This report summarises the findings of the 1996 Tanzania Demographic and Health Survey (TDHS), conducted by the Bureau of Statistics, Planning Commission. Funding for the survey was provided by the U.S. Agency for International Development (USAID). Macro International Inc. provided technical assistance under the Demographic and Health Surveys Project.

The 1996 Tanzania Demographic and Health Survey (TDHS) is part of the worldwide Demographic and Health Surveys (DHS) project, which is designed to collect data on fertility, family planning, and maternal and child health. Information about the TDHS may be obtained from the Bureau of Statistics, P.O. Box 796, Dar es Salaam, Tanzania (Telephone: 051-111993). Additional information about the DHS project may be obtained from Macro International Inc., 11785 Beltville Drive, Suite 300, Calverton, MD 20705, USA (Telephone: 301-572-0200; Fax: 301-572-0999; E-mail: reports@macroint.com; Internet: http://www.macroint.com/dhs/).
Background

The Tanzania Demographic and Health Survey (TDHS) is a nationally representative survey of 8,120 women age 15-49. A survey of 2,256 men age 15-59 was also conducted. The survey was fielded between July and November 1996. The 1996 TDHS is the third national survey of its kind to be undertaken in Tanzania. The primary objective of the TDHS was to provide policy-makers and planners with detailed information on fertility, family planning, infant and child mortality, maternal and child health, and nutrition. In addition, the TDHS collected information on female circumcision, maternal mortality, and knowledge of AIDS. All regions in the United Republic of Tanzania were covered by the survey.

The TDHS was conducted by the Bureau of Statistics of the Government of Tanzania. Macro International Inc. provided financial and technical assistance to the project through the Demographic and Health Surveys (DHS) programme funded by the U.S. Agency for International Development.
Fertility

Levels and Trends in Fertility

Survey data indicate that fertility has been declining in Tanzania. At current fertility levels, a Tanzanian woman will give birth to an average of 5.8 children during her childbearing years. This represents a decline of 7 percent from the level of 6.3 births per woman that prevailed in 1989-92.

At current fertility levels, a Tanzanian woman will give birth to an average of 5.8 children by the end of her childbearing years.

On the mainland, fertility is much higher in rural areas than in urban areas (6.3 compared with 4.1 births per woman). Total fertility rates are lowest in the coastal and southern part of the country and highest around Lake Victoria and in the central part of the country. Women who have received some secondary education have the lowest level of fertility, with a total fertility rate of 4.8, compared with 7.1 children per woman for those with either no education or incomplete primary education, a difference of more than two children.

Figure 2
Total Fertility Rates by Background Characteristics

<table>
<thead>
<tr>
<th>Total Fertility Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESIDENCE</td>
</tr>
<tr>
<td>Mainland Urban</td>
</tr>
<tr>
<td>Mainland Rural</td>
</tr>
<tr>
<td>Zanzibar</td>
</tr>
<tr>
<td>ZONE</td>
</tr>
<tr>
<td>Coastal</td>
</tr>
<tr>
<td>Northern Highlands</td>
</tr>
<tr>
<td>Lake</td>
</tr>
<tr>
<td>Central</td>
</tr>
<tr>
<td>Southern Highlands</td>
</tr>
<tr>
<td>Southern</td>
</tr>
<tr>
<td>EDUCATION</td>
</tr>
<tr>
<td>No Education</td>
</tr>
<tr>
<td>Incomplete Primary</td>
</tr>
<tr>
<td>Primary Completed</td>
</tr>
<tr>
<td>Secondary+</td>
</tr>
</tbody>
</table>

There are substantial differences in fertility among sub-groups. Women with no education or incomplete primary education have two to three children more than women who received some secondary education.

Figure 1
Age-specific Fertility Rates, 1991-92 and 1996 TDHS

Fertility declined 7 percent in Tanzania between the 1991-92 TDHS and the 1996 TDHS, from 6.3 births per woman to 5.8. The largest decline was among women 20-24.
More than a quarter of teenage women (age 15-19) have begun childbearing, with 21 percent having had a child already and 5 percent carrying their first child. By the time they reach age 19, over 60 percent of women have begun childbearing.

By the time they reach age 19, over 60 percent of Tanzanian women have either given birth or are pregnant with their first child.

Marriage and Exposure to the Risk of Pregnancy

Fertility decline in Tanzania has been influenced in part by an increase in the age at first marriage. The median age at first marriage for women in Tanzania has risen steadily from less than 18 years among women age 45-49 to 19 years among women age 20-24 (representing recent marital patterns). Between 1991-92 and 1996, the median age at first marriage increased from 17.9 to 18.2 among women age 25-49.

Men marry much later than women; the median age at first marriage among men 25-59 is 25 years, compared with 18 years for women 25-49. By age 25, which is the median age at first marriage for men, 89 percent of women have married.

The median age at marriage is 18 among women and 25 among men.
Overall, 29 percent of married women and 15 percent of married men are in a polygynous union. As expected, the practice of polygyny increases with age from 22 percent among teenagers to 38 percent among women age 45-49.

Survey findings show that women are exposed to the risk of pregnancy at a young age. The median age at first sexual intercourse for women is 17, more than one year lower than the median age at first marriage. Overall, women become sexually active earlier than men. The median age at first sex for men is 18 years.

**Birth Intervals**

Most Tanzanian children (83 percent) are born after a “safe” birth interval (24 or more months apart), with about 43 percent born at least 36 months after a prior birth. The overall median birth interval is 34 months. Younger women tend to have shorter birth intervals than older women. The median birth interval is six months shorter for children whose previous sibling died compared with children whose previous sibling survived.

*Most Tanzanian children are born after a “safe” birth interval. The median birth interval is 34 months.*
**Fertility Preferences**

Survey data indicate that there is a strong desire for children and a preference for large families. Sixty percent of women and 74 percent of men want to have more children. Only 26 percent of women and 13 percent of men say they want no more children.

Overall, women report a mean ideal number of children of 5.5, compared with 5.9 children for men; ideal family size is higher among currently married women and men (5.9 and 6.7, respectively). Only 5 percent of women and men regard a two-child family as ideal. Despite high fertility preferences, the data show that there has been a decline in ideal family size among women in Tanzania, from an average of 6.1 children in 1991-92 to 5.5 in 1996.

Unplanned pregnancies are common in Tanzania. About one-quarter of the births in the three years prior to the survey were reported to be unplanned—15 percent were mistimed (wanted later) and 9 percent were unwanted. If unwanted births could be eliminated altogether, the total fertility rate in Tanzania would be 5.1 births per woman instead of the actual level of 5.8.

**Figure 3**

Fertility Preferences among Women 15-49 and Men 15-59

![Diagram showing fertility preferences among women and men.](image)

*Note: "Want no more" includes sterilised persons.*

Twenty-six percent of women and 13 percent of men say they want no more children. These are potential users of contraceptive methods for the purpose of limiting family size.
Family Planning

Knowledge of Contraception

Knowledge of contraceptive methods is high in Tanzania. Seventy-one percent of women and 67 percent of men know at least three modern methods. Among women, the pill is the best known method (78 percent), while among men, the condom is the best known method (86 percent). The proportion of women who have heard of at least one modern method increased from 72 percent in 1991-92 to 83 percent in 1996.

**Figure 4**
Trends in Contraceptive Use, 1991-1996

Use of Contraception

Sixteen percent of Tanzanian women are currently using a contraceptive method, with 12 percent using a modern method. The most widely used methods are the pill (5 percent) and injectables (4 percent).

Current use is higher among men than women. Twenty-two percent of men are currently using contraception—14 percent modern methods and 8 percent traditional methods.

Contraceptive use has increased 60 percent since the 1991-92 TDHS when just 10 percent of women were using a contraceptive method. Over the same period, use of modern methods doubled from 6 to 12 percent. Injectables have shown the largest increase, from less than 1 percent to 4 percent. Among men, use of modern methods increased from 8 percent to 14 percent.

*Sixteen percent of Tanzanian women are currently using a contraceptive method, with 12 percent using a modern method.*

Contraceptive use rose from 10 to 16 percent between 1991 and 1996. The greatest increase was in the use of modern methods.
Differentials in Family Planning Use

There are differences in current use between the mainland and Zanzibar and more notably by region, educational level, and number of living children. Use of modern family planning methods is lower in Zanzibar (8 percent) than on the mainland (12 percent). On the mainland, urban women are much more likely to be using modern contraceptive methods (24 percent) than rural women (8 percent). Levels of current use of modern family planning methods are highest in Kilimanjaro, Coast, and Dar es Salaam regions (23-24 percent) and lowest in the Shinyanga, Kagera, and Mara regions (4-5 percent). Women with some secondary education are almost five times as likely to use modern methods as women with no education (23 versus 5 percent). Contraceptive use in Tanzania rises with the number of living children.

Women with some secondary education are almost five times as likely to use modern methods as women with no education (23 versus 5 percent).

Figure 5
Use of Modern Contraceptive Methods among Women 15-49 by Background Characteristics

Urban women are much more likely to use modern contraceptive methods than rural women. There is considerable variation in contraceptive use by region.
Sources of Family Planning Services
About three-fourths of women currently using modern contraceptives obtained their method from the public sector: government and district hospitals, government health centres, and government dispensaries or parastatal facilities. Private medical sources account for 18 percent of current users. Community-based field workers supply about 2 percent of modern methods.

Unmet Need for Family Planning
There is considerable potential for increased family planning use. Overall, 24 percent of currently married women have an unmet need for family planning services—15 percent for spacing and 9 percent for limiting births. Interest in spacing births is largely concentrated among younger women (under age 30), while unmet need for limiting childbirth is higher among older women.

The unmet need for family planning among currently married women in Tanzania has declined from 30 percent in 1991-92 to 24 percent in 1996 and the total demand satisfied has increased from 26 percent to 44 percent during the same period.

Figure 6
Distribution of Current Users of Modern Contraceptive Methods by Source of Method

The public sector is a major source of contraception. Three-fourths of women using modern methods obtain their method from the public sector.

About a quarter of women in Tanzania have an unmet need for family planning.
Child Health

Infant and Child Mortality

At current mortality levels, one in seven children born in Tanzania will die before the fifth birthday, with two-thirds of the deaths occurring during the first year of life. When the results of the 1996 TDHS are compared with those of the 1991-92 TDHS, there is evidence of a decline in mortality. Infant mortality has declined from 92 to 88 deaths per 1,000 live births and under-five mortality has declined from 141 to 137.

Mortality is consistently lower in urban areas than in rural areas. The lowest infant mortality rate is in the northern highlands (41 per 1,000 live births). Outside of these areas, infant mortality is about 100 per 1,000 live births.

Maternal education is strongly related to a child’s risk of dying. Children born to mothers with no education suffer the highest mortality. Results show that children born to women with secondary or higher levels of education have under-five mortality rates about half those of uneducated women.

The 1996 TDHS data indicate that spacing births can potentially reduce childhood mortality levels. Children born less than 24 months after a preceding sibling are almost twice as likely to die before their first birthday as children born after an interval of four or more years.

*Figure 7*


![Chart showing trends in infant and under-five mortality rates](chart.png)

*Between 1979 and 1994, infant mortality declined from 92 to 88 deaths per 1,000 births, while under-five mortality declined from 141 to 137.*

At current mortality levels, one in seven children born in Tanzania will die before the fifth birthday, with two-thirds of the deaths occurring during the first year of life.
Vaccination of Children

A primary means of improving child survival is expanding childhood vaccination coverage. Seventy-one percent of Tanzanian children age 12-23 months have received all of the recommended vaccinations, while only 3 percent have not received any vaccinations. The remaining 26 percent of children are partially vaccinated. Vaccination coverage for BCG is 96 percent, with similar coverage for the first doses of DPT and polio vaccines. Coverage for the third doses of DPT and polio are 85 percent and 80 percent, respectively.

Vaccination coverage is higher in Zanzibar than on the mainland. Less than half of children age 12-23 months are fully vaccinated in Shinyanga region compared with 94 percent in Kilimanjaro region. Immunisation coverage improves substantially as mothers’ level of education increases, from 58 percent for children whose mothers have no formal education to 77 percent for children whose mothers have completed primary education or higher.

Although overall vaccination coverage has not changed since 1991-92, the dropout rate between first and third dose of DPT has declined.

Figure 8
Vaccination Coverage among Children Age 12-23 Months, 1991-92 and 1996 TDHS

Overall, 71 percent of children age 12-23 months are fully vaccinated.

Seventy-one percent of children age 12-23 months have received all the recommended vaccinations.
Treatment of Childhood Illnesses

Diarrhoeal and respiratory illnesses are common causes of child deaths. In the two weeks before the survey, 14 percent of children had diarrhoea and 13 percent were ill with acute respiratory infections (ARI). About 60 percent of those with diarrhoea and 70 percent of those with ARI were taken to a health facility. Among children with diarrhoea, 48 percent were treated with a solution prepared from packets of oral rehydration salts (ORS), 3 percent received recommended home fluids (RHF), and 50 percent received either ORS or RHF. In addition, 57 percent of mothers reported that they increased the amount of fluids given to their children with diarrhoea.

In the two weeks before the survey, 14 percent of children had diarrhoea and 13 percent were ill with acute respiratory infections (ARI). Sixty percent of those with diarrhoea and 70 percent of those with ARI were taken to a health facility for treatment.
Breastfeeding

The 1996 TDHS results indicate that breastfeeding is practised almost universally in Tanzania, with a median duration of 22 months. Data show that about 60 percent of the children were breastfed within an hour of birth and 88 percent in the first 24 hours after delivery. Although exclusive breastfeeding is recommended until 4-6 months of age, 81 percent of children age 4-6 months receive complementary foods.

Children’s Nutritional Status

The level of malnutrition among children is high; 43 percent of Tanzanian children under five are classified as stunted (low height-for-age) and 18 percent are severely stunted. Seven percent of children under five are wasted (low weight-for-height); 1 percent are severely wasted. More than 30 percent of children are underweight for their age. Comparison with the 1991-92 TDHS shows little change in chronic malnutrition (stunting) or acute malnutrition (wasting).

The level of malnutrition among children is high, with 43 percent of children under age five stunted, 7 percent wasted, and 30 percent underweight.
Women's Health

Maternity Care

The results of the survey indicate very high utilisation of antenatal care services in Tanzania for most pregnancies (97 percent). In most cases, antenatal care is provided by a trained nurse or midwife (43 percent), or a health aide (40 percent), with doctors and traditional birth attendants (TBAs) providing the remainder. In Tanzania, three-fourths of women receive at least two doses of tetanus toxoid vaccine during pregnancy. Overall, 47 percent of births are delivered in a health facility, while about half of the births are delivered at home. More than 40 percent of births are assisted by medically trained personnel.

Utilisation of antenatal services is high. In the five years prior to the survey, mothers received antenatal care for 97 percent of births.

Maternal Nutritional Status

The nutritional status of women is important for the well being of both mothers and their children. Among mothers with children born in the five years preceding the survey, the mean height is 156 centimetres. Only 3 percent of mothers are shorter than 145 centimetres, the height below which a woman is considered to be at nutritional risk.

The Body Mass Index (BMI), a measure of thinness, indicates that 9 percent of Tanzanian women are below 18.5 and are therefore at nutritional risk.

Figure 9
Antenatal Care, Tetanus Coverage and Delivery Care (Births in the Preceding 5 Years)

Four or more antenatal care visits 70
Two or more tetanus vaccinations 74
Delivery by medical personnel 47
Delivery in a health facility 47

Women received four or more antenatal visits for 70 percent of births, and delivery care from medical personnel for 47 percent of births.
Maternal Mortality
Pregnancy and childbearing can be life threatening for Tanzanian women. Maternal deaths accounted for 27 percent of all deaths to women age 15-49. For the decade before the survey, the maternal mortality ratio was estimated to be 529 deaths per 100,000 live births. In other words, for every 1,000 live births in Tanzania during this period, 5 women died of pregnancy-related causes.

In the decade before the survey, 5 women died of pregnancy-related causes for every 1,000 live births. Maternal deaths accounted for 27 percent of all deaths among women age 15-49.

Female Circumcision
The 1996 TDHS data indicate that 18 percent of women in Tanzania are circumcised. Younger women (age 15-19 years) and women living in Zanzibar and in urban areas on the mainland are less likely to be circumcised than other women. A higher proportion of women in Arusha (81 percent), Dodoma (68 percent), and Mara (44 percent) regions are circumcised. The survey indicates that the practice may be declining, since only 7 percent of eldest daughters of respondents were reported to have been circumcised.
AIDS-Related Knowledge and Behaviour

Most women and men in Tanzania are aware of AIDS. The radio and friends and relatives are the main sources for knowledge of AIDS among both women and men.

Thirty-nine percent of women and 55 percent of men cite use of condoms as a way to avoid AIDS. One-fourth say that having only one partner can help prevent the spread of the disease, and 20 percent of women and 17 percent of men report that limiting the number of sexual partners can prevent AIDS.

More than 90 percent of respondents are aware that AIDS is a fatal disease. Twenty-nine percent of women and 41 percent of men say that they have no chance of being infected. This is similar to the results from the 1994 Tanzania Knowledge, Attitudes and Practices Survey (TKAPS). However, more respondents now think that their risk of getting AIDS is low or nil because of abstaining from sex than found in the 1994 TKAPS.

Women perceive themselves at greater risk of getting AIDS than men. About one-fourth of women say they have a moderate or great risk of getting the disease, compared with only 15 percent of men.

Eighty-two percent of women and 91 percent of men say that they have changed their sexual behaviour to avoid getting AIDS. Among those reporting a change in behaviour, most women and men say that they have restricted themselves to one partner.

Four percent of women and 11 percent of men have already been tested for AIDS and about two-thirds of women and men express a desire to be tested for AIDS.

*Nearly all Tanzanian adults have heard of AIDS and more than 90 percent of respondents are aware that AIDS is a fatal disease.*

**Figure 10**

*Changes in Behaviour after Hearing about HIV/AIDS by Sex*

<table>
<thead>
<tr>
<th>Percent</th>
<th>NO CHANGE IN BEHAVIOUR</th>
<th>CHANGE IN BEHAVIOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Restricted to one partner</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>18</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Had fewer partners</td>
<td></td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td>24</td>
<td></td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stopped all sex</td>
<td></td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td>7</td>
<td></td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Began using condoms</td>
<td></td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>Women</strong></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Used more condoms</td>
<td></td>
</tr>
<tr>
<td><strong>Men</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

*Eighty-two percent of women and 91 percent of men say that they have changed their sexual behaviour to avoid getting AIDS.*
Fact Sheet

1988 Population Data
- Total population (millions) ........................................... 23.1
- Urban population (percent) ........................................... 18.3
- Annual intercensal population growth (percent) ..................... 2.8
- Crude birth rate (per 1,000 population) ........................... 52
- Crude death rate (per 1,000 population) ........................... 17

Tanzania Demographic and Health Survey 1996

Sample Population
- Women age 15-49 ..................................................... 8,120
- Men age 15-59 ......................................................... 2,256

Background Characteristics of Women Interviewed
- Percent urban in the mainland ....................................... 22.3
- Percent with no education ........................................... 28.5
- Percent attended secondary school or higher ....................... 5.4

Marriage and Other Fertility Determinants
- Percent of women 15-49 currently married ......................... 66.6
- Percent of women 15-49 ever married ............................... 76.7
- Median age at first marriage among women age 25-49 .......... 18.2
- Median duration of breastfeeding (months) ....................... 21.5
- Median duration of postpartum amenorrhoea (months) ......... 12.1
- Median duration of postpartum abstinence (months) ............ 8.6

Fertility
- Total fertility rate ..................................................... 5.8
- Mean number of children ever born to women age 40-49 ...... 7.3

Desire for Children
- Percent of all women who:
  - Want no more children ........................................... 25.6
  - Want to delay their next birth at least 2 years ............... 32.9
  - Mean ideal number of children among women 15-49 ......... 5.5
  - Percent of births in the last 5 years that were:
    - Unwanted ......................................................... 9.2
    - Mistimed .......................................................... 32.9

Knowledge and Use of Family Planning
- Percent of all women who:
  - Know any method .................................................. 84.2
  - Know a modern method ............................................ 83.6
  - Have ever used any method ...................................... 30.9
  - Are currently using any method ................................ 16.1
  - Are currently using a modern method ......................... 11.7
- Percent of women currently using:
  - Pill ................................................................. 4.8
  - IUD ................................................................. 0.5
  - InjectableS ...................................................... 3.7
  - Condom ........................................................... 1.3
  - Female sterilisation ............................................. 1.4
  - Traditional/Folk methods ..................................... 4.3

Mortality and Health
- Infant mortality rate .................................................. 88
- Under-five mortality rate ........................................... 137
- Maternal mortality ratio ............................................ 529
- Percent of births to mothers who:
  - Received antenatal care from medical provider ............. 89.3
  - Received two or more tetanus toxoid injections ............. 74.3
- Percent of births to mothers who were assisted at delivery by:
  - Doctor ............................................................. 5.7
  - Nurse/Trained midwife/Health Aide ......................... 41.0
  - Traditional birth attendant .................................... 17.7
  - Relative/Other ................................................... 28.0
  - Percent of children 0-5 months who are breastfeeding ...... 98.4
  - Percent of children 10-11 months who are breastfeeding ... 96.4
  - Percent of children 0-5 months who are exclusively breastfeeding ........................................ 28.9
  - Percent of children 12-23 months who received BCG .... 96.2
  - DPT (three doses) ............................................... 85.2
  - Polio (three doses) ............................................. 79.6
  - Measles .......................................................... 80.9
  - All vaccinations ................................................ 70.5
- Percent of children under 5 years who:
  - Had diarrhoea in the 2 weeks preceding the survey ....... 13.7
  - Had a cough accompanied by short, rapid breathing (ARI) in the 2 weeks preceding the survey ........... 13.0
  - Among children with ARI, percentage taken to a health facility ................................................. 69.6
  - Had fever in the 2 weeks preceding the survey ............ 30.3
  - Are chronically malnourished (stunted) ....................... 43.4
  - Are acutely malnourished (wasted) ............................. 7.2

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1 Current status estimate based on births during the 36 months preceding the survey
2 Based on births to women 15-49 years during the 1-36 months preceding the survey
3 Mortality rates for the period 0-4 years preceding the survey (roughly 1992 to 1996); expressed as deaths per 1,000 live births
4 Rates for the period 0-9 years preceding the survey; expressed as maternal deaths per 100,000 live births
5 Figure includes births in the period 1-59 months preceding the survey
6 Refers to injections received during pregnancy
7 Based on information from vaccination cards and mothers' reports
8 Stunting assessed by height-for-age, wasting assessed by weight-for-height, the percent malnourished 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.