UZBEKISTAN DEMOGRAPHIC AND HEALTH SURVEY 1996

SUMMARY REPORT

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Tashkent, Uzbekistan

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Photographs: The Futures Group

This report summarizes the findings of the 1996 Uzbekistan Demographic and Health Survey (UDHS) conducted by the Institute of Obstetrics and Gynecology, Ministry of Health of Uzbekistan. Macro International Inc. provided technical assistance. Funding was provided by the U.S. Agency for International Development (USAID).

The UDHS is part of the worldwide Demographic and Health Surveys (DHS) program, which is designed to collect data on fertility, family planning, and maternal and child health. Additional information about the Uzbekistan survey may be obtained from the Institute of Obstetrics and Gynecology, Abdullaev Ave. 132A (Telephone: (73712) 637-830; Fax: (73712) 638-483). Additional information about the DHS program may be obtained by writing to: DHS, Macro International Inc., 11785 Beltsville Drive, Suite 300, Calverton, MD 20705 (Telephone: 301-572-0200; Fax: 301-572-0999; E-mail: reports@macroint.com; Internet: http://www.macroint.com/dhs/).
Background

The 1996 Uzbekistan Demographic and Health Survey (UDHS) is a nationally representative survey of 4,415 women age 15-49. Fieldwork was conducted from June to October 1996. The UDHS was sponsored by the Ministry of Health (MOH), and was funded by the U.S. Agency for International Development. The Institute of Obstetrics and Gynecology implemented the survey with technical assistance from the Demographic and Health Surveys (DHS) program.

The purpose of the UDHS was to provide data to the MOH on factors which determine the health status of women and children such as fertility, contraception, induced abortion, maternal care, infant mortality, and nutritional status.

Some statistics presented in this report are currently available to the MOH from other sources. For example, the MOH collects and regularly publishes information on fertility, contraception, induced abortion and infant mortality. However, the survey presents information on these indices in a manner which is not currently available, i.e., by population subgroups such as those defined by age, marital duration, education, and ethnicity. Additionally, the survey provides statistics on some issues not previously available in Uzbekistan: for example, breastfeeding practices and anaemia status of women and children. When considered together, existing MOH data and the UDHS data provide a more complete picture of the health conditions in Uzbekistan than was previously available.
### Fertility

**Fertility levels and trends**

Survey results indicate a total fertility rate (TFR) for all of Uzbekistan of 3.3 children per woman. Fertility levels differ for different population groups. The TFR for women living in urban areas (2.7 children per woman) is substantially lower than for women living in rural areas (3.7). The TFR for Uzbeki women (3.5 children per woman) is higher than for women of other ethnic groups (2.5). Among the regions of Uzbekistan, the TFR is lowest in Tashkent City (2.3 children per woman).

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A woman in Uzbekistan will give birth to an average of 3.3 children during her reproductive years.
The UDHS data show that fertility has declined in Uzbekistan in recent years. For example, fertility among women 25-29 has fallen by one-third over the past 20 years. The declining trend in fertility can be seen by comparing the completed family size of women near the end of their childbearing years with the current TFR. Completed family size among women 45-49 is 4.6 children which is more than one child greater than the current TFR (3.3).

**The TFR for women living in urban areas (2.7 children per woman) is substantially lower than for women living in rural areas (3.7).**

**Birth Intervals and Fertility Preferences**

Overall, one-third of non-first births (30 percent) in Uzbekistan take place within 24 months of the previous birth. The median birth interval is 2.5 years.

The median age at which women in Uzbekistan begin childbearing has been holding steady over the past two decades at approximately 21.5 years. Most women have their first birth while in their early twenties, although about one-quarter of women give birth before age 20.

One-half of married women in Uzbekistan (51 percent) do not want to have more children, and a large majority of women (75 percent) want either to delay their next birth by at least two years (24 percent) or to stop childbearing altogether. These are the women who are potentially in need of some method of family planning.

**Figure 2**

**Trends in Age-specific Fertility Rates**

A large majority of women in Uzbekistan (75 percent) want to either delay their next birth (24 percent) or stop childbearing altogether.
Family Planning

The Ministry of Health of Uzbekistan incorporates family planning in a comprehensive program of maternal and child health services. The main objectives of the family planning component are to reduce adverse health outcomes resulting from inadequately spaced births and induced abortions.

Knowledge and Use of Contraception

Knowledge of contraceptive methods is high in Uzbekistan: 89 percent of women know of at least one method. High levels of knowledge are the norm for women of all ages, in all regions, at all educational levels, and among all ethnic groups. However, knowledge of sterilization is low; only 27 percent of women reported knowing of this method.

Overall, among currently married women, 56 percent report that they are currently using a contraceptive method. More than half (51 percent) are using a modern method of contraception and another 4 percent are using a traditional method.

Almost half of currently married women (46 percent) are using the IUD. Other modern methods of contraception account for only a small amount of use among currently married women: pills and condoms (2 percent each), and injectables and female sterilization (1 percent each).

Fifty-six percent of currently married women are using a contraceptive method.

Figure 3
Use of Specific Contraceptive Methods
(Currently Married Women 15-49)

Of the 56 percent of married women who are currently using a contraceptive method, 91 percent use modern methods.
Unmet need for family planning services

Women who want to space or stop their childbearing and who are not using contraception are considered to have an unmet need for family planning. Fourteen percent of married women in Uzbekistan have an unmet need for family planning services, 7 percent for spacing births and 7 percent for limiting births. Combined with the 56 percent of married women who are currently using contraception, the total demand for family planning comprises 69 percent of married women. While contraceptive prevalence is quite high, if all married women who say they want to space or limit their births were to use methods, contraceptive prevalence would increase from 56 to 69 percent of married women.
Induced Abortion

At the current age-specific rates of induced abortion, a woman in Uzbekistan will have, on average, less than one abortion (0.7) over her lifetime. The total abortion rate is higher in urban areas (1.0 abortions per woman) than in rural areas (0.5). The total abortion rate in Tashkent City is 1.3, which is two to three times higher than in other regions of Uzbekistan. Additionally, the total abortion rate is substantially lower among ethnic Uzbek women (0.5) than among women of other ethnic groups (1.0).

A woman in Uzbekistan will have an average of less than one abortion (0.7) over her lifetime.

Abortion rates based on data from both the UDHS and the Ministry of Health clearly show that recourse to the practice of induced abortion is declining in Uzbekistan. During a recent five-year period, abortion rates declined by 31 percent according to UDHS data and by 43 percent according to MOH data.

During a recent five-year period, the abortion rate in Uzbekistan declined by 31 percent

Figure 4
Total Induced Abortion Rate by Background Characteristics (Women 15-49)

The abortion rate in Tashkent City is two to three times higher than in other regions of Uzbekistan.
Infant and Child Mortality

For the five-year period before the survey (i.e., approximately mid-1992 to mid-1996), infant mortality in Uzbekistan is estimated at 49 infant deaths per 1,000 births. The estimates of neonatal and postneonatal mortality are 23 and 26 per 1,000, respectively.

For the five-year period preceding the survey (mid-1992 to mid-1996), infant mortality was estimated at 49 per 1,000 live births.

Over the period from 1986 to 1995, the MOH has reported a steady declining trend in the annual infant mortality rate from 46.3 to 26.0 per 1,000. The average of the annual rates for the 10-year period is 37 per 1,000. This corresponds to the UDHS rate for the same time period of 44 per 1,000.

The Ministry of Health annually publishes infant mortality rates based on a definition of live birth which differs from the international definition used in the UDHS survey. In the Ministry of Health system, a pregnancy terminating at less than 28 weeks of gestation (or weighing less than 1,000 grams or measuring less than 35 centimeters) that shows signs of life at birth such as breathing, but does not survive seven days, is classified as a late miscarriage. According to the international definition, a live birth is a birth which, after separation from the mother, breathes or shows any sign of life irrespective of the duration of the pregnancy.

Thus, some events classified as late miscarriages in the Ministry of Health system would be classified as live births and infant deaths in the UDHS survey. The definitional difference explains why the infant mortality estimates of the Ministry of Health are lower than the estimates derived from the survey by 16 percent.
**Maternal and Child Health**

**Antenatal and Delivery Care**

Virtually all births in Uzbekistan (94 percent) are delivered at health facilities: 94 percent in delivery hospitals and less than 1 percent in either general hospitals or FAPs (Doctor’s Assistant/Midwife Posts). Only 6 percent of births are delivered at home. Almost all births (98 percent) are delivered under the supervision of medically trained persons: 94 percent by a doctor and 4 percent by a nurse or midwife.

A high proportion of respondents (95 percent) receive antenatal care from professional health providers: the majority from a doctor (85 percent) and a significant proportion from a nurse or midwife (10 percent). The general pattern in Uzbekistan is that women seek antenatal care early and continue to receive care throughout their pregnancy. The median number of antenatal care visits reported by respondents is 8.

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**Figure 5**

Antenatal Care and Delivery Characteristics (Births in the Preceding 3 Years)

<table>
<thead>
<tr>
<th>ANTENATAL CARE</th>
<th>Percent</th>
</tr>
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<tbody>
<tr>
<td>Doctor</td>
<td>85.3</td>
</tr>
<tr>
<td>Nurse/Trained midwife</td>
<td>9.6</td>
</tr>
<tr>
<td>No one</td>
<td>5.0</td>
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</table>

<table>
<thead>
<tr>
<th>PLACE OF DELIVERY</th>
<th></th>
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<tbody>
<tr>
<td>Delivery hospital</td>
<td>93.7</td>
</tr>
<tr>
<td>Hospital</td>
<td>0.3</td>
</tr>
<tr>
<td>Doctor’s assistant/Midwife post</td>
<td>0.1</td>
</tr>
<tr>
<td>Respondent’s home</td>
<td>6.1</td>
</tr>
<tr>
<td>Other home</td>
<td>0.8</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>ASSISTANCE DURING DELIVERY</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Doctor</td>
<td>93.8</td>
</tr>
<tr>
<td>Nurse/Trained midwife</td>
<td>3.7</td>
</tr>
<tr>
<td>High</td>
<td>1.5</td>
</tr>
</tbody>
</table>

* A high proportion of women in Uzbekistan receive antenatal care and delivery assistance from a professional health provider.
Immunization

In Uzbekistan, the percentage of children 12-23 months of age who have received all the World Health Organization (WHO) recommended vaccinations is high (85 percent). BCG vaccination is usually given in delivery hospitals and is nearly universal (98 percent). Almost all children (100 percent) have received the first doses of polio and DPT/DT. Coverage for the second doses of polio and DPT/DT is also nearly universal (98 percent). The third doses of polio and DPT/DT have been received by more than 94 percent of children. A high proportion of children (92 percent) have received the measles vaccine.

In Uzbekistan, 85 percent of children 12-23 months of age have received all the World Health Organization (WHO) recommended vaccinations.

Figure 6
Vaccination Coverage Among Children Age 12-23 Months

Dropout rates are very low in Uzbekistan. The third doses of polio and DPT/DT have been received by more than 94 percent of children age 12-23 months.
Infant Feeding and Child Nutrition Status

Breastfeeding is almost universal in Uzbekistan; 96 percent of children born in the three years preceding the survey are breastfed. Overall, 19 percent of children are breastfed within an hour of delivery and 40 percent within 24 hours of delivery. The median duration of breastfeeding is lengthy (17 months). However, durations of exclusive breastfeeding, as recommended by WHO, are short (0.4 months).

In the UDHS, the height and weight of children under three years of age was measured. The results indicate that 31 percent of children under the age of three years are stunted (i.e., short for their age), a condition reflecting chronic malnutrition, and 12 percent are wasted (i.e., thin for their height), a condition reflecting acute malnutrition.

*Breastfeeding is almost universal in Uzbekistan; 96 percent of children are breastfed. However, durations of exclusive breastfeeding, as recommended by WHO, are short (0.4 months).*
Anemia

Testing of women and children for anemia was one of the major efforts of 1996 UDHS. The study involved hemoglobin testing for anemia using the Hemocue system.

Sixty percent of the women in Uzbekistan suffer from some degree of anemia. The great majority of these women have either mild (45 percent) or moderate anemia (14 percent). One percent have severe anemia.

Sixty-one percent of children under the age of three suffer from some degree of anemia. Twenty-six percent of children have moderate anemia, and 1 percent are severely anemic.

A relationship was observed between the prevalence of anemia among mothers and their children. Among children of mothers with moderate anemia, 3 percent have severe anemia and 38 percent have moderate anemia. The prevalence of moderate anemia among these children is more than twice as high as among children of nonanemic mothers.

Sixty-one percent of children under the age of three suffer from some degree of anemia. Twenty-six percent have moderate anemia. One percent of children are severely anemic.

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Figure 7
Percent Distribution of Hemoglobin Levels Among Women Age 15-49

The entire hemoglobin distribution for pregnant women is shifted downward, compared with the distribution for nonpregnant women (breastfeeding and non-breastfeeding).
Conclusions

Despite the declining fertility and high contraceptive knowledge and current use, a significant proportion of women in Uzbekistan have an unmet need for some method of family planning. These are women who want no more children or want to delay their next birth, but are not using any method of contraception. Among currently married women, 14 percent are in this category.

The practice of family planning in Uzbekistan places high reliance on a single method, the IUD, although the pill, condom and injectables are widely known. A stated goal of the family planning program is to improve the contraceptive method mix by encouraging greater use of short-term as well as permanent methods.

Many women in Uzbekistan decide to stop childbearing at a relatively young age—when they still have 20 or more years of potential childbearing ahead. For some of these women the most appropriate method of contraception may be a long-term method such as female sterilization. In the interest of providing a broad range of safe and effective methods, information about and access to sterilization should be increased so that individual women can make informed decisions about using this method.

One of the objectives of the family planning program is to reduce the number of inadequately spaced pregnancies. Currently, one-third of non-first births (30 percent) in Uzbekistan take place within 24 months of the previous birth. Therefore, birth spacing could improve by using short-term and long-term contraceptive methods.

The majority of users of modern methods of contraception in Uzbekistan obtain their method from the public sector, although the private sector has an increasing role in the delivery of family planning services.

Uzbekistan has a well-developed health system with an extensive infrastructure of facilities that provide maternal care services. This system includes special delivery hospitals, the obstetrics and gynecology departments of general hospitals, women's consulting centers, and doctor's assistant/midwife posts. There is an extensive network of the latter facilities throughout the rural areas.

As a result of this system, Uzbekistan has achieved success in providing antenatal and delivery care services throughout the country. UDHS data show that antenatal care is received early in pregnancy, and for most women, it is continued throughout pregnancy. Virtually all births (94 percent) are delivered at health facilities under the supervision of persons with medical training: 94 percent by a doctor and 4 percent by a nurse or trained midwife.
However, despite this extensive medical infrastructure, Uzbekistan has relatively high rates of infant and child mortality. For the five-year period before the survey (i.e., approximately mid-1992 to mid-1996), the infant mortality rate was estimated at 49 per 1,000 live births, and under-five mortality was estimated at 59 per 1,000.

Anemia is recognized as a major problem throughout the world and has been considered a major public health problem in Uzbekistan for decades. UDHS data show that anemia rates among women and children are high in all regions of the country. Sixty percent of women in the UDHS survey and 61 percent of children are diagnosed as having some degree of anemia. The prevalence of anemia is among the highest in Region 1, which includes Karakalpakstan; more than half of children living there (53 percent) are diagnosed as having moderate or severe anemia. There is sufficient evidence to suggest that the majority of cases of anemia among women in Uzbekistan are due to nutritional deficiency of iron.

The UDHS findings, as well as the findings of other more geographically limited studies, provide important information for the development of health intervention programs in Uzbekistan. These programs would help to prevent complications of pregnancy and delivery related to anemia among women, as well as developmental problems among children. These data are important as background for public health policy decisions pertaining to iron fortification of food and iron supplementation programs.
### Fact Sheet

#### 1996 Population Data

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Total population (millions)</td>
<td>22.5</td>
</tr>
<tr>
<td>Urban population (percent)</td>
<td>38.6</td>
</tr>
<tr>
<td>Annual population growth (per 1000 population)</td>
<td>6.6</td>
</tr>
<tr>
<td>Crude birth rate (per 1,000 population)</td>
<td>22.8</td>
</tr>
<tr>
<td>Crude death rate (per 1,000 population)</td>
<td>6.6</td>
</tr>
</tbody>
</table>

#### Uzbekistan Demographic and Health Survey 1996

**Sample Population**

- Women age 15-49: 4,415

**Background Characteristics of Women Interviewed**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent urban</td>
<td>38.3</td>
</tr>
<tr>
<td>Percent Uzbek</td>
<td>82.6</td>
</tr>
<tr>
<td>Percent with primary and secondary education</td>
<td>63.8</td>
</tr>
<tr>
<td>Percent with higher education</td>
<td>10.7</td>
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**Marriage and Other Fertility Determinants**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
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<tbody>
<tr>
<td>Percent of women 15-49 currently married</td>
<td>69.2</td>
</tr>
<tr>
<td>Percent of women 15-49 ever married</td>
<td>75.1</td>
</tr>
<tr>
<td>Median age at first marriage among women 25-49</td>
<td>20.1</td>
</tr>
<tr>
<td>Median duration of breastfeeding (months)</td>
<td>17.3</td>
</tr>
<tr>
<td>Median duration of postpartum amenorrhea (months)</td>
<td>5.3</td>
</tr>
<tr>
<td>Median duration of postpartum abstinence (months)</td>
<td>1.8</td>
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**Fertility**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total fertility rate</td>
<td>3.3</td>
</tr>
<tr>
<td>Mean number of children ever born to women age 40-49</td>
<td>4.6</td>
</tr>
</tbody>
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**Induced Abortion**

<table>
<thead>
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<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Total abortion rate</td>
<td>0.7</td>
</tr>
<tr>
<td>Mean number of abortions, women age 40-49</td>
<td>0.8</td>
</tr>
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**Desire for Children**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of currently married women who:</td>
<td></td>
</tr>
<tr>
<td>Want no more children</td>
<td>50.9</td>
</tr>
<tr>
<td>Want to delay their next birth at least 2 years</td>
<td>24.2</td>
</tr>
<tr>
<td>Mean ideal number of children among women 15-49</td>
<td>3.6</td>
</tr>
<tr>
<td>Percent of births in the last 3 years that were:</td>
<td></td>
</tr>
<tr>
<td>Unwanted</td>
<td>1.9</td>
</tr>
<tr>
<td>Mistimed</td>
<td>2.4</td>
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**Knowledge and Use of Family Planning**

<table>
<thead>
<tr>
<th>Category</th>
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<tbody>
<tr>
<td>Percent of currently married women who:</td>
<td></td>
</tr>
<tr>
<td>Know any method</td>
<td>95.7</td>
</tr>
<tr>
<td>Know a modern method</td>
<td>95.5</td>
</tr>
<tr>
<td>Have ever used any method</td>
<td>67.9</td>
</tr>
<tr>
<td>Are currently using any method</td>
<td>55.6</td>
</tr>
<tr>
<td>Are currently using a modern method</td>
<td>51.3</td>
</tr>
<tr>
<td>Percent of currently married women currently using:</td>
<td></td>
</tr>
<tr>
<td>Pill</td>
<td>1.7</td>
</tr>
<tr>
<td>IUD</td>
<td>45.8</td>
</tr>
<tr>
<td>Female Sterilization</td>
<td>0.7</td>
</tr>
<tr>
<td>Injectables and diaphragm</td>
<td>1.0</td>
</tr>
<tr>
<td>Condom</td>
<td>1.7</td>
</tr>
<tr>
<td>Periodic abstinence</td>
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<tr>
<td>Withdrawal</td>
<td>2.8</td>
</tr>
<tr>
<td>Douche</td>
<td>0.4</td>
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**Mortality, Health and Nutrition**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Infant mortality rate</td>
<td>49</td>
</tr>
<tr>
<td>Under-five mortality rate</td>
<td>59</td>
</tr>
<tr>
<td>Percent of births to mothers who received antenatal care from medical provider</td>
<td>95</td>
</tr>
<tr>
<td>Percent of births to mothers who were assisted at delivery by:</td>
<td></td>
</tr>
<tr>
<td>Doctor</td>
<td>93.8</td>
</tr>
<tr>
<td>Nurse/Trained midwife</td>
<td>3.7</td>
</tr>
<tr>
<td>Percent of children 0-3 months who are breastfeeding</td>
<td>97.6</td>
</tr>
<tr>
<td>Percent of children 8-11 months who are breastfeeding</td>
<td>83.5</td>
</tr>
<tr>
<td>Percent of children 0-3 months who are exclusively breastfeeding</td>
<td>4.1</td>
</tr>
<tr>
<td>Percent of children 12-23 months who received BCG</td>
<td>97.6</td>
</tr>
<tr>
<td>DPT (three doses)</td>
<td>94.4</td>
</tr>
<tr>
<td>Polio (three doses)</td>
<td>96.2</td>
</tr>
<tr>
<td>Measles</td>
<td>91.5</td>
</tr>
<tr>
<td>All vaccines</td>
<td>85.0</td>
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**Anemia**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of women 15-49 moderately anemic</td>
<td>14.2</td>
</tr>
<tr>
<td>Percent of women 15-49 severely anemic</td>
<td>0.9</td>
</tr>
<tr>
<td>Percent of children under age 3 moderately anemic</td>
<td>25.6</td>
</tr>
<tr>
<td>Percent of children under age 3 severely anemic</td>
<td>1.2</td>
</tr>
</tbody>
</table>

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2. Current status estimate based on births during the 36 months preceding the survey.
3. Based on births to women 15-49 years during the period 0-3 years preceding the survey.
4. Excludes the women who gave a non-numeric response to ideal family size.
5. Rates for the period 0-4 years preceding the survey (approximately mid 1992-mid-1996); expressed as deaths per 1,000 live births.
6. Figure includes births in the period 1-35 months preceding the survey.
7. Based on information from vaccination cards obtained from local health care facilities.
8. Stunting assessed by height-for-age, wasting assessed by weight-for-height; the percent undernourished are those below -2 SD from the median of the international reference population, as defined by the U.S. National Centre for Health Statistics, and recommended by the World Health Organisation.
9. Anemia assessed by hemoglobin measurement in the blood; moderate anemia was diagnosed when the hemoglobin concentration was 7.0-9.9 grams/deciliter; severe anemia when the hemoglobin level was below 7.0 grams/deciliter.