.050	.075
USTR	.298	.018	651.0	752.2	1.031	.062	.204	.012	923.0	1244.9	.936	.061
WNT	.315	.019	651.0	752.2	1.070	.062	.337	.020	923.0	1244.9	1.273	.059
DELAY	.183	.018	651.0	752.2	1.167	.097	.192	.012	923.0	1244.9	.950	.064
IDEA	2.866	.073	682.0	788.0	1.623	.025	3.142	.047	893.0	1204.5	1.206	.015
BREA	21.066	1.250	711.0	821.5	1.104	.059	24.341	.713	984.0	1327.2	.761	.029
AMENO	7.157	.828	711.0	821.5	.985	.116	7.491	.714	984.0	1327.2	1.029	.095
ABSTI	6.530	.819	711.0	821.5	.987	.125	6.660	.756	984.0	1327.2	1.111	.114
NCEB	4.165	.319	711.0	821.5	1.170	.077	5.069	.239	984.0	1327.2	.969	.047
ATTE	.125	.020	711.0	821.5	1.118	.156	.100	.015	984.0	1327.2	1.190	.148
TETA	.117	.017	711.0	821.5	1.062	.147	.146	.018	984.0	1327.2	1.230	.121
DIAR	.062	.011	711.0	821.5	.930	.177	.058	.009	984.0	1327.2	.969	.153
DIATRE	.725	.096	711.0	821.5	1.100	.133	.730	.088	984.0	1327.2	1.202	.121
KIDBCG	1.000	.000	711.0	821.5	.000	.000	1.000	.000	984.0	1327.2	.000	.000
DPT123	.887	.037	711.0	821.5	1.046	.042	.969	.018	984.0	1327.2	1.043	.019
POL123	.887	.037	711.0	821.5	1.046	.042	.959	.026	984.0	1327.2	1.286	.027
MEAS	.625	.058	711.0	821.5	1.067	.093	.663	.063	984.0	1327.2	1.320	.095
MCARD	.851	.037	711.0	821.5	1.013	.044	.875	.032	984.0	1327.2	1.039	.037
FINMU	.613	.057	711.0	821.5	1.050	.094	.663	.063	984.0	1327.2	1.320	.095

Domain: ZONE 5   Domain: ZONE 6

	R	SE	N	WN	DEFT	SE/R	R	SE	N	WN	DEFT	SE/R
RESI	.068	.004	1165.0	1167.3	.607	.066	.090	.013	652.0	402.2	1.167	.146
EDUC	.480	.026	1165.0	1167.3	1.756	.054	.556	.028	652.0	402.2	1.455	.051
CMAR	.926	.008	1165.0	1167.3	1.048	.009	.937	.009	652.0	402.2	.954	.010
EXPOS	.567	.017	1088.0	1081.3	1.101	.029	.609	.018	611.0	376.9	.896	.029
CCEB	3.112	.083	1165.0	1167.3	1.273	.027	3.472	.099	652.0	402.2	1.062	.028
CSUR	2.899	.072	1165.0	1167.3	1.202	.025	3.254	.085	652.0	402.2	.985	.026
PRG	.074	.008	1088.0	1081.3	1.030	.111	.079	.011	611.0	376.9	.968	.134
KWMD	.992	.004	1088.0	1081.3	1.331	.004	.997	.002	611.0	376.9	.994	.002
EVUS	.650	.020	1088.0	1081.3	1.377	.031	.751	.021	611.0	376.9	1.181	.028
CUUS	.574	.019	1088.0	1081.3	1.274	.033	.623	.017	611.0	376.9	.868	.027
USPL	.051	.008	1088.0	1081.3	1.264	.165	.036	.006	611.0	376.9	.835	.175
USEST	.289	.018	1088.0	1081.3	1.299	.062	.301	.021	611.0	376.9	1.111	.069
USAB	.096	.011	1088.0	1081.3	1.228	.115	.146	.016	611.0	376.9	1.126	.110
USTR	.121	.011	1088.0	1081.3	1.139	.093	.182	.018	611.0	376.9	1.140	.098
WNT	.330	.019	1088.0	1081.3	1.356	.059	.324	.023	611.0	376.9	1.214	.071
DELAY	.178	.017	1088.0	1081.3	1.432	.093	.206	.018	611.0	376.9	1.084	.086
IDEA	3.215	.060	1083.0	1059.7	1.428	.019	3.368	.073	574.0	354.0	1.291	.022
BREA	22.360	.787	1165.0	1167.3	1.043	.035	24.996	1.044	652.0	402.2	.906	.042
AMENO	8.657	.648	1165.0	1167.3	1.026	.075	7.664	.846	652.0	402.2	.977	.110
ABSTI	5.944	.676	1165.0	1167.3	1.173	.114	7.395	.912	652.0	402.2	.986	.123
NCEB	5.532	.257	1165.0	1167.3	1.126	.047	6.321	.480	652.0	402.2	1.258	.076
ATTE	.108	.016	1165.0	1167.3	1.305	.147	.097	.013	652.0	402.2	.865	.134
TETA	.086	.013	1165.0	1167.3	1.186	.148	.136	.017	652.0	402.2	.959	.123
DIAR	.046	.010	1165.0	1167.3	1.338	.219	.078	.017	652.0	402.2	1.314	.218
DIATRE	.632	.081	1165.0	1167.3	1.020	.128	.807	.077	652.0	402.2	1.157	.096
KIDBCG	.993	.005	1165.0	1167.3	.700	.005	1.000	.000	652.0	402.2	.000	.000
DPT123	.948	.021	1165.0	1167.3	1.124	.023	.966	.018	652.0	402.2	.949	.019
POL123	.945	.022	1165.0	1167.3	1.104	.023	.966	.018	652.0	402.2	.949	.019
MEAS	.703	.044	1165.0	1167.3	1.119	.063	.683	.069	652.0	402.2	1.320	.101
WCARD	.766	.033	1165.0	1167.3	1.043	.043	.907	.039	652.0	402.2	1.313	.043
FINMU	.682	.044	1165.0	1167.3	1.089	.064	.671	.069	652.0	402.2	1.308	.103

	R	SE	N	UN	DEFT	SE/R	R	SE	N	UN	DEFT	SE/R
RESI	.019	.010	790.0	690.8	2.154	.557	.125	.011	862.0	857.2	.951	.086
EDUC	.465	.024	790.0	690.8	1.361	.052	.588	.017	862.0	857.2	1.007	.029
CMAR	.883	.010	790.0	690.8	.894	.012	.959	.008	862.0	857.2	1.144	.008
EXPOS	.570	.025	698.0	610.2	1.329	.044	.512	.017	824.0	822.4	.957	.033
CCEB	3.555	.113	790.0	690.8	1.284	.032	1.186	.035	862.0	857.2	1.063	.029
CSUR	3.336	.101	790.0	690.8	1.274	.030	1.152	.034	862.0	857.2	1.077	.030
PRG	.067	.010	698.0	610.2	1.101	.155	.183	.014	824.0	822.4	1.023	.075
KWMD	.991	.005	698.0	610.2	1,320	.005	.973	.007	824.0	822.4	1.184	.007
EVUS	.704	.021	698.0	610.2	1.206	.030	.523	.019	824.0	822.4	1.097	.037
CUUS	.581	.025	698.0	610.2	1.332	.043	.389	.018	824.0	822.4	1.061	.046
USPL	.033	.008	698.0	610.2	1.111	.228	.069	.011	824.0	822.4	1.264	.162
USEST	.272	.026	698.0	610.2	1.518	.094	.051	.008	824.0	822.4	1.046	.157
USAB	.144	.016	698.0	610.2	1.217	.112	.123	.013	824.0	822.4	1.159	.108
USTR	.162	.019	698.0	610.2	1.394	.120	.156	.015	824.0	822.4	1.207	.098
WNT	.309	.015	698.0	610.2	.848	.048	.720	.017	824.0	822.4	1.084	.024
DELAY	.220	.013	698.0	610.2	.854	.061	.503	.017	824.0	822.4	.972	.034
IDEA	3.318	.079	709.0	619.9	1.649	.024	2.557	.037	825.0	820.1	1.200	.015
BREA	25.972	1.265	790.0	690.8	1.326	.049	22.593	.649	862.0	857.2	1.004	.029
AMENO	7.537	1.160	790.0	690.8	1.547	.154	8.096	.596	862.0	857.2	1.070	.074
ABSTI	7.634	.949	790.0	690.8	1.220	.124	7.393	.625	862.0	857.2	1.114	.085
NCEB	6.536	.347	790.0	690.8	1.148	.053	.000	.000	862.0	857.2	.000	.000
ATTE	.066	.014	790.0	690.8	1.219	.214	.096	.010	862.0	857.2	.928	.102
TETA	.118	.015	790.0	690.8	1.018	.127	.123	.012	862.0	857.2	1.062	.101
DIAR	.077	.010	790.0	690.8	.948	.134	.081	.010	862.0	857.2	1.114	.123
DIATRE	.832	.071	790.0	690.8	1.298	.085	.716?	.053	862.0	857.2	1.008	.075
KIDBCG	.990	.010	790.0	690.8	.999	.010	.992	.006	862.0	857.2	.853	.006
DPT123	.897	.037	790.0	690.8	1.206	.042	.934	.021	862.0	857.2	1.109	.023
POL123	.897	.037	790.0	690.8	1.206	.042	.923	.026	862.0	857.2	1.249	.028
MEAS	.731	.047	790.0	690.8	1.069	.065	.759	.038	862.0	857.2	1.149	.050
WCARD	.718	.042	790.0	690.8	1.108	.059	.792	.034	862.0	857.2	1.204	.042
FINMU	.721	.048	790.0	690.8	1.075	.067	.744	.037	862.0	857.2	1.098	.050

Subclass: Age group 25-34   Subclass: Age group 35-49

	R	SE	N	WN	DEFT	SE/R	R	SE	N	WN	DEFT	SE/R
RESI	.000	.000	171.0	167.9	.000	.000	.182	.007	2692.0	2691.2	.985	.040
EDUC	.784	.043	171.0	167.9	1.373	.055	.536	.013	2692.0	2691.2	1.351	.024
CMAR	.971	.009	171.0	167.9	.725	.010	.893	.007	2692.0	2691.2	1.158	.008
EXPOS	.681	.037	166.0	163.0	1.017	.054	.561	.011	2410.0	2403.0	1.053	.019
CCEB	2.193	.090	171.0	167.9	.949	.041	4.090	.054	2692.0	2691.2	1.196	.013
CSUR	2.135	.094	171.0	167.9	1.023	.044	3.817	.049	2692.0	2691.2	1.175	.013
PRG	.096	.014	166.0	163.0	.602	.143	.013	.003	2410.0	2403.0	1.082	.189
KMMD	1.000	.000	166.0	163.0	.000	.000	.991	.002	2410.0	2403.0	1.133	.002
EVUS	.855	.025	166.0	163.0	.908	.029	.787	.009	2410.0	2403.0	1.088	.012
CUUS	.705	.034	166.0	163.0	.960	.048	.690	.010	2410.0	2403.0	1.072	.015
USPL	.078	.022	166.0	163.0	1.038	.277	.018	.004	2410.0	2403.0	1.572	.239
USEST	.235	.027	166.0	163.0	.832	.117	.341	.011	2410.0	2403.0	1.180	.033
USAB	.175	.032	166.0	163.0	1.077	.182	.204	.009	2410.0	2403.0	1.083	.044
USTR	.223	.032	166.0	163.0	.998	.145	.234	.009	2410.0	2403.0	1.065	.039
WNT	.307	.038	166.0	163.0	1.055	.123	.127	.008	2410.0	2403.0	1.121	.060
DELAY	.187	.032	166.0	163.0	1.050	.171	.030	.004	2410.0	2403.0	1.092	.126
IDEA	2.564	.059	165.0	162.0	.814	.023	3.380	.033	2404.0	2389.0	1.175	.010
BREA	18.607	1.443	171.0	167.9	.759	.078	24.875	1.081	2692.0	2691.2	1.032	.043
AMENO	6.472	1.298	171.0	167.9	.917	.201	6.932	.754	2692.0	2691.2	1.104	.109
ABSTI	4.854	1.467	171.0	167.9	1.098	.302	8.003	.704	2692.0	2691.2	.951	.088
NCEB	.000	.000	171.0	167.9	.000	.000	5.082	.113	2692.0	2691.2	1.078	.022
ATTE	.173	.045	171.0	167.9	1.308	.260	.185	.017	2692.0	2691.2	1.101	.090
TETA	.167	.028	171.0	167.9	.865	.171	.155	.013	2692.0	2691.2	.934	.085
DIAR	.053	.015	171.0	167.9	.823	.285	.030	.006	2692.0	2691.2	1.041	.210
DIATRE	.750	.171	171.0	167.9	1.115	.228	.795	.092	2692.0	2691.2	1.126	.115
KIDBCG	1.000	.000	171.0	167.9	.000	.000	1.000	.000	2692.0	2691.2	.000	.000
DPT123	.966	.034	171.0	167.9	.990	.035	.926	.028	2692.0	2691.2	1.066	.030
POL123	.966	.034	171.0	167.9	.990	.035	.926	.028	2692.0	2691.2	1.066	.030
MEAS	.655	.097	171.0	167.9	1.094	.148	.662	.055	2692.0	2691.2	1.134	.083
WCARD	.906	.051	171.0	167.9	.978	.056	.822	.035	2692.0	2691.2	.988	.042
FIMMU	.655	.097	171.0	167.9	1.094	.148	.650	.055	2692.0	2691.2	1.116	.084

	R	SE	N	WN	DEFT	SE/R	R	SE	N	WN	DEFT	SE/R
RESI	1.000	.000	1011.0	945.0	.000	.000	.000	.000	4854.0	4919.5	.000	.000
EDUC	.747	.015	1011.0	945.0	1.077	.020	.562	.011	4854.0	4919.5	1.571	.020
CMAR	.936	.008	1011.0	945.0	1.096	.009	.926	.004	4854.0	4919.5	1.088	.004
EXPOS	.573	.014	949.0	884.9	.874	.025	.581	.008	4500.0	4557.0	1.033	.013
CCEB	2.785	.060	1011.0	945.0	.970	.021	3.052	.034	4854.0	4919.5	1.104	.011
CSUR	2.644	.054	1011.0	945.0	.946	.020	2.873	.031	4854.0	4919.5	1.088	.011
PRG	.059	.008	949.0	884.9	1.036	.134	.071	.004	4500.0	4557.0	1.106	.060
KWMD	.996	.002	949.0	884.9	.926	.002	.990	.002	4500.0	4557.0	1.378	.002
EVUS	.802	.014	949.0	884.9	1.069	.017	.727	.008	4500.0	4557.0	1.147	.010
CUUS	.650	.017	949.0	884.9	1.075	.026	.611	.008	4500.0	4557.0	1.154	.014
USPL	.039	.005	949.0	884.9	.870	.140	.041	.004	4500.0	4557.0	1.283	.092
USEST	.236	.013	949.0	884.9	.954	.056	.251	.008	4500.0	4557.0	1.313	.034
USAB	.216	.014	949.0	884.9	1.053	.065	.169	.006	4500.0	4557.0	1.056	.035
USTR	.240	.015	949.0	884.9	1.094	.063	.205	.006	4500.0	4557.0	1.054	.031
WNT	.282	.014	949.0	884.9	.986	.051	.325	.009	4500.0	4557.0	1.244	.027
DELAY	.159	.012	949.0	884.9	.969	.072	.189	.007	4500.0	4557.0	1.141	.035
IDEA	2.840	.040	953.0	886.9	.952	.014	3.092	.026	4488.0	4537.1	1.407	.008
BREA	17.967	.891	1011.0	945.0	.906	.050	23.430	.425	4854.0	4919.5	1.042	.018
AMENO	6.350	.630	1011.0	945.0	.886	.099	7.727	.347	4854.0	4919.5	1.106	.045
ABSTI	6.157	.747	1011.0	945.0	1.036	.121	6.696	.347	4854.0	4919.5	1.122	.052
NCEB	4.917	.271	1011.0	945.0	1.123	.055	5.115	.125	4854.0	4919.5	1.073	.024
ATTE	.304	.025	1011.0	945.0	1.145	.082	.107	.007	4854.0	4919.5	1.201	.067
TETA	.174	.016	1011.0	945.0	.933	.093	.126	.007	4854.0	4919.5	1.147	.057
DIAR	.066	.010	1011.0	945.0	.981	.154	.057	.004	4854.0	4919.5	1.091	.079
DIATRE	.826	.061	1011.0	945.0	1.002	.074	.743	.038	4854.0	4919.5	1.175	.051
KIDBCG	.954	.023	1011.0	945.0	1.034	.024	.997	.002	4854.0	4919.5	.813	.002
OPT123	.893	.031	1011.0	945.0	.940	.035	.940	.011	4854.0	4919.5	1.080	.012
POL123	.893	.031	1011.0	945.0	.940	.035	.936	.012	4854.0	4919.5	1.136	.013
MEAS	.653	.049	1011.0	945.0	.948	.075	.690	.024	4854.0	4919.5	1.199	.035
WCARD	.858	.036	1011.0	945.0	1.042	.042	.816	.016	4854.0	4919.5	1.072	.020
FINMU	.630	.047	1011.0	945.0	.895	.074	.680	.024	4854.0	4919.5	1.190	.035

APPENDIX B

SLDHS QUESTIONNAIRE

DEPARTMENT OF CENSUS AND STATISTICS OF SRI LANKA
DEMOGRAPHIC AND HEALTH SURVEY
HOUSEHOLD SCHEDULE

IDENTIFICATION

ZONE_____
DISTRICT_____
SECTOR: URB/RURAL/ESTATE_____
WARD/GS DIV/ESTATE_____
SURVEY BLOCK NUMBER_____
HOUSING UNIT NUMBER_____
HOUSEHOLD NUMBER_____

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
				MONTH YEAR
DATE	_____	_____	_____	
INTERVIEWER'S NAME..	_____	_____	_____	
RESULT (*)	_____	_____	_____	

NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS
TIME	_____	_____		

*RESULT CODES:

1 COMPLETED
2 HH PRESENT BUT NO COMPETENT RESPONDENT AT HOME
3 HH ABSENT NIGHT BEFORE INTERVIEW
4 POSTPONED
5 REFUSED
6 DWELLING VACANT/ADDRESS NOT A DWELLING
7 DWELLING DESTROYED
8 DWELLING NOT FOUND
9 OTHER

	FIELD EDITED BY	OFFICE EDITED BY	KEYED BY	
NAME	_____	_____	_____	KEYED BY
DATE	_____	_____	_____	

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Now we would like some information about the people who usually live in your household, or who are staying with you now.

NAMES	RESIDENCE		SEX	AGE	MAR STAT	ELIGIBILITY
Please give me the names of the persons who usually live in your household or who are staying with you now. (RECORD NAME OF HEAD OF HOUSEHOLD FIRST) (1)	Does (NAME) usually live here? (2)	Did (NAME) sleep here last night? (3)	Is (NAME) male or female? (4)	How old is he/she? (5)	FORMERLY MAR.=1 CURRENTLY MAR.=2 NEVER MAR.=3 (6)	*CIRCLE LINE NUMBER OF WOMEN ELIGIBLE FOR INDIVIDUAL INTERVIEW (7)
LINE NO.	YES / NO	YES / NO	M / F	IN YEARS	F / C / N	
01	1 2	1 2	1 2	☐☐	1 2 3	01
02	1 2	1 2	1 2	☐☐	1 2 3	02
03	1 2	1 2	1 2	☐☐	1 2 3	03
04	1 2	1 2	1 2	☐☐	1 2 3	04
05	1 2	1 2	1 2	☐☐	1 2 3	05
06	1 2	1 2	1 2	☐☐	1 2 3	06
07	1 2	1 2	1 2	☐☐	1 2 3	07
08	1 2	1 2	1 2	☐☐	1 2 3	08
09	1 2	1 2	1 2	☐☐	1 2 3	09
10	1 2	1 2	1 2	☐☐	1 2 3	10
11	1 2	1 2	1 2	☐☐	1 2 3	11
12	1 2	1 2	1 2	☐☐	1 2 3	12

TICK HERE IF CONTINUATION SHEET USED ☐

*WOMAN IS ELIGIBLE IF COL. (3)=1, (4)=2, (5)=15-49, (6)=1 OR 2.

TOTAL NUMBER OF ELIGIBLE WOMEN ON THIS SHEET ☐☐

Just to make sure that I have this right:

1) Are there any other persons such as small children or infants that we have not listed? YES ☐ —→ CORRECT AND ENTER NAMES IN TABLE   NO ☐

2) In addition, are there any other people who usually live here but are not members of your family, such as domestic servants, lodgers or friends whom we have not listed? YES ☐ —→ CORRECT AND ENTER NAMES IN TABLE   NO ☐

3) Are there any guests or visitors who are temporarily staying with the family and who spent last night here that are not listed? YES ☐ —→ CORRECT AND ENTER NAMES IN TABLE   NO ☐

CONTINUATION SHEET FOR HOUSEHOLD SCHEDULE

NAMES	RESIDENCE				SEX		AGE	MAR STAT			ELIGIBILITY
Please give me the names of the persons who usually live in your household or who are staying with you now. (RECORD NAME OF HEAD OF HOUSEHOLD FIRST) (1)	Does (NAME) usually live here? (2)		Did (NAME) sleep here last night? (3)		Is (NAME) male or female? (4)		How old is he/she? (5)	FORMERLY MAR.=1 CURRENTLY MAR.=2 NEVER MAR.=3 (6)			CIRCLE LINE NUMBER OF WOMEN ELIGIBLE FOR INDIVIDUAL INTERVIEW (7)
LINE NO.	YES	NO	YES	NO	M	F	IN YEARS	F	C	N	
↓	↓	↓	↓	↓	↓	↓		↓	↓	↓	
13	1	2	1	2	1	2	☐☐	1	2	3	13
14	1	2	1	2	1	2	☐☐	1	2	3	14
15	1	2	1	2	1	2	☐☐	1	2	3	15
16	1	2	1	2	1	2	☐☐	1	2	3	16
17	1	2	1	2	1	2	☐☐	1	2	3	17
18	1	2	1	2	1	2	☐☐	1	2	3	18
19	1	2	1	2	1	2	☐☐	1	2	3	19
20	1	2	1	2	1	2	☐☐	1	2	3	20
21	1	2	1	2	1	2	☐☐	1	2	3	21
22	1	2	1	2	1	2	☐☐	1	2	3	22
23	1	2	1	2	1	2	☐☐	1	2	3	23
24	1	2	1	2	1	2	☐☐	1	2	3	24

TOTAL NUMBER OF ELIGIBLE WOMEN ON THIS SHEET ☐☐

TOTAL NUMBER OF ELIGIBLE WOMEN ON BOTH SHEETS ☐☐

DEPARTMENT OF CENSUS AND STATISTICS OF SRI LANKA
DEMOGRAPHIC AND HEALTH SURVEY
INDIVIDUAL QUESTIONNAIRE

IDENTIFICATION

ZONE _____ ☐☐

DISTRICT _____

SECTOR: URB/RURAL/ESTATE _____

WARD/GS DIV/ESTATE _____

SURVEY BLOCK NUMBER _____

HOUSING UNIT NUMBER _____

HOUSEHOLD NUMBER _____

LINE NUMBER OF ELIGIBLE WOMAN _____

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
				MONTH DAY
DATE	_____	_____	_____	☐☐ ☐☐
INTERVIEWER'S NAME..	_____	_____	_____	☐☐
RESULT (*)	_____	_____	_____	☐

					TOTAL NUMBER OF VISITS
NEXT VISIT: DATE	_____	_____			☐
TIME					

*RESULT CODES:

1 COMPLETED
2 NOT AT HOME
3 POSTPONED
4 REFUSED
5 PARTLY COMPLETED
6 OTHER

	FIELD EDITED BY	OFFICE EDITED BY	KEYED BY	
NAME	_____	_____	_____	KEYED BY
DATE	_____	_____	_____	☐☐

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
101	RECORD NUMBER OF PEOPLE LISTED IN THE HOUSEHOLD SCHEDULE.	NUMBER OF PEOPLE.. ☐☐	
102	RECORD NUMBER OF CHILDREN AGE 5 AND UNDER LISTED IN THE HOUSEHOLD SCHEDULE AND WHO USUALLY LIVE IN THE HOUSHOLD.	NUMBER OF CHILDREN AGE 5 AND UNDER... ☐☐	
103	RECORD THE TIME.	HOUR.............. ☐☐ MINUTES.......... ☐☐	
104	First I would like to ask some questions about yourself and your household. For most of the time until you were 12 years old, did you live in metropolitan Colombo, another urban area, in a village, or on an estate?	COLOMBO METRO (ZONE 1)..1 OTHER URBAN.............2 VILLAGE.................3 ESTATE..................4	
105	How long have you been living continuously in this _____ (URBAN AREA, VILLAGE, OR ESTATE)?	ALWAYS.................95——>107 VISITOR................96——>107 YEARS............. ☐☐	
106	Just before you moved here, did you live in metropolitan Colombo, another urban area, in a village, or on an estate?	COLOMBO METRO (ZONE 1)..1 OTHER URBAN.............2 VILLAGE.................3 ESTATE..................4	
107	In what month and year were you born?	MONTH.............. ☐☐ DK MONTH.........98 YEAR............... ☐☐ DK YEAR..........98	
108	How old were you at your last birthday? COMPARE AND CORRECT 107 AND/OR 108 IF INCONSISTENT.	AGE IN COMPLETED YEARS... ☐☐	
109	Have you ever attended school?	YES.....................1 NO......................2——>113	

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
110	What was the highest grade in school you completed? CIRCLE BOTH LEVEL AND GRADE.	PRIMARY ...1 00 01 02 03 04 05 SECONDARY..2 06 07 08 09 HIGHER.....3 10 11 12 13	→112
111	What was the highest exam you passed?	TECHNICAL...............1 G.C.E. O LEVEL..........2 G.C.E. A LEVEL..........3 UNIV./PROFESSIONAL......4 OTHER_____5 (specify) NONE....................6	
112	CHECK 110: PRIMARY ☐ SECONDARY OR HIGHER ☐		→114
113	Can you read a letter or newspaper easily, with difficulty, or not at all?	EASILY..................1 WITH DIFFICULTY.........2 NOT AT ALL..............3	→115
114	Do you read a newspaper or magazine at least once a week?	YES.....................1 NO......................2	
115	Do you usually watch television every week?	YES.....................1 NO......................2	
116	Do you usually listen to a radio every day?.	YES.....................1 NO......................2	
117	What is the major source of drinking water for members of your household?	PIPED INTO RESIDENCE...01 PIPED ONTO PREMISES....02 PUBLIC TAP.............03 TUBE WELL/ABESIN. PUMP.04 PROTECTED WELL.........05 UNPROTECTED WELL.......06 RIVER/CANAL/TANK/ SPRING WATER.........07 RAINWATER..............08 OTHER _____ 09 (specify)	

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO

118	What is the major source of water for household use OTHER than drinking (eg., handwashing, cooking) for members of your household?	PIPED INTO RESIDENCE...01
		PIPED ONTO PREMISES....02 ——→120
		PUBLIC TAP.............03
		TUBE WELL/ABESIN. PUMP.04
		PROTECTED WELL.........05
		UNPROTECTED WELL......06
		RIVER/CANAL/TANK/
		  SPRING WATER..........07
		RAINWATER..............08
		OTHER. _____ 09
		    (specify)	

119	How long does it take to go there, get water, and come back?	MINUTES....... ☐☐☐ ON PREMISES...........996	
120	What kind of toilet facility is available for use by members of this household?	FLUSH...................1 WATER SEAL..............2 PIT.....................3 BUCKET..................4 OTHER _____ 5 (specify) NONE (BUSH)............6 ——→122	
121	Is this facility for the exclusive use of members of this household, or is it shared?	HOUSEHOLD MEMBERS ONLY..1 SHARED WITH OTHERS......2	
122	Do you have, right now, a cake of bath soap on the premises?	YES.....................1 NO......................2	

123	Does your house have:
	  Electricity?
	  A radio?
	  A television?
	  A refrigerator?
		YES NO
		ELECTRICITY....... 1 2
		RADIO............. 1 2
		TELEVISION........ 1 2
		REFRIGERATOR...... 1 2	

123	Does any member of your household own:
	  A bicycle?
	  A motorcycle?
	  A car?
	  A tractor?
		YES NO
		BICYCLE............ 1 2
		MOTORCYCLE......... 1 2
		CAR................ 1 2
		TRACTOR............ 1 2	

124	MAIN MATERIAL OF THE FLOOR. (INTERVIEWER: RECORD OBSERVATION)	TERRAZZO FLOOR TILE.....1 CEMENT..................2 WOOD....................3 DUNG/MUD................4 SAND....................5 OTHER _____ 6 (specify)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
125	MAIN MATERIAL OF THE ROOF. (INTERVIEWER: RECORD OBSERVATION)	TILE.....................1 ASBESTOS................2 TIN.......................3 CADJAN/PALMAYRA/STRAW...4 WASTE MATERIALS.........5 OTHER _____ 6 (specify)	
126	MAIN MATERIAL OF THE WALLS. (INTERVIEWER: RECORD OBSERVATION)	BRICK/CEMENT/STONE/ CABOOK.................1 MUD.....................2 WOOD....................3 CADJAN/PALMAYRA.........4 OTHER _____ 5 (specify)	
127	What religion do you belong to?	BUDDHIST...............01 HINDU..................02 MUSLIM.................03 CATHOLIC...............04 OTHER CHRISTIAN.......05 OTHER_____.06 (specify)	
128	RECORD ETHNICITY. (INTERVIEWER: RECORD OBSERVATION)	LOW COUNTRY SINHALESE..01 UP COUNTRY SINHALESE (KANDYIAN)..........02 SRI LANKAN TAMIL.......03 INDIAN TAMIL...........04 SRI LANKAN MOOR........05 BURGHER................06 MALAY..................07 OTHER_____08 (specify)	

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES......................1 NO.......................2——>206	
202	Do you have any son or daughter you have given birth to who is now living with you?	YES......................1 NO.......................2——>204	
203	How many sons live with you? And how many daughters live with you? IF NONE ENTER ZEROS <00>.	SONS AT HOME...... DAUGHTERS AT HOME.	
204	Do you have any son or daughter you have given birth to who is alive but does not live with you?	YES......................1 NO.......................2——>206.	
205	How many sons live elsewhere? How many daughters live elsewhere? IF NONE ENTER ZEROS <00>.	SONS ELSEWHERE.... DAUGHTERS ELSEWHERE........	
206	Have you ever given birth to a boy or a girl who was born alive but later died? IF NO, PROBE: Any (other) boy or girl who cried or showed any sign of life but only survived a few hours or days?	YES......................1 NO.......................2——>208	
207	How many boys have died? And how many girls have died? IF NONE ENTER ZEROS <00>.	BOYS DEAD........ GIRLS DEAD........	
208	SUM ANSWERS TO 203, 205, 207, AND ENTER TOTAL. IF NONE ENTER ZEROS <00>..	TOTAL.............	
209	CHECK 208: Just to make sure that I have this right: you have had in total ____ live births during your life. Is that correct? YES ☐ NO ☐➔ PROBE AND CORRECT 201- 209 AS NECESSARY		
210	CHECK 208: ONE OR MORE ☐ NO LIVE BIRTHS ☐ LIVE BIRTHS		——>220

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211 Now I would like to talk to you about all of your births.
It is important that you begin with your first birth and then report subsequent births in the order that they occurred. Now, please tell me the name of your first birth.

INTERVIEWER: FIRST, RECORD THE NAMES OF ALL BIRTHS THE WOMAN MENTIONS BY PROGRESSING DOWN COLUMN 212.
SECOND, ASK QUESTIONS 213-218, AS APPROPRIATE FOR EACH BIRTH.
THIRD, RECORD TWINS ON SEPARATE LINES, AND CONNECT WITH A BRACKET.

212 What is the name of your (FIRST, SECOND, etc.) birth?	213 Is (NAME) a boy or a girl?	214 In what month and year was (NAME) born? month	215 Is (NAME) still alive?	216 IF DEAD: How old was (NAME) when he/she died? RECORD DAYS IF < 1 MONTH (31 DAYS); MONTHS IF < 2 YEARS.	217 IF ALIVE: How old was (NAME) at his/her last birthday?	218 IF ALIVE: Is (NAME) living with you now?
01 (NAME)	BOY GIRL 1 2	MONTH... YEAR....	YES NO 1 2	DAYS 1 MONTHS 2 YEARS 3 (GO TO NEXT BIRTH)	AGE	YES NO 1 2
02 (NAME)	BOY GIRL 1 2	MONTH... YEAR....	YES NO 1 2	DAYS 1 MONTHS 2 YEARS 3 (GO TO NEXT BIRTH)	AGE	YES NO 1 2
03 (NAME)	BOY GIRL 1 2	MONTH... YEAR....	YES NO 1 2	DAYS 1 MONTHS 2 YEARS 3 (GO TO NEXT BIRTH)	AGE	YES NO 1 2
04 (NAME)	BOY GIRL 1 2	MONTH... YEAR....	YES NO 1 2	DAYS 1 MONTHS 2 YEARS 3 (GO TO NEXT BIRTH)	AGE	YES NO 1 2
05 (NAME)	BOY GIRL 1 2	MONTH... YEAR....	YES NO 1 2	DAYS 1 MONTHS 2 YEARS 3 (GO TO NEXT BIRTH)	AGE	YES NO 1 2
06 (NAME)	BOY GIRL 1 2	MONTH... YEAR....	YES NO 1 2	DAYS 1 MONTHS 2 YEARS 3 (GO TO NEXT BIRTH)	AGE	YES NO 1 2
07 (NAME)	BOY GIRL 1 2	MONTH... YEAR....	YES NO 1 2	DAYS 1 MONTHS 2 YEARS 3 (GO TO NEXT BIRTH)	AGE	YES NO 1 2

TICK HERE IF CONTINUATION SHEET IS USED————————————————————————————→ ⟶PROCEED TO NEXT PAGE.

219 COMPARE 208 WITH NUMBERS OF BIRTHS IN HISTORY ABOVE AND MARK CORRECT BOX.
NUMBERS ARE SAME   NUMBERS ARE DIFFERENT   (PROBE AND RECONCILE)

INTERVIEWER: v
FOR EACH LIVE BIRTH: YEAR OF BIRTH IS RECORDED
FOR EACH LIVE CHILD: CURRENT AGE IS RECORDED
FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED

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212 What is the name of your (EIGHTH, NINTH, etc.) birth?	213 Is (NAME) a boy or a girl?	214 In what month year was (NAME) born? month	215 Is (NAME) still alive?	216 IF DEAD: How old was (NAME) when he/she died?	217 IF ALIVE: How old was (NAME) at his/her last birthday?	218 IF ALIVE: Is (NAME) living with you now?
08 ____ (NAME)	BOY GIRL 1 2	MONTH... ☐☐ YEAR.... ☐☐	YES NO 1 2	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 (GO TO NEXT BIRTH)	AGE ☐☐	YES NO 1 2
09 ____ (NAME)	BOY GIRL 1 2	MONTH... ☐☐ YEAR.... ☐☐	YES NO 1 2	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 (GO TO NEXT BIRTH)	AGE ☐☐	YES NO 1 2
10 ____ (NAME)	BOY GIRL 1 2	MONTH... ☐☐ YEAR.... ☐☐	YES NO 1 2	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 (GO TO NEXT BIRTH)	AGE ☐☐	YES NO 1 2
11 ____ (NAME)	BOY GIRL 1 2	MONTH... ☐☐ YEAR.... ☐☐	YES NO 1 2	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 (GO TO NEXT BIRTH)	AGE ☐☐	YES NO 1 2
12 ____ (NAME)	BOY GIRL 1 2	MONTH... ☐☐ YEAR.... ☐☐	YES NO 1 2	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 (GO TO NEXT BIRTH)	AGE ☐☐	YES NO 1 2
13 ____ (NAME)	BOY GIRL 1 2	MONTH... ☐☐ YEAR.... ☐☐	YES NO 1 2	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 (GO TO NEXT BIRTH)	AGE ☐☐	YES NO 1 2
14 ____ (NAME)	BOY GIRL 1 2	MONTH... ☐☐ YEAR.... ☐☐	YES NO 1 2	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 (GO TO 219)	AGE ☐☐	YES NO 1 2

219 | COMPARE 208 WITH NUMBERS OF BIRTHS IN HISTORY ABOVE AND MARK CORRECT BOX WITH AN "X".

NUMBERS ARE SAME   NUMBERS ARE DIFFERENT
        ☐   ☐ (PROBE AND RECONCILE)
        v

INTERVIEWER:
        FOR EACH LIVE BIRTH: YEAR OF BIRTH IS RECORDED   ☐
        FOR EACH LIVE CHILD: CURRENT AGE IS RECORDED
        FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED   ☐

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
220	How long ago did your last menstrual period start?	DAYS AGO........1 WEEKS AGO........2 MONTHS AGO......3 YEARS AGO.......4 BEFORE LAST BIRTH.....995———>222 NEVER MENSTRUATED.....996— DOES NOT KNOW........998——>223	
221	CHECK 220: LESS THAN 1 MONTH OR 4 WEEKS (30 DAYS OR LESS) ☐——>GO TO 223 AND CIRCLE 2. 1 MONTH OR MORE, AND LESS THAN 2 MONTHS (MORE THAN 4 WEEKS AND LESS THAN 8 WEEKS) ☐——>ASK 223. 2 MONTHS OR MORE (MORE THAN 8 WEEKS) ☐		
222	Why did your last menstruation occur so long ago?	MENOPAUSAL.............1——>223, CIRCLE 2. IRREGULAR DUE TO INJECTIONS...........2 POSTPARTUM.............3 PREGNANT...............4——>223, CIRCLE 1. DOES NOT KNOW..........5——>223 NOT UNUSUAL............6——>223	
223	Are you pregnant now?	YES.....................1 NO......................2 NOT SURE................3——>228	
224	For how many months have you been pregnant?	MONTHS............ ☐☐	
225	Have you had a tetanus injection since you have been pregnant?	YES.....................1 NO... ....2 DK......................8	
226	Did you see anyone for a check on this pregnancy?	YES.....................1 NO......................2——>228	
227	Whom did you see? PROBE FOR TYPE OF PERSON AND RECORD MOST QUALIFIED.	DOCTOR..................1 GOVT NURSE/MIDWIFE......2 TRADITIONAL BIRTH ATTENDANT..............3 OTHER_____.4 (SPECIFY)	

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
228	When during her monthly cycle do you think a woman has the greatest chance of becoming pregnant? PROBE: What are the days during the month when a woman has to be careful to avoid becoming pregnant?	DURING HER PERIOD.......1 RIGHT AFTER HER PERIOD HAS ENDED..............2 IN THE MIDDLE OF THE CYCLE..................3 JUST BEFORE HER PERIOD BEGINS.................4 AT ANY TIME.............5 OTHER _____ 6 (SPECIFY) DOES NOT KNOW..........8	
229	PRESENCE OF OTHERS AT THIS POINT:	YES NO CHILDREN UNDER 10.. 1 2 HUSBAND.............1 2 OTHER MALES.........1 2 OTHER FEMALES.......1 2	

301 Now I would like to talk about a different topic. There are various ways that a couple can delay or avoid a pregnancy. Which of these methods have you heard of?

INTERVIEWER: a) CIRCLE CODE 1 IN 302 FOR EACH METHOD MENTIONED SPONTANEOUSLY.
b) THEN PROCEED DOWN THE COLUMN, CONTINUING Q. 302, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 2 IF METHOD IS RECOGNIZED, AND CODE 3 IF NOT RECOGNIZED.
c) THEN FOR EACH METHOD WITH CODE 1 OR 2 CIRCLED IN Q. 302, ASK Q. 303-305 BEFORE PROCEEDING TO THE NEXT METHOD.

	302 Have you ever heard of (READ METHOD AND DESCRIPTION)?	303 Have you ever used (METHOD)	304 Where would you go to obtain (METHOD) if you wanted to use it? (CODES BELOW)	305 What would you say is the main problem, if any, in getting or using (METHOD)? (CODES BELOW)
PILL "Women can take a pill every day."	YES/SPON.......1 YES/PRBD.......2 NO............3	YES.....1 NO......2	OTHER:———	OTH:———
IUD "Women can have a loop or coil placed inside them by a doctor or a nurse."	YES/SPON.......1 YES/PRBD.......2 NO............3	YES.....1 NO......2	OTHER:———	OTH:———
INJECTIONS "Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months."	YES/SPON.......1 YES/PRBD.......2 NO............3	YES.....1 NO......2	OTHER:———	OTH:———
DIAPHRAGM, FOAM, JELLY "Women can place a sponge or suppository or diaphragm or jelly or cream inside them immediately before intercourse."	YES/SPON.......1 YES/PRBD.......2 NO............3	YES.....1 NO......2	OTHER:———	OTH:———
CONDOM "Men can use a rubber sheath during sexual intercourse."	YES/SPON.......1 YES/PRBD.......2 NO............3	YES.....1 NO......2	OTHER:———	OTH:———

CODES FOR 304
GOVT HOSP/MCH CENTER......................01
PRIV DR/PRIV NURSING HOME.................02
NON-GOVT CLINIC..........................03
MOBILE CLINIC............................04
GOVT PUBLIC HEALTH MIDWIFE/NURSE.........05
OTHER FIELD WORKERS......................06
AYURVEDIC DOCTOR.........................07
FRIEND/RELATIVE..........................08
PHARMACY/SHOP............................09
OTHER (specify above)....................10
NOWHERE.................................11
DOES NOT KNOW...........................98

CODES FOR 305
NOT EFFECTIVE......................02
HUSBAND DISAPPROVES..............03
HEALTH CONCERNS...................04
ACCESS/AVAILABILITY..............05
COSTS TOO MUCH....................06
INCONVENIENT TO USE..............07
OTHER (specify above)............10
NONE.............................11
DOES NOT KNOW....................98

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	302 Have you ever heard of (READ METHOD AND DESCRIPTION)?	303 Have you ever used (METHOD)	304 Where would you go to obtain (METHOD) if you wanted to use it? (CODES BELOW)	305 What would you say is the main problem, if any, in getting or using (METHOD)? (CODES BELOW)
FEMALE STERILIZATION "Women can have an operation to avoid having any more children."	YES/SPON.......1 YES/PRBD.......2 NO............3	YES.....1 NO......2	☐☐ OTHER:————	☐☐ OTH:————
MALE STERILIZATION "Men can have an operation to avoid having any more children."	YES/SPON.......1 YES/PRBD....:..2 NO............3	YES.....1 NO......2	☐☐ OTHER:———	☐☐ OTH:———
SAFE PERIOD "Couples can avoid having sexual intercourse on certain days of each month when the woman is more likely to get pregnant."	YES/SPON.......1 YES/PRBD.......2 NO............3	YES.....1 NO......2	Where would you go to obtain advice about SAFE PER.? ☐☐ OTHER:————	☐☐ OTH:————
WITHDRAWAL "Men can be careful and pull out before climax."	YES/SPON.......1 YES/PRBD.......2 NO............3	YES.....1 NO......2		☐☐ OTH:————
NORPLANT "Women can have a tube inserted into their arms and avoid pregnancy for many years."	YES/SPON.......1 YES/PRBD.......2 NO............3	YES.....1 NO......2	☐☐ OTHER:————	☐☐ OTH:————
ANY OTHER METHODS? "Have you heard of any other ways or methods that women or men can use to avoid pregnancy?" ———————— (specify)	YES/SPON.......1 NO............3	YES.....1 NO......2		

CODES FOR 304
GOVT HOSP/MCH CENTER....................01
PRIV DR/PRIV NURSING HOME...............02
NON-GOVT CLINIC.........................03
MOBILE CLINIC...........................04
GOVT PUBLIC HEALTH MIDWIFE/NURSE........05
OTHER FIELD WORKERS.....................06
AYURVEDIC DOCTOR........................07
FRIEND/RELATIVE.........................08
PHARMACY/SHOP...........................09
OTHER (specify above)...................10
NOWHERE.................................11
DOES NOT KNOW...........................98

CODES FOR 305
NOT EFFECTIVE...................02
HUSBAND DISAPPROVES.............03
HEALTH CONCERNS................04
ACCESS/AVAILABILITY............05
COSTS TOO MUCH.................06
INCONVENIENT TO USE...........07
OTHER (specify above)..........10
NONE..........................11
DOES NOT KNOW.................98

306 CHECK 303: EVER USED A METHOD?

NO-NEVER USER   YES-EVER USER
☐   ☐ ——————————————————————————>309

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
307	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES.....................1 NO......................2	→315
308	What have you used or done? CORRECT 302-303 AND OBTAIN INFORMATION FOR 304 TO 306 AS NECESSARY.		
309	CHECK 303: EVER USED NEVER USED SAFE SAFE PERIOD ☐ PERIOD ☐		→311

310	The last time you used the safe period, how did you determine on which days you had to abstain?	BASED ON CALENDAR.......1
		BASED ON BODY
		  TEMPERATURE............2
		BASED ON CERVICAL MUCUS
		  (BILLINGS METHOD)......3
		BASED ON BODY TEMPERATURE
		  AND MUCUS..............4
		OTHER _____.5
		       (SPECIFY)	

311	How many living children, if any, did you already have when you first did something to avoid getting pregnant? IF NONE ENTER ZEROS <00>.	NUMBER OF CHILDREN...... ☐☐	
312	CHECK 223: NOT PREGNANT/NOT SURE PREGNANT ☐ ☐		→324
313	Are you currently doing something or using any method to avoid getting pregnant?	YES.....................1 NO......................2	→319
314	Have you done something or used a method in the past month to avoid getting pregnant?	YES.....................1 NO......................2	→319

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
315	Some women abstain from sexual relations completely for more than one or two months for the following reasons: 1: To avoid pregnancy 2: Because the eldest child is of marriage age 3: Because the husband is away 4: A woman has just had a baby or is breast-feeding 5: Illness 6: Religious reasons. Have you ever abstained for any of these reasons?	YES......................1 NO.......................2	—>323
316	Are you currently abstaining for any of these reasons?	YES......................1 NO.......................2	—>323

317	Which reason?	AVOID PREGNANCY.........1
		ELDEST CHILD OF
		  MARRIAGE AGE..........2
		HUSBAND AWAY............3
		POSTPARTUM/BREASTFDG....4
		ILLNESS.................5
		RELIGIOUS REASONS.......6
		OTHER_____.7
		    (specify)
			>319
			
			>323

319	Which method are you using?	PILL..................01 IUD...................02 INJECTIONS............03 DIAPHRAGM/FOAM/JELLY...04 CONDOM................05 FEMALE STERILIZATION...06 MALE STERILIZATION.....07 SAFE PERIOD...........08 WITHDRAWAL............09 NORPLANT..............10 OTHER_____.11 (specify) PROLONGED ABSTINENCE...12	—>320 >327 >322 >323 —>327 >323

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
320	Please show me the package of pills you are now using. (RECORD NAME OF BRAND.)	MITHURI................01 EUGYNON................02 MICROGYNON.............03 OVULEN.................04 OVRAL..................05 TRIQUILAR.............06 TRINORDIOL............07 NORDETTE..............08 OTHER_____.09 (specify) NOT ABLE TO SHOW.......98	
321	How much does one packet (cycle) of pills cost you?	COST...Rs. ☐☐ Cts. ☐☐ FREE.................9996 DK...................9998	>327
322	In what month and year did you (he) have the operation?	MONTH............ ☐☐ YEAR.............	>327A
323	CHECK 306: NEVER USED ☐ EVER USED ☐		>324
323A	CHECK 317: 317=1 OR 2 ☐ 317=3-7 OR NOTHING CIRCLED ☐		>347
324	Have you obtained a method to avoid pregnancy in the last twelve months from a hospital, a clinic, a doctor, or a fieldworker?	YES.....................1 NO......................2	>326
325	Which method did you obtain?	PILL...................01 IUD....................02 INJECTIONS.............03 DIAPHRAGM/FOAM/JELLY...04 CONDOM.................05 MALE STERILIZATION.....07 SAFE PERIOD............08 NORPLANT...............10 OTHER_____.11 (specify)	>327
326	Have you obtained instructions for using the safe period in the last twelve months from a hospital, clinic, a doctor, or a fieldworker?	YES.....................1 NO......................2	>329

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
327 OR 327A	Where did you obtain (METHOD) the last time? Where did the sterilization take place?	GOVT HOSP/MCH CENTER....01 PRIV DR/PRIV NRSG HOME..02 NON-GOVT CLINIC.........03 MOBILE CLINIC...........04 GOVT PUBLIC HEALTH MIDWIFE/NURSE........05 OTHER FIELD WORKERS.....06 AYURVEDIC DOCTOR........07 FRIEND/RELATIVE.........08 PHARMACY/SHOP...........09 OTHER_____.10 (specify) DK.....................98	>329
328	Was there anything you disliked about the service you received there? IF YES: What?	WAIT TOO LONG..........1 STAFF DISCOURTEOUS......2 SERVICES EXPENSIVE......3 NOT ABLE TO GET DESIRED SERVICES/METHOD........4 OTHER _____.5 (SPECIFY) NO COMPLAINTS..........6	
329	CHECK 223: NOT PREGNANT ☐ PREGNANT ☐ OR NOT SURE		>347
330	CHECK 319: HE/SHE ☐ CURRENTLY ☐ NOT ☐ STERILIZED USING ANOTHER CURRENTLY (SKIP TO 332) METHOD USING		>341
331	For how long have you been using (CURRENT METHOD) continuously?	MONTHS............ ☐☐ YEARS............. SINCE LAST BIRTH.......96	
332	Have you experienced any problems from using (CURRENT METHOD)?	YES....................1 NO....................2	>334
333	What is the main problem you experienced?	METHOD FAILED.........02 HUSBAND DISAPPROVED....03 HEALTH CONCERNS........04 ACCESS/AVAILABILITY....05 COSTS TOO MUCH.........06 INCONVENIENT TO USE....07 OTHER _____.10 (specify) DK.....................98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
334	At any time during the same month, do you regularly use any other method than (CURRENT METHOD)?	YES.....................1 NO......................2	→336
335	Which method is that? CHECK 302-333 AND CORRECT AS NECESSARY	PILL...................01 IUD....................02 INJECTIONS.............03 DIAPHRAGM/FOAM/JELLY...04 CONDOM.................05 SAFE PERIOD............08 WITHDRAWAL.............09 NORPLANT...............10 OTHER_____.11 (specify)	
336	Have you ever used any other method before (CURRENT METHOD) (since your last birth) to avoid getting pregnant?	YES.....................1 NO......................2	→350
337	Which method did you use before (CURRENT METHOD)?	PILL...................01 IUD....................02 INJECTIONS.............03 DIAPHRAGM/FOAM/JELLY...04 CONDOM.................05 MALE STERILIZATION.....07 SAFE PERIOD............08 WITHDRAWAL.............09 NORPLANT...............10 OTHER_____.11 (specify)	
338	In what month and year did you start using (METHOD BEFORE CURRENT) (the last time)?	MONTH............. ⊞ YEAR..............	
339	For how long had you been using (METHOD BEFORE CURRENT) before you stopped using it (last time)?	MONTHS............ ⊞ YEARS............. DK.....................98	
340	What was the main reason you stopped using (METHOD BEFORE CURRENT) then?	METHOD FAILED..........02 HUSBAND DISAPPROVED....03 HEALTH CONCERNS........04 ACCESS/AVAILABILITY....05 COST TOO MUCH..........06 INCONVENIENT TO USE....07 INFREQUENT SEX.........08 TO USE PERMANENT METH..09 OTHER _____.10 (specify) DK.....................98	>350

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
341	CHECK 208: ANY BIRTHS? YES ☐ NO ☐		→343
342	Since your last birth have you used any method to avoid getting pregnant?	YES.....................1 NO......................2	→347
343	Which was the last method you used?	PILL....................01 IUD.....................02 INJECTIONS.............03 DIAPHRAGM/FOAM/JELLY...04 CONDOM..................05 MALE STERILIZATION.....07 SAFE PERIOD............08 WITHDRAWAL.............09 NORPLANT...............10 OTHER_____.11 (specify) DK.....................98	
344	In what month and year did you start using that method (the last time)?	MONTH............. ☐☐ YEAR.............	
345	For how long had you been using (LAST METHOD) before you stopped using it (last time)?	MONTHS............ ☐☐ YEARS.............	
346	What was the main reason you stopped using (LAST METHOD) then?	TO BECOME PREGNANT.....01 METHOD FAILED..........02 HUSBAND DISAPPROVED....03 HEALTH CONCERNS........04 ACCESS/AVAILABILITY....05 COST TOO MUCH..........06 INCONVENIENT TO USE....07 INFREQUENT SEX.........08 OTHER _____.09 (specify) DK.....................98	
347	Do you intend to use a method to avoid pregnancy at any time in the future?	YES.....................1 NO......................2 DK......................8	→350

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
348	Which method would you prefer to use?	PILL....................01 IUD.....................02 INJECTIONS.............03 DIAPHRAGM/FOAM/JELLY...04 CONDOM.................05 FEMALE STERILIZATION...06 MALE STERILIZATION.....07 SAFE PERIOD............08 WITHDRAWAL.............09 NORPLANT...............10 OTHER_____.11 (specify) NOT SURE..............12	
349	Do you intend to use (PREFERRED METHOD) in the next 12 months?	YES......................1 NO.......................2 DK.......................8	
350	In the last month, have you heard or seen a message about family planning on the radio or on tv?	YES......................1 NO.......................2——>352	
351	Did you hear it once or more than once?	ONCE.....................1 MORE THAN ONCE..........2	
352	Do you think that it is acceptable or not acceptable for family planning information to be provided on radio? On television?	NOT ACC. ACC. DK RADIO 1 2 8 TV 1 2 8	
353	When do you listen to the radio?	MORNING.................1 AFTERNOON...............2 EVENING.................3	
354	What programs do you listen to? (CIRCLE ALL MENTIONED.)	NEWS OR BEHIND NEWS.....1 QUIZ, DISCUSSIONS, DOCUMENTARIES..........1 PLAYS, SOAPS, MUSIC.....1 OTHER_____.1 (specify)	
355	CHECK 223: NOT PREGNANT OR ☐ PREGNANT ☐ UNSURE		——>356
355A	CHECK 214: HAD BIRTH SINCE ☐ NO BIRTH SINCE ☐ JAN. 1982 JAN. 1982		——>501

356 Now I would like to get some more information about (your pregnancy and) the children you had in the last five years.

INTERVIEWER: FIRST, MARK PREGNANCY STATUS, AND FROM P. 10 RECORD NAMES OF BIRTHS SINCE 1982.
              SECOND, MARK APPROPRIATE BOX IN 357, AND ASK THE APPROPRIATE QUESTIONS FOR EACH COLUMN FOR WHICH THE HEADING
              IS FILLED OUT.

ASK QUESTIONS ABOUT ALL BIRTHS	CURRENTLY PREGNANT? YES ☐ NO ☐	LAST BIRTH ___(name)___	NEXT-TO-LAST BIRTH ___(name)___	SECOND FROM LAST BIRTH ___(name)___	
357 CHECK 306: EVER USED A METHOD ☐ (ASK 358-365 FOR EACH COLUMN)					
NEVER USED A METHOD ☐ (ASK 364 FOR EACH COLUMN)					
358 Before you became pregnant (with NAME) and after the birth of (NAME) did you do anything to avoid getting pregnant, even for a short time?	YES..........1 NO.......... 2┐ SKIP TO 364 ←┘	YES..........1 NO.......... 2┐ SKIP TO 364 ←┘	YES..........1 NO.......... 2┐ SKIP TO 364 ←┘	YES..........1 NO.......... 2┐ SKIP TO 364 ←┘	
359 Which was the last method you used then? (CODES BELOW)	☐☐ OTHER:————	☐☐ OTHER:————	☐☐ OTHER:————	☐☐ OTHER:————	
360 Any method before that? (RECORD CODE.) (IF NONE, ENTER 00)	PRECEDING ☐☐ METHOD	PRECEDING ☐☐ METHOD	PRECEDING ☐☐ METHOD	PRECEDING ☐☐ METHOD	
361 For how long had you used (LAST METHOD) that time?	MONTHS... ⊞ YEARS....	MONTHS... ⊞ YEARS....	MONTHS... ⊞ YEARS....	MONTHS... ⊞ YEARS....	
362 Did you become pregnant while you were still using (LAST METHOD)?	YES............1┐ (SKIP TO 365)←┘ NO............2	YES............1┐ (SKIP TO 365)←┘ NO............2	YES............1┐ (SKIP TO 365)←┘ NO............2	YES............1┐ (SKIP TO 365)←┘ NO............2	
363 What was the main reason you stopped using (LAST METHOD)? IF RESPONSE IS "TO GET PREGNANT", CIRCLE 01 AND GO TO NEXT COLUMN. IF NOT, SEE CODES BELOW.	TO GET PREG....01 (GO TO NEXT COL.) ☐☐ OTHER:————	TO GET PREG....01 (GO TO NEXT COL.) ☐☐ OTHER:————	TO GET PREG....01 (GO TO NEXT COL.) ☐☐ OTHER:————	TO GET PREG....01 (GO TO 401) ☐☐ OTHER:————	
364 At the time you became pregnant (with NAME) did you want to have that child then, to wait until later, or to have no (more) children at all?	THEN..........1 LATER.........2 NO MORE........3 (ALL TO NEXT COL)	THEN..........1 LATER.........2 NO MORE........3 (ALL TO NEXT COL)	THEN..........1 LATER.........2 NO MORE........3 (ALL TO NEXT COL)	THEN..........1 LATER.........2 NO MORE........3 (ALL TO NEXT COL)	
365 Did you want to have that child, but at a later time, or not have another child at all?	HAVE CHILD LATER.........1 NOT HAVE CHILD.2 (ALL TO NEXT COL)	HAVE CHILD LATER.........1 NOT HAVE CHILD.2 (ALL TO NEXT COL)	HAVE CHILD LATER.........1 NOT HAVE CHILD.2 (ALL TO NEXT COL)	HAVE CHILD LATER.........1 NOT HAVE CHILD.2 (ALL TO 401)	

CODES FOR 359, 360
PILL...........................01
IUD............................02
INJECTION......................03
DIAPH/FM/JLY...................04
CONDOM.........................05
MALE STERIL....................07
SAFE PERIOD....................08
WITHDRAWAL.....................09
NORPLANT.......................10
OTHER (specify above)........11

CODES FOR 363
NOT EFFECTIVE.....................02
HUSBAND DISAPPROVED...................03
HEALTH CONCERNS........................04
ACCESS/AVAILABILITY...................05
COST TOO MUCH.........................06
INCONVENIENT TO USE...................07
INFREQUENT SEX........................08
OTHER (specify above)................10
DK....................................98

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401 CHECK 214:   HAD BIRTH SINCE JAN. 1982   NO BIRTH SINCE JAN. 1982

[ ]   [ ] (SKIP TO 501)

402 FROM QUESTION 212 ON P. 10, RECORD THE NAMES AND LINE NUMBERS OF ALL BIRTHS SINCE JAN. 1982 IN THE FOLLOWING TABLE.
     FOR EACH BIRTH, CHECK IF ALIVE OR DEAD, AND MARK THE APPROPRIATE BOX.

ASK QUESTIONS 403-422 FOR ALL BIRTHS, ALIVE AND DEAD	LAST BIRTH [ ][ ] (name and line number) ALIVE [ ] DEAD [ ]	NEXT-TO-LAST BIRTH [ ][ ] (name and line number) ALIVE [ ] DEAD [ ]	SECOND-TO-LAST BIRTH [ ][ ] (name and line number) ALIVE [ ] DEAD [ ]
403 Did you receive a tetanus injection when you were pregnant with (NAME)?	YES, 1 DOSE......1 YES, 2 DOSES.....2 NO...............3 DOES NOT KNOW....4	YES, 1 DOSE......1 YES, 2 DOSES.....2 NO...............3 DOES NOT KNOW....4	YES, 1 DOSE......1 YES, 2 DOSES.....2 NO...............3 DOES NOT KNOW....4
404 Did the Family Health midwife visit you when you were prenant with (NAME)?	YES.............1 NO..............2	YES.............1 NO..............2	YES.............1 NO..............2
405 Did you visit a doctor or a clinic for a check on this pregnancy?	YES.............1 NO..............2	YES.............1 NO..............2	YES.............1 NO..............2
406 In what type of place was (NAME) born?	GOVT HOSP/MATER- NITY HOME......1 PRIV NURSING HM..2 AT HOME.........3 OTHER_____.4 (specify)	GOVT HOSP/MATER- NITY HOME......1 PRIV NURSING HM..2 AT HOME.........3 OTHER_____.4 (specify)	GOVT HOSP/MATER- NITY HOME......1 PRIV NURSING HM..2 AT HOME.........3 OTHER_____.4 (specify)
407 Who assisted with the delivery of (NAME)? PROBE AND RECORD MOST QUALIFIED PERSON.	DOCTOR..........1 GOVT NURSE/ MIDWIFE........2 TRADITIONAL BIRTH ATTENDANT......3 REL/NEIGHBOR.....4 OTHER_____5 (specify) NO ONE..........6	DOCTOR..........1 GOVT NURSE/ MIDWIFE........2 TRADITIONAL BIRTH ATTENDANT......3 REL/NEIGHBOR.....4 OTHER_____5 (specify) NO ONE..........6	DOCTOR..........1 GOVT NURSE/ MIDWIFE........2 TRADITIONAL BIRTH ATTENDANT......3 REL/NEIGHBOR.....4 OTHER_____5 (specify) NO ONE..........6
408 Did you ever feed (NAME) at the breast?	YES............ 1 NO............. 2 (SKIP TO 414) <┘	YES............ 1 NO............. 2 (SKIP TO 414) <┘	YES............ 1 NO............. 2 (SKIP TO 414) <┘

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409 How many days after birth did you begin feeding (NAME) at the breast?	SAME DAY.........1 NEXT DAY.........2 TWO DAYS AFTER...3 THREE + DAYS.....4	SAME DAY.........1 NEXT DAY.........2 TWO DAYS AFTER...3 THREE + DAYS.....4	SAME DAY.........1 NEXT DAY.........2 TWO DAYS AFTER...3 THREE + DAYS.....4
410 Was the colostrum (the first milk produced) given to (NAME) or was it thrown away?	FED TO BABY......1 (SKIP TO 412) THROWN AWAY......2	FED TO BABY......1 (SKIP TO 413) THROWN AWAY......2	FED TO BABY......1 (SKIP TO 413) THROWN AWAY......2
411 Why did you throw it away?	MILK BAD FOR BABY...........1 MILK YELLOW......2 BABY REFUSED.....3 HABIT...........4	MILK BAD FOR BABY...........1 MILK YELLOW......2 BABY REFUSED.....3 HABIT...........4	MILK BAD FOR BABY...........1 MILK YELLOW......2 BABY REFUSED.....3 HABIT...........4
412 Are you still breastfeeding (NAME)? IF DEAD, CIRCLE '3'.	YES.............1 (SKIP TO 415) NO..............2 CHILD DEAD 3		
413 At what age did you totally stop breastfeeding (NAME)?	MONTHS.... ☐☐ AT DEATH.......96 (SKIP TO 415)<	MONTHS.... ☐☐ AT DEATH.......96 (SKIP TO 415)<	MONTHS.... ☐☐ AT DEATH.......96 (SKIP TO 415)<

414
What is the main reason you
(never breastfed/stopped
breastfeeding) (NAME)?
	NO MILK.........01
	INSUFFICNT MILK.02
	NIPPLE INJURED..03
	MOTHER ILL......04
	MOTHER BUSY.....05
	OTHER MILK/FOOD
	 BTR FOR BABY...06
	BABY ILL........07
	BABY REFUSED....08
	OTHER_____.09
	    (specify)
	BECAME PREGNANT.10
	BABY DIED RIGHT
	 AFTER BIRTH....11
	(SKIP TO 420)<
		NO MILK.........01
		INSUFFICNT MILK.02
		NIPPLE INJURED..03
		MOTHER ILL......04
		MOTHER BUSY.....05
		OTHER MILK/FOOD
		 BTR FOR BABY...06
		BABY ILL........07
		BABY REFUSED....08
		OTHER_____.09
		    (specify)
		BECAME PREGNANT.10
		BABY DIED RIGHT
		 AFTER BIRTH....11
		(SKIP TO 420)<
			NO MILK.........01
			INSUFFICNT MILK.02
			NIPPLE INJURED..03
			MOTHER ILL......04
			MOTHER BUSY.....05
			OTHER MILK/FOOD
			 BTR FOR BABY...06
			BABY ILL........07
			BABY REFUSED....08
			OTHER_____.09
			    (specify)
			BECAME PREGNANT.10
			BABY DIED RIGHT
			 AFTER BIRTH....11
			(SKIP TO 420)<

161

		MONTHS			MONTHS			MONTHS

415
At what age did you begin to give the following foods to (NAME)? READ OUT CATEGORIES.
  Powdered milk: half cream
  Powdered milk: full cream
  Cow/goat milk
  Cungee
  Eggs
  Mashed potatoes/cereal
  Fruit/juice/soup

00 IF GIVEN IN FIRST MONTH
96 IF NEVER GIVEN
98 IF DK

Col 1	Col 2	Col 3
HALF CREAM ☐☐	HALF CREAM ☐☐	HALF CREAM ☐☐
FULL CREAM ☐☐	FULL CREAM ☐☐	FULL CREAM ☐☐
COW MILK ☐☐	COW MILK ☐☐	COW MILK ☐☐
CUNGEE ☐☐	CUNGEE ☐☐	CUNGEE ☐☐
EGGS ☐☐	EGGS ☐☐	EGGS ☐☐
POTATOES ☐☐	POTATOES ☐☐	POTATOES ☐☐
FRUIT ☐☐	FRUIT ☐☐	FRUIT ☐☐

416
At what age did you start at least one food on a daily basis?

MONTHS ☐☐   MONTHS ☐☐   MONTHS ☐☐

417
CHECK 416:

6 MONTHS OR LESS ☐ (SKIP TO 419)
7 MONTHS OR MORE ☐

6 MONTHS OR LESS ☐ (SKIP TO 419)
7 MONTHS OR MORE ☐

6 MONTHS OR LESS ☐ (SKIP TO 419)
7 MONTHS OR MORE ☐

418
Why did you wait so long to begin daily supplemental feeding of (NAME)?

_____
_____
_____

419
When you began daily supplemental feeding of (NAME), did you continue full breastfeeding, did you reduce; or did you stop completely?

Col 1	Col 2	Col 3
CONTINUED FULL...1	CONTINUED FULL...1	CONTINUED FULL...1
REDUCED.........2	REDUCED.........2	REDUCED.........2
STOPPED.........3	STOPPED.........3	STOPPED.........3
NEVER B'FED......4	NEVER B'FED......4	NEVER B'FED......4

420
How many months after the birth of (NAME) did your period return?

MONTHS.... ☐☐
NOT RETURNED...96

MONTHS.... ☐☐
NEVER RETURNED..96

MONTHS.... ☐☐
NEVER RETURNED..96

421
Have you resumed sexual relations since the birth of (NAME)?

YES (OR PREG)...1
NO............. 2
(GO TO NEXT COL)

422
How many months after the birth of (NAME) did you resume sexual relations?

MONTHS.... ☐☐
(GO BACK TO P. 24 ASK 403 NEXT BIRTH)

MONTHS.... ☐☐
(GO BACK TO P. 24 ASK 403 NEXT BIRTH)

MONTHS.... ☐☐
(ALL GO TO 423)

162

423 FROM PAGE 10, RECORD THE NAMES OF ALL BIRTHS SINCE JAN. 1982 IN THE FOLLOWING TABLE.
    FOR EACH BIRTH, CHECK IF ALIVE OR DEAD, AND MARK THE APPROPRIATE BOX.

	LAST BIRTH	NEXT-TO-LAST-BIRTH	SECOND-TO-LAST-BIRTH
	(name)	(name)	(name)
ASK QUESTIONS 424-434 FOR ALL SURVIVING BIRTHS	ALIVE ☐ DEAD ☐	ALIVE ☐ DEAD ☐	ALIVE ☐ DEAD ☐

(GO TO 453)

| 424 Do you have a clinic card, a child growth card or any other document showing what immunizations (NAME) was given? | YES, CARD SEEN.............1
YES, NOT SEEN..............2
  (SKIP TO 426)<—
NO CARD....................3 | YES, CARD SEEN.............1
YES, NOT SEEN..............2
  (SKIP TO 426)<—
NO CARD....................3 | YES, CARD SEEN.............1
YES, NOT SEEN..............2
  (SKIP TO 426)<—
NO CARD....................3 |

425
RECORD THE DATES OF INJECTIONS FROM THE CARD. CIRCLE "1" IF NOT GIVEN.

	NOT GVN	YEAR	MON	DAY		NOT GVN	YEAR	MON	DAY		NOT GVN	YEAR	MON	DAY
BCG	BCG 1				BCG	BCG 1				BCG	BCG 1			
TRIPLE 1	TR 1 1				TR 1 1					TR 1 1				
POLIO 1	PL 1 1				PL 1 1					PL 1 1				
TRIPLE 2	TR 2 1				TR 2 1					TR 2 1				
POLIO 2	PL 2 1				PL 2 1					PL 2 1				
TRIPLE 3	TR 3 1				TR 3 1					TR 3 1				
POLIO 3	PL 3 1				PL 3 1					PL 3 1				
MEASLES	MS 1				MS 1					MS 1				

(ALL GO TO 430)   (ALL GO TO 430)   (ALL GO TO 430)

| 426 Has (NAME) ever had an immunization to prevent him/her from getting diseases? | YES........................1
NO..........................2
  (SKIP TO 430)<—
DK..........................8 | YES........................1
NO..........................2
  (SKIP TO 430)<—
DK..........................8 | YES........................1
NO..........................2
  (SKIP TO 430)<—
DK..........................8 |

427
Please tell me if (NAME) has had any of the following injections:

		YES	NO		YES	NO		YES	NO
BCG	BCG	1	2	BCG	1	2	BCG	1	2
TRIPLE 1	TRIPLE 1	1	2	TRIPLE 1	1	2	TRIPLE 1	1	2
POLIO 1	POLIO 1	1	2	POLIO 1	1	2	POLIO 1	1	2
TRIPLE 2	TRIPLE 2	1	2	TRIPLE 2	1	2	TRIPLE 2	1	2
POLIO 2	POLIO 2	1	2	POLIO 2	1	2	POLIO 2	1	2
TRIPLE 3	TRIPLE 3	1	2	TRIPLE 3	1	2	TRIPLE 3	1	2
POLIO 3	POLIO 3	1	2	POLIO 3	1	2	POLIO 3	1	2

163

428 At what age was (NAME) given the last of these immuni-zations?	MONTHS.... ☐☐	MONTHS.... ☐☐	MONTHS.... ☐☐
429 Was (NAME) given a measles vaccine?	YES.............1 NO.............2	YES.............1 NO.............2	YES.............1 NO.............2
430 Has (NAME) had diarrhea in the last 24 hours?	YES............ 1 (SKIP TO 432)<⌐ NO.............2	YES............ 1 (SKIP TO 432)<⌐ NO.............2	YES............ 1 (SKIP TO 432)<⌐ NO.............2
431 Has (NAME) had diarrhea in the last two weeks?	YES............ 1 NO............. 2⌐ (GO TO NEXT COL)<◁ DK.............8⌐	YES............ 1 NO............. 2⌐ (GO TO NEXT COL)<◁ DK.............8⌐	YES............ 1 NO............. 2⌐ (GO TO 435)<——— DK.............8⌐
432 Did you take (NAME) to a government hospital or clinic, to a Western doctor, or to an Ayurvetic doctor to treat the diarrhea (the last time)? IF YES: Where did you take him/her?	YES, GOVT HOSP/CLIN..1 YES, WESTERN DR......2 YES, AYURVETIC DR....3 NO, NOT TAKEN.......9	YES, GOVT HOSP/CLIN..1 YES, WESTERN DR......2 YES, AYURVETIC DR....3 NO, NOT TAKEN.......9	YES, GOVT HOSP/CLIN..1 YES, WESTERN DR......2 YES, AYURVETIC DR....3 NO, NOT TAKEN.......9
433 Was (NAME) given any packet of Jeevanee or UNICEF salts to treat the diarrhea (the last time)?	YES.............1 NO............. 2 DK.............8	YES.............1 NO............. 2 DK.............8	YES.............1 NO............. 2 DK.............8
434 Was there anything (else) you or somebody did to treat the diarrhea? IF YES: What was done? CIRCLE CODE 1 FOR ALL MENTIONED.	HOME SUGAR/SALT/ WATER SOLUTION..1 TABLETS/INJEC- TIONS,SYRUPS....1 INCREASE FLUIDS..1 INCREASE FOODS...1 GIVE CUNJEE......1 DECREASE FLUIDS..1 DECREASE FOODS...1 OTHER_____.1 (specify) NOTHING..........1 (ALL GO TO NEXT COL)	HOME SUGAR/SALT/ WATER SOLUTION..1 TABLETS/INJEC- TIONS,SYRUPS....1 INCREASE FLUIDS..1 INCREASE FOODS...1 GIVE CUNJEE......1 DECREASE FLUIDS..1 DECREASE FOODS...1 OTHER_____.1 (specify) NOTHING..........1 (ALL GO TO NEXT COL)	HOME SUGAR/SALT/ WATER SOLUTION..1 TABLETS/INJEC- TIONS,SYRUPS....1 INCREASE FLUIDS..1 INCREASE FOODS...1 GIVE CUNJEE......1 DECREASE FLUIDS..1 DECREASE FOODS...1 OTHER_____.1 (specify) NOTHING..........1 (ALL GO TO 435)

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
435	CHECK 433: "1" MARKED FOR ANY BIRTH? IF 433 IS EMPTY, MARK "NO". NO ☐ YES ☐		——>439
436	Have you ever heard of JEEVANEE or UNICEF Salts which you can give to a child with diarrhea?	JEEVANEE...................1 UNICEF.....................2 BOTH.......................3 NEITHER....................4	>438
437	INTERVIEWER: SHOW JEEVANEE AND UNICEF PACKETS. ASK: Have you ever seen either or both packets before?	JEEVANEE...................1 UNICEF.....................2 BOTH.......................3 NEITHER....................4——>446	
438	Have you ever given either JEEVANEE or UNICEF Salts to any of your children?	YES........................1 NO.........................2——>446	
439	Where did you obtain the packet (the last time)?	GOVT HOSP/CLIN............1 MOH OFFICE................2 PHARMACY..................3 PRIV. DOCTOR.............4 OTHER_____.5 (specify)	
440	How much did one packet cost? IF FREE, ENTER RS.00.00.	COST....Rs. ☐☐ ☐☐ DK...................9998	
441	I now have some questions about how to prepare Jeevanee.		
442	Please describe the type of water used to mix Jeevanee.	PLAIN WATER..............1 BOILED AND COOLED........2 OTHER/DK.................3	
443	Describe how the powder is mixed.	1 PACKET IN 1 LITER OF WATER...................1 OTHER/DK.................2——>445	
444	How do you measure the water?	1 LITER VESSEL...........1 2.5 BOTTLES SODA WATER...2 1 1/3 BOTTLES ARRACK.....3 5 TEA CUPS...............4 OTHER/DK.................5	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
445	How long can you keep the solution once it has been mixed?	24 HOURS OR LESS.........1 OTHER/DK.................2	
446	CHECK 412 FOR LAST BIRTH: LAST CHILD ☐ ALL ☐ STILL BREAST- OTHERS FED		→501
447	How many times did you breastfeed (NAME OF LAST BIRTH) last night, between sundown and sunrise?	NUMBER OF TIMES....☐☐ CHILD SLEEPS AT BREAST.96	
448	How many times did you breastfeed (NAME OF LAST BIRTH) yesterday during the daylight hours?	NUMBER OF TIMES....☐☐ AS OFTEN AS WANTED.....96	
449	At any time yesterday or last night, was (NAME OF LAST BIRTH) given any of the following? READ OUT CODING CATEGORIES PLAIN WATER? JUICE? POWDERED MILK? COW'S OR GOAT'S MILK? ANY OTHER LIQUID? ANY SOLID OR MUSHY FOOD?	YES NO PLAIN WATER.........1 2 JUICE...............1 2 POWDERED MILK.......1 2 COW OR GOAT MILK....1 2 ANY OTHER LIQUID....1 2 SOLID OR MUSHY FOOD.1 2	
450	CHECK 449: NO FOOD OR LIQUIDS GIVEN (ALL "2"S CIRCLED) ☐ WAS GIVEN FOOD OR LIQUIDS (AT LEAST ONE "1" CIRCLED) ☐		→452
451	Were any of these given in a bottle with a nipple?	YES.....................1 NO......................2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
452	CHECK 430 AND 431 FOR LAST BIRTH: NO DIARRHEA IN LAST 2 WEEKS ☐ HAD DIARRHEA IN LAST 2 WEEKS ☐		→501
453	When (NAME) had diarrhea recently, did you continue (full) breastfeeding, did you reduce, or did you stop completely?	CONTINUED FULL ....1 REDUCED.................2 STOPPED COMPLETELY......3	→501
454	Why did you (reduce/stop)?		

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
501	Are you currently married, or are you widowed, divorced, or separated?	MARRIED.................1 WIDOWED.................2 DIVORCED................3 SEPARATED...............4	>502
501A	Are you and your husband currently living together?	YES.....................1 NO......................2	
502	Have you been married once, or more than once?	ONCE....................1 MORE THAN ONCE..........2	
503	In what month and year did you start living with your (first) husband as husband and wife?	MONTH.............. ☐☐ DK MONTH...............98 YEAR............... ☐☐☐ DK YEAR................98	>505
504	How old were you when you started living with him?	AGE............... ☐☐	
505	Where did you live before you began living with your husband--in metropolitan Colombo, another urban area, in a village, or on an estate?	COLOMBO METRO (ZONE 1)..1 OTHER URBAN.............2 VILLAGE.................3 ESTATE.................4	
506	Did your (first) husband live in the same place before marriage, or in a different urban area, village, or estate?	SAME U.A./VILLAGE/EST...1 DIFFERENT URBAN AREA....2 DIFFERENT VILLAGE.......3 DIFFERENT ESTATE........4	>508
507	How many miles was his place from yours?	MILES........... ☐☐☐	
508	Are your mother and father still alive?	YES NO DK WOMAN'S MOTHER..1 2 8 WOMAN'S FATHER..1 2 8	

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO

509 | Are your first husband's parents still alive?

	YES	NO	DK
HUSB'S MOTHER	1	2	8
HUSB'S FATHER	1	2	8

510 | CHECK 508 AND 509:

AT LEAST ONE PARENT NOT LIVING (NOT ALL 1'S CIRCLED) ☐

ALL PARENTS LIVING (ALL 1'S CIRCLED) ☐ ──────→514

511 | FOR EACH "1" CIRCLED IN 508 AND 509, CIRCLE A "1" FOR THE CORRESPONDING PARENT IN 512. THEN ASK 512 FOR THOSE PARENTS NOT HAVING A "1" CIRCLED.

512 | Was (MENTION PARENTS NOT ALIVE NOW) alive at the time you began living with your (first) husband?

	YES	NO	DK
WOMAN'S MOTHER	1	2	8
WOMAN'S FATHER	1	2	8
HUSB'S MOTHER	1	2	8
HUSB'S FATHER	1	2	8

513 | CHECK 512:

SOME PARENT ALIVE AT MARRIAGE ☐

NO PARENT ALIVE AT MARRIAGE ☐ ──────→517

514 | At the time you began living with your (first) husband, did you and he live with any of these parents for at least 6 months?

YES.....................1
NO......................2──→516

515 | For about how many years did you live with the parents at that time?

YES............ ☐☐
UP TO THE PRESENT......96──→517

516 | Are you now living either with your parents or with your husband's parents?

YES.....................1
NO......................2

517 | CHECK 501:

CURRENTLY MARRIED ☐

OTHER ☐ ──────→601

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
518	Have you had sexual intercourse in the last four weeks?	YES.....................1 NO......................2 —->520	
519	How many times?	TIMES............. ☐☐	
520	When was the last time you had sexual intercourse?	DAYS AGO........1 ☐☐ WEEKS AGO.......2 ☐☐ MONTHS AGO......3 ☐☐ YEARS AGO.......4 ☐☐ BEFORE LAST BIRTH.....995——->525	

521	CHECK 223:
	  NOT PREGNANT/ PREGNANT
	  NOT SURE ☐ ☐
			->525

522	CHECK 315: CURRENTLY
	  NOT USING CONTRACEPTION USING
	         ☐ ☐
			->525

523	If you became pregnant in the next few weeks, would you feel happy, unhappy, or would it not matter very much?	HAPPY....................1——->525 UNHAPPY..................2 WOULD NOT MATTER........3	
524	What is the main reason that you are not using a method to avoid pregnancy?	LACK OF KNOWLEDGE OR LACK OF SOURCE.....01 OPPOSED TO FP..........02 HUSBAND DISAPPROVES....03 OTHER PEOPLE DISAPPR...04 INFREQUENT SEX.........05 POSTPARTUM/BF..........06 MENOPAUSAL/SUBFECUND...07 HEALTH CONCERNS........08 ACCESS/AVAILABILITY....09 COSTS TOO MUCH.........10 RELIGION...............11 INCONVENIENT TO USE....12 OTHER _____ 13 (specify) DK.....................98	
525	PRESENCE OF OTHERS AT THIS POINT:	YES NO CHILDREN UNDER 10..1 2 HUSBAND.............1 2 OTHER MALES........1 2 OTHER FEMALES......1 2	

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
601	CHECK 319: WOMAN STERILIZED ☐ HUSBAND STERILIZED ☐ OTHER ☐ (SKIP TO 609) (SKIP TO 610)		
602	CHECK 501: CURRENTLY MARRIED ☐ OTHER ☐		——>612
603	Now I have some questions about the future. CHECK 223: ☐ NOT PREGNANT/NOT SURE Would you like to have a (another) child or would you prefer not to have any (any more) children? ☐ PREGNANT After the child you are expecting, would you like to have another child or would you prefer not to have any more children?	HAVE A/ANOTHER CHILD...................1——>606 NO (MORE) CHILDREN......2 UNDECIDED OR DK.........8——>605	
604	Would you say that you definitely do not want to have (more) children, or are you not sure?	DEFINITELY NO MORE......1 NOT SURE................2	——>612
605	Are you more inclined toward having a (another) child, or toward not having a (another) child?	HAVE ANOTHER............1——>607 NOT HAVE ANOTHER........2 NOT SURE................8——>612	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
606	Would you say that you definitely want a (another) child, or are you not sure?	DEFINITELY MORE.........1 NOT SURE...............2	
607	How long would you like to wait from now before the birth of a (another) child?	MONTHS..........1 ☐☐→612 YEARS...........2 ☐☐→612 DON'T KNOW...........998	
608	How old would your youngest child be? IF NO LIVING CHILDREN, CIRCLE '96'.	YEARS..............☐☐ NO LIVING CHILDREN.....96 DK....................98	>612
609	Was your last child born by caesarean section?	YES.....................1 NO......................2	
610	Do you regret that you (your husband) had the operation not to have any more children?	YES.....................1 NO......................2——→612	
611	Would you like to have another child or would you prefer not to have any more children?	HAVE ANOTHER............1 NO MORE.................2 DK......................8	
612	CHECK 202 and 204 AND MARK CORRECT BOX. RECORD SINGLE NUMBER, RANGE or OTHER ANSWER. ☐ HAS NO LIVING CHILDREN: If you could choose exactly the number of children to have in your whole life, how many would that be? ☐ HAS LIVING CHILDREN: If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?	NUMBER............☐☐ RANGE: BETWEEN ☐☐ AND ☐☐ OTHER ANSWER: _____ (specify)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
701	Now I have some questions about your (most recent) husband, his background, and his work.		
702	Did your husband ever attend school?	YES.....................1 NO......................2——>706	
703	What was the highest grade in school he completed? CIRCLE BOTH LEVEL AND GRADE.	PRIMARY....1 00 01 02 03 04 05——>705 SECONDARY..2 06 07 08 09 HIGHER.....3 10 11 12 13 DK.......998————————————>706	
704	What was the highest exam he passed?	TECHNICAL...............1 G.C.E. O LEVEL..........2 G.C.E. A LEVEL..........3 UNIV./PROFESSIONAL......4 OTHER_____5 (specify) NONE....................6	
705	CHECK 703: PRIMARY ☐ SECONDARY OR HIGHER ☐		——>707
706	Can (could) he read a letter or newspaper easily, with difficulty, or not at all?	EASILY..................1 WITH DIFFICULTY.........2 NOT AT ALL..............3	

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO

707	What kind of work does (did) your husband mainly do?	FARMING..............01——>709
		FISHING/HUNTING........02
		ESTATE WORKER..........03
		UNSKILLED LABORER/
		  OWN ACCOUNT..........04
		UNSKILLED LABORER/
		  PRVT/GOVT EMPLOYE....05
		SKILLED LABORER/
		  OWN ACCOUNT..........06
		SKILLED LABORER/
		  PRVT/GOVT EMPLOYE....07
		PETTY TRADER/HAWKER....08
		COTTAGE INDUSTRY.......09
		DOMESTIC WORKER........10
		TEACHER: PRIM/SECOND...11
		TEACHER: UNIV/OTHER....12
		NURSE/HEALTH WORKER....13
		TECHNICAL/MGRL/
		  PROFESSIONAL.........14
		OTHER_____.15
		   (specify)
		DOES NOT KNOW.........98	

708	Does (did) he earn a regular wage or salary?	YES.....................1 NO......................2 }>711 DOES NOT KNOW...........8	
709	Does (did) your husband work mainly on his or his family's or on someone else's land?	HIS/FAMILY LAND.........1 SOMEONE ELSE'S LAND.....2——>710	
709A	Does (did) he hire others to work the land for him?	YES.....................1 NO......................2——>711	
710	Does (did) he work mainly for money or does (did) he work for a share of the crops?	MONEY...................1 SHARE OF CROPS..........2	
711	Now I have some questions about your work.		
712	Before you married your (first) husband, did you ever work regularly to earn money, other than on a farm or in a business run by your family?	YES.....................1 NO......................2——>714	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
713	When you were earning money then, did you turn most of it over to your family or did you keep most of it for yourself?	TURNED OVER TO FAMILY...1 KEPT FOR SELF..........2	
714	Since you were first married, have you ever worked regularly to earn money other than on a farm or in a business run by your family?	YES....................1 NO......................2——>716	
715	Are you now working to earn money, other than on a farm or in a business run by your family?	YES....................1——>717 NO......................2	
716	Are you now working to earn money on a farm or in a business run by your family?	YES....................1 NO......................2——>801	

717	What kind of work do you mainly do?	FARMING................01
		FISHING/HUNTING........02
		ESTATE WORKER..........03
		UNSKILLED LABORER/
		   OWN ACCOUNT..........04
		UNSKILLED LABORER/
		   PRVT/GOVT EMPLOYE....05
		SKILLED LABORER/
		   OWN ACCOUNT..........06
		SKILLED LABORER/
		   PRVT/GOVT EMPLOYE....07
		PETTY TRADER/HAWKER....08
		COTTAGE INDUSTRY.......09
		DOMESTIC WORKER........10
		TEACHER: PRIM/SECOND...11
		TEACHER: UNIV/OTHER....12
		NURSE/HEALTH WORKER....13
		TECHNICAL/MGRL/
		   PROFESSIONAL.........14
		OTHER_____.15
		    (specify)
		DOES NOT KNOW..........98	

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
801	Has your household experienced any food shortages in the past 6 months?	YES......................1 NO........................2	→803
802	Has your household experienced any food shortages in the past 2 weeks?	YES......................1 NO........................2	
803	INTERVIEWER: DO MEMBERS OF THE HOUSEHOLD APPEAR WEALTHY ENOUGH TO OWN A CHANGE OF CLOTHES?	YES......................1 NO........................2	
804	RECORD THE TIME.	HOUR.............. MINUTES...........	

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┌─────────────────────────────────────────┐
│         SECTION 9:   LENGTH AND WEIGHT.   │
└─────────────────────────────────────────┘
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INTERVIEWER: FROM PAGE 10, RECORD NAMES AND LINE NUMBERS OF ALL
               LIVING CHILDREN BORN SINCE JANUARY 1, 1984.

               START WITH THE YOUNGEST CHILD.
               RECORD DATE OF BIRTH IN 901 AND CHECK AGE IN 902.
               THEN GO TO TEAR-OFF SHEET.

	1 YOUNGEST LIVING CHILD	2 NEXT-TO-YOUNGEST LIVING CHILD	3 SECOND-TO-YOUNGEST LIVING CHILD
	☐☐		
	(name and line #)	(name)	(name)
901 DATE OF BIRTH	MONTH... ☐☐ YEAR.... ☐☐	MONTH... ☐☐ YEAR.... ☐☐	MONTH... ☐☐ YEAR.... ☐☐
902 CHECK AGE: 3-36 MONTHS?	YES ☐ NO ☐ ───>	YES ☐ NO ☐ ───>	YES ☐ NO ☐ v GO TO NEXT PAGE.
903 LENGTH (in cms)	☐☐.☐	☐☐.☐	☐☐.☐
904 WEIGHT (in kg)	☐☐.☐	☐☐.☐	☐☐.☐
905 STATE REASON IF UNABLE TO RECORD			

906
NAME OF
MEASURER: _____ ☐☐   NAME OF
                                  ASSISTANT: _____ ☐☐

INTERVIEWER'S OBSERVATIONS.
(To be filled in after completing interview.)

Person Interviewed: _____

_____

_____

Specific Questions: _____

_____

_____

Other Aspects: _____

_____

Name of Interviewer: _____   Date: _____

SUPERVISOR'S OBSERVATIONS.

_____

_____

_____

_____

Name of Supervisor: _____   Date: _____

EDITOR'S OBSERVATIONS.

_____

_____

_____

_____

Name of Field Editor:_____   Date: _____

Name of Keyer: _____   Date: _____

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┌─────────────────────────────────────────┐
│     TEAR-OFF MEASUREMENT SHEET.           │
└─────────────────────────────────────────┘
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INTERVIEWER: FILL IN IDENTIFICATION INFORMATION AND 901-T.
               GIVE THIS TEAR-OFF SHEET TO MEASURERS.

MEASURER: COMPLETE 903-T, 904-T, 905-T, AND 906-T.
               GIVE THIS TEAR-OFF SHEET TO TEAM SUPERVISOR.

IDENTIFICATION

SURVEY BLOCK NUMBER_____
HOUSING UNIT NUMBER_____
HOUSEHOLD NUMBER_____
LINE NUMBER OF ELIGIBLE WOMAN_____

	1 YOUNGEST LIVING CHILD	2 NEXT-TO-YOUNGEST LIVING CHILD	3 SECOND-TO-YOUNGEST LIVING CHILD
	(name)	(name)	(name)
901-T DATE OF BIRTH	MONTH...⬚⬚ YEAR....⬚⬚	MONTH...⬚⬚ YEAR....⬚⬚	MONTH...⬚⬚ YEAR....⬚⬚
903-T LENGTH (in cms)	⬚⬚.⬚	⬚⬚.⬚	⬚⬚.⬚
904-T WEIGHT (in kg)	⬚⬚.⬚	⬚⬚.⬚	⬚⬚.⬚
905-T STATE REASON IF UNABLE TO RECORD			

906-T
NAME OF
MEASURER: _____ ⬚⬚   NAME OF
                              ASSISTANT: _____ ⬚⬚

INTERVIEWERS: EACH EVENING, RECORD THE INFORMATION FROM 903-T, 904-T,
              905-T, AND 906-T INTO 903, 904, 905, AND 906.

41-T

SURVEY STAFF

National Director   - Mr. R.B.M. Korale
Additional Director - Mr.A.A.D.C.Yasasiri
Project Manager   - Mr. K.H.W. Gaminiratne
Assistant Manager   - Mrs. Soma De Silva
Survey Team Members - Miss. Padmini De Silva
                     - Mrs. Swarna Ukwatta

Field Co-Ordinators
 Miss. Padmini De Silva
 Mrs. S. Ukwatte
 Mr. C.N.Galahitiyawa
 Mr. A. Kahanda

Team Supervisors

1. Mr. W.A.L. Fernando
2. Mr. T. Thanabalasingham
3. Mr. A.D.H. Gunatileka
4. Mr. D.P. Rajapakse
5. Mr. H.A.B. Rodrigo
6. Mrs. A.B.S. Fernando
7. Mrs. Daya Wijetunga
8. Mrs. Dharma Attanayaka
9. Mrs. C.K. Kahande
10. Miss. Soma Athukorala
11. Mr. D.S. Hemachandra
12. Mr. S. Siththampalam
13. Mr. K. Mahendralingam
14. Mr. N. Sivakumara
15. Mr. T.Wijayasingham
16. Mr. S. Ponnadure
17. Mr. N. Sivakumara

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3. Mr. G.D.A.C. Rathnasekara
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14. Mr. P.G.Gunasingha
15. Mr. K.G.R.Annanda
16. Mr. K.A.Karunatilaka
17. Mr. T.P.Kodituwakku

Interviewers
1. Mrs. K. Kannangara
2. Mrs. K.S.T.De Silva
3. Mrs. Sriyawathie Weerasinghe
4. Mrs. D.M.G. Ariyawathie
5. Miss. Lalitha Ramawickrama
6. Mrs. S. Jayasekera
7. Mrs. E.K.N. Fernando
8. Mrs. K.S. Tilakeratne
9. Mrs. W.S.J. Botejue
10. Mrs. Wasanthie Jayanetti
11. Mrs. P.D. Kuruppu
12. Miss G.W.N.D.De Silva
13. Miss G.A. Mala Pushpakanthie
14. Mrs. I.K. Disna Malkanthie
15. Mrs. H.M. Nandawathie
16. Mrs. A.J.A.G. Sakalasuriya
17. Miss. Chandani Hettiarachchi
18. Mrs. Sumithra Senanayake
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22. Mrs. H.M. Abayaratne
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29. Miss. Hema Rodrigo
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32. Mrs. M.P.R. Sirima Menike
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34. Miss. R.A. Rohini
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60. Miss. V. Patjmawathi
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62. Miss. M.A. Sitthy Faleela
63. Mrs. P. Thirunawakarasu

Measurers
1. Mr. M.H. Gunathilleka
2. Mr. M.G. Dharamadasa
3. Mr. E.A.G.S. Perera
4. Mr. D.L.R. Wijetunga
5. Mr. D.L.Edirisinghe
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18. Mr. D.Y. Poopalapillai
19. Mr. M.S.M.Kaleem
20. Mr. D.L.Senathirajah
21. Mr. S. Sinnarajah

Data Processing Staff

Editing and Coding
1. Miss. Nirmala Denawake
2. Miss. Rasika Wijesinghe
3. Mrs. Anne Rupasinghe
4. Miss. M.A.M.Hemalatha
5. Mrs. Sujatha Jayasuriya
6. Mrs. E.K.N.Fernando

Data Entry
1. Miss. Senani Gunawardena
2. Mrs. S. Jayasekara
3. Mrs. P.D. Kuruppu
4. Miss Sharmane Fernando

Secretarial Assistants
1. Mrs. Sujatha Jayasuriya
2. Miss. M.A.M. Hemalatha
3. Mrs. P.E.Perera

Statistical Assistants
1. Mr. A.M.U.K. Alahakoon
2. Mr. H.d.Amaradasa
3. Mr. S.D.Rajapaksa

Administrative Financial Management Assistants
1. Mr.P.Gamalath   - Accountant
2. Mr. D.K.J.J. Perera - Officer in Charge

Supporting Services
1. Mrs. E.M.F.Linus
2. Mrs. I.Ekanayake
3. Mrs. G.Kusumawathie
4. Mr. B.W.T. Hemapala
5. Mr. N.G.J.Perera
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7. Mr. A.H.M.Mohideen