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Assam Summary Report

National Family Health Survey 1992-93

Population Research Centre
Gauhati University
Guwahati

International Institute for Population Sciences
Bombay

National Family Health Survey

(MCH and Family Planning)

Assam

1992-93

Summary Report

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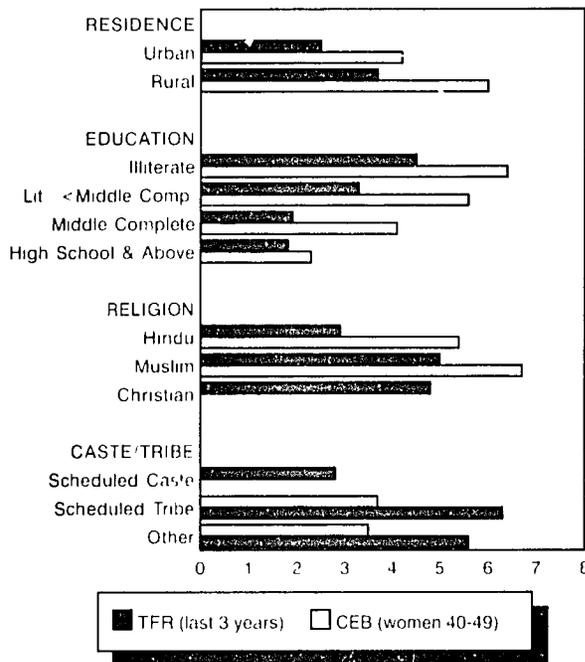


BACKGROUND

The National Family Health Survey (NFHS) is a nationally representative survey of ever-married women age 13-49. The NFHS covered the population of 24 states and the National Capital Territory of Delhi (the erstwhile Union Territory of Delhi) to provide demographic and health data for interstate comparisons. The primary objective of the NFHS was to provide national-level and state-level data on fertility, nuptiality, family size preferences, knowledge and practice of family planning, the potential demand for contraception, the level of unwanted fertility, utilization of antenatal services, breastfeeding and food supplementation practices, child nutrition and health, vaccinations, and infant and child mortality.

In Assam, the interviewers collected information from 3,006 ever-married women age 13-49 in urban and rural areas. The fieldwork was conducted between 7 December 1992 and 15 March 1993. The survey was carried out as a collaborative project of the Ministry of Health and Family Welfare, Government of India, New Delhi; the International Institute for Population Sciences, Bombay; the Population Research Centre, Gauhati University, Guwahati; MODE Research Private Limited, Calcutta; the East-West Center/Macro International, U.S.A; and the United States Agency for International Development (USAID), New Delhi. Funding for the survey was provided by USAID.

Figure 1
Total Fertility Rate (TFR) and Mean Number of Children Ever Born (CEB)



Note: The means (CEB) for the categories Christian and Scheduled Caste are not shown because they are based on fewer than 25 cases.



FERTILITY AND MARRIAGE

Fertility Levels, Trends and Differentials

- The total fertility rate (TFR) in Assam is moderately high at 3.5 children per woman age 15-49 for the period 1990-92, which is almost the same as the national TFR of 3.4. Childbearing in Assam is highly concentrated in the age group 20-29, which accounts for 56 percent of total fertility. There is also a substantial amount of early childbearing. Sixteen percent of total fertility is accounted for by births to women age 15-19, and the contribution of women above age 35 is only 11 percent. One-fifth of all women and 63 percent of currently married women age 15-19 have begun childbearing.

At current fertility rates, women in Assam will have an average of 3.5 children (almost the same as the national average).

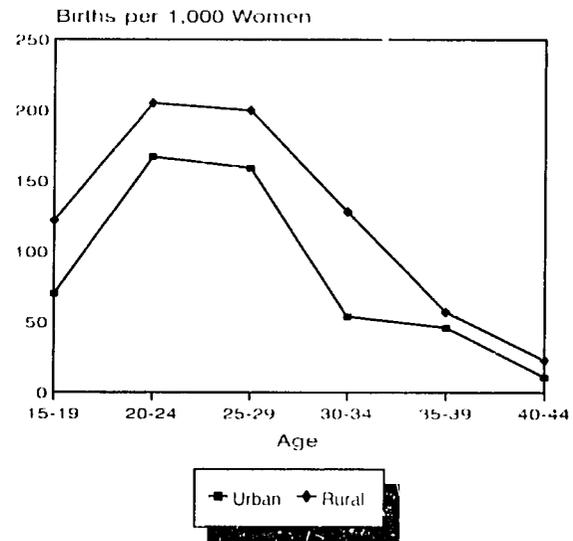
- The NFHS estimates may be compared with estimates from the Sample Registration System (SRS) maintained by the Office of the Registrar General. The most comparable report with estimates for Assam is for 1991. The TFR from the NFHS is the same as the SRS estimate. The crude birth rate estimated from the NFHS of 30.4 for 1990-92 is also similar to the 1991 SRS estimate of 30.9.

- Current fertility in rural areas is 45 percent higher than in urban areas. Fertility differences also exist between various other population subgroups. The fertility of illiterate women is substantially higher (4.5 children per woman) than the fertility of women with at least a high school education (1.8 children per woman). Differentials by caste and tribe are also substantial. Scheduled castes have a lower TFR (2.8) than scheduled tribes (3.7) and others (3.5). Religious differentials are also prominent. The fertility of Muslim women is much higher than the fertility of Hindu women (a TFR of 5.0 compared with a TFR of 2.9), and Muslims and Christians do not differ much in their current fertility.
- The median interval between births is 30 months, or about 2.5 years. One in every eight second or higher order births occurs within 18 months of the previous birth, and 30 percent occur within 24 months. The likelihood of survival is lower for children born less than 24 months following a previous birth.

Marriage

- As in many other parts of India, marriage is universal and takes place at relatively young ages in Assam. Thirty-two percent of women are married at age 15-19 increasing to 85 percent by age 25-29. At age 30-34, the percentage married reaches 94 percent. The proportion ever married at age 15-19 is lower in urban areas (18 percent) than in rural areas (34 percent).

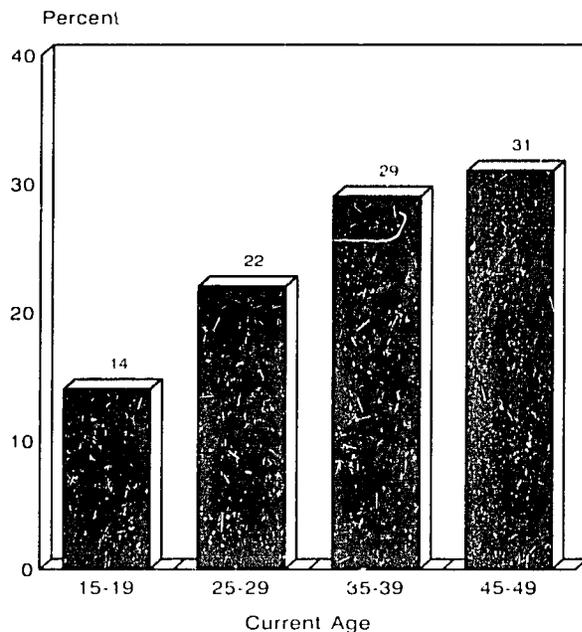
Figure 2
Age-Specific Fertility Rates by Residence



Note: Rates are for the three years before the survey (1990-92)



Figure 3
Percentage of Women Married before Age 15, by
Current Age



- The singulate mean age at marriage for males and females is 27.9 and 21.6 years, respectively. It has also increased steadily over time from 18.6 years in 1961 to 21.6 years in 1992-93 for females and from 25.9 to 27.9 years in the same period of time for males. The proportion marrying before age 15 declined from 31 percent for the 45-49 age cohort to 14 percent for the 15-19 age cohort. The trend is similar in both urban and rural areas, although urban women marry more than two years later than rural women. The median age at marriage for the more recent cohort of women age 25-29 is 17.6 years, 20.2 years in urban areas and 17.3 years in rural areas.

Marriage at very young ages has been declining over time, but the median age at marriage is still low at 17.4 years.



- The age at marriage increases sharply with the education of women. Among women age 25-29, the median age at marriage is 16.4 years for illiterate women and 24.6 years for women who have completed high school, a difference of more than 8 years. Differences by religion are also substantial. Muslim women marry three years younger than Hindu women and almost four years younger than the Christian women. The median age at marriage is higher for scheduled tribe women than for scheduled caste and non-SC/ST women.

- According to the Child Marriage Restraint Act of 1978, the minimum legal age at marriage in India is 18 years for women and 21 years for men. Despite this Act, 44 percent of women age 20-24 were married below the legal minimum age at marriage. The proportion of women age 20-24 who married before age 18 is higher in rural areas (46 percent) than in urban areas (31 percent). A large majority of women are not even aware of the legal minimum age at marriage for men and women. Only 19 percent of women could correctly report age 18 as the legal minimum age at marriage for females and only 4 percent could correctly report age 21 as the legal minimum age at marriage for males.

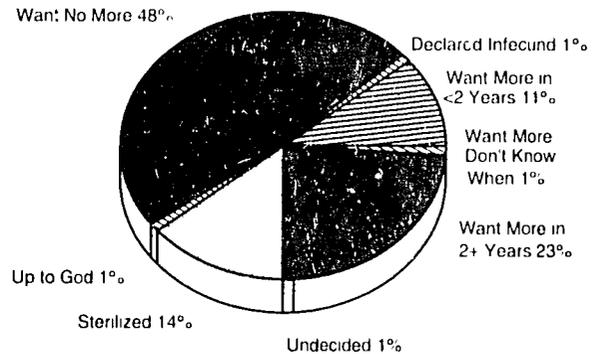


A substantial minority of women age 20-24 in Assam marry before the legal minimum age at marriage of 18 years.

Fertility Preferences

- Nearly one-half (48 percent) of women say they do not want any more children and 14 percent of women (or their husbands) are sterilized, so that they cannot have any more children. These two groups together constitute 62 percent of all currently married women in Assam. Overall, 85 percent of women want to either space their next birth or stop having children altogether. Only 35 percent of women say they want another child sometime in the future, and almost two-thirds of these women (23 percent of all women) say they would like to wait at least two years before having the next child.

Figure 4
Fertility Preferences Among Currently Married Women Age 13-49





Eighty-five percent of currently married women want to either postpone their next birth or stop having children altogether.

- The desire for more children declines rapidly as the number of children increases. Ninety-two percent of women with no children say they want a child and only 2 percent say they do not want any children. The proportion who want another child drops to 43 percent for women who have two living children and 20 percent for those with three living children.
- The desire for spacing children is very strong for women who have fewer than three children. Twenty-two percent of women with no children say that they would like to wait at least two years before having their first child. Similarly, 64 percent of women with one child and 34 percent of women with two children would like to wait at least two years before having their next child. Since 42 percent of all women have fewer than three living children, the strong expressed desire for spacing children among these women cannot be ignored.
- Among women who want another child, there is a preference for having a son as the next child. Fifty-seven percent say they want a son, only 15 percent express a desire for a daughter, and the rest say that the sex of the child does not matter (19 percent) or that it is up to God (9 percent). The desire for a son is particularly strong in rural areas and among high parity women.

- In Assam, a large majority of women (80 percent) consider 2-4 children to be ideal. For those who gave numeric responses, the average number of children considered ideal is 3.2 per couple, ranging from about 2.7 children for women with less than two children to 4.1 for those who already have six or more children.

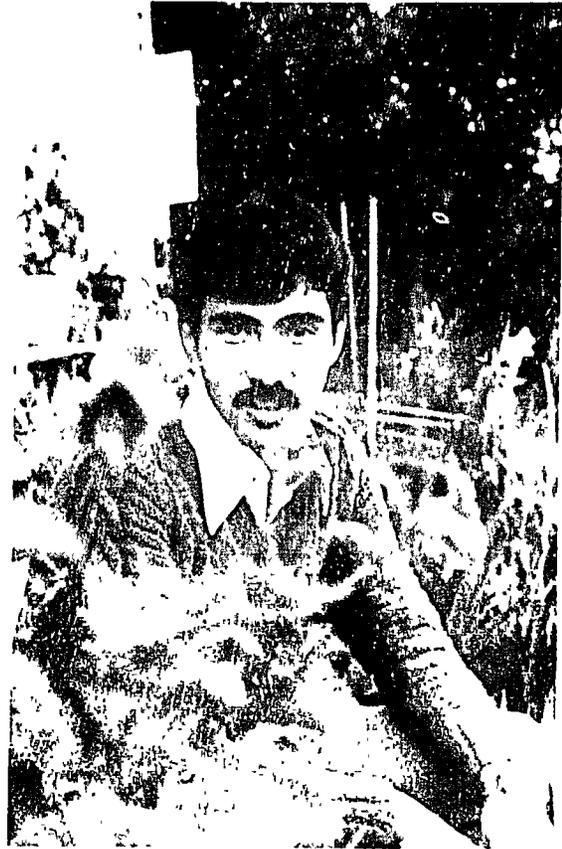
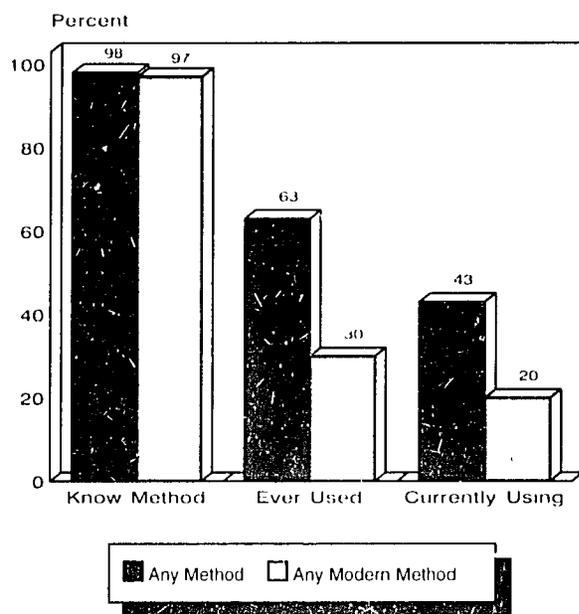


Figure 5
 Knowledge and Use of Family Planning
 (Currently Married Women Age 13-49)



FAMILY PLANNING

Knowledge of Family Planning Methods

- Knowledge of family planning is nearly universal in Assam: 98 percent of currently married women know of at least one contraceptive method, and 90 percent know where they could go to obtain a modern method. Knowledge about sterilization is widespread; 96 percent know about female sterilization and 84 percent know about male sterilization. Women who know about modern spacing methods such as the pill, IUD, and condom are fewer, ranging from 59 to 73 percent. Modern spacing methods are not only less well known, but knowledge about where to obtain these methods is also more limited. In Assam, unlike in many other states in India, traditional methods of contraception are well known; nearly four-fifths of currently married women report knowledge of these methods.

Knowledge of at least one contraceptive method is nearly universal.

Contraceptive Use

- Current use of any modern method of contraception among currently married women age 15-49 is 43 percent in Assam. Use of any traditional method is slightly higher (25 percent) than the use of any modern method (20 percent). Periodic abstinence and withdrawal are practised by 16 and 6 percent of the couples, respectively. Female sterilization is the most popular modern method, adopted by 12 percent of currently

married women. The use rates for other modern methods are 3 percent for the pill, 2 percent each for male sterilization and the condom, and 1 percent for the IUD

Forty-three percent of married women currently use family planning, and unlike in many other states, traditional methods are more popular than modern methods.

- Current use of contraception in urban areas (62 percent) is 55 percent higher than in rural areas (40 percent). Current use of every single method of family planning, except male sterilization, is higher in urban areas than in rural areas. Modern methods account for a higher proportion of total contraceptive use (54 percent) in urban areas than in rural areas (45 percent).
- Illiterate women report less use of any contraceptive method than literate women. The use of any traditional method has a positive relationship to education; whereas the differential in the use of modern methods is most evident between illiterate and literate women. Although only 15 percent of illiterate women use a modern method, this percentage among literate women ranges from 27 to 30. Christians have a lower contraceptive prevalence rate (19 percent) than Hindus (48 percent) and Muslims (32 percent). Among Hindus, the modern and traditional methods are equally popular, whereas among Muslims and Christians, traditional methods are more popular than modern methods. The practice of family planning is much higher among sched-

Figure 6
Current Use of Modern Contraceptive Methods by Education

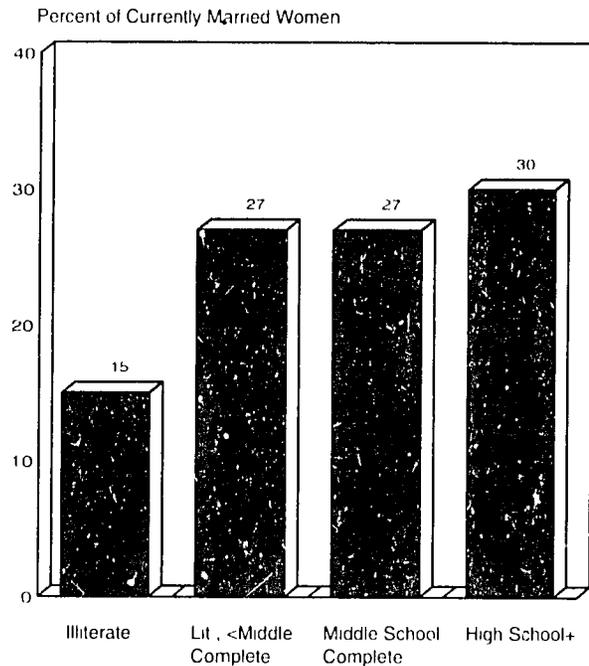
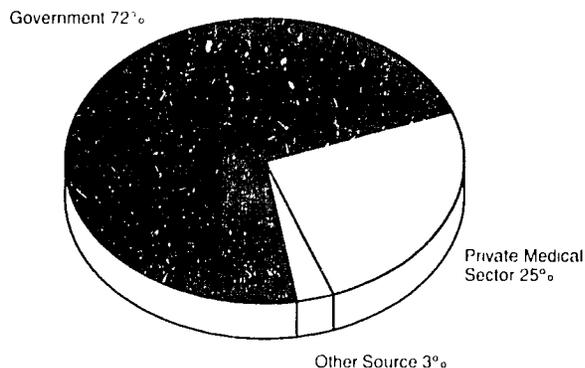


Figure 7
Sources of Family Planning Among Current Users of Modern Contraceptive Methods



uled caste women (53 percent) than among scheduled tribe women (31 percent) and non-SC/ST women (45 percent).

- The use of family planning methods is positively related to the number of living children a woman has, and increases from 18 percent for women with no children to around 51 percent for women with three or more children. Furthermore, at each parity, the use of modern family planning methods is lowest for women with no sons, indicating the existence of son preference. However, the use of traditional methods does not vary much by the number of living children (among those who have at least one child, the use rate ranges narrowly from 22 to 27 percent), and at each parity, does not vary much by the sex composition of living children.
- The public sector (consisting of government/municipal hospitals, Primary Health Centres and other governmental health infrastructure) supplies 72 percent of users of all modern methods, while the private medical sector (including private hospitals or clinics, private doctors and pharmacies/drugstores) supplies 25 percent. Three percent of users obtain their methods from other sources, such as shops, friends and relatives. In rural areas, the public sector is the source of supply for a substantial majority of contraceptive users (76 percent), and in urban areas, the public sector is the source of supply for 56 percent of users.

Attitudes Toward Family Planning

- Attitudes toward the use of family planning are generally positive in Assam. An overwhelming majority of currently married nonsterilized women who know of a contraceptive method (90 percent) approve of family planning and only 10 percent disapprove. More than three-fourths (76

percent) of women report that both they and their husbands approve of family planning.

Nine out of ten married women approve of family planning.

- Education of women as well as their husbands is an important determinant of approval of family planning. Overall, 87 percent of illiterate women approve of family planning compared with 95 percent of women who have completed high school. Joint approval by both husband and wife is 69 percent among illiterate women compared with 93 percent among women who have a high school education. Approval of family planning does not differ much between Hindus and Muslims, but Christians are somewhat less likely to approve family planning. Approval is slightly lower among those belonging to scheduled castes than among other groups.
- Eighty-eight percent of women who have ever used family planning report that both they and their husbands approve of family planning. Among never users, however, 60 percent of women report that they and their husbands approve of family planning.
- Overall, 46 percent of currently married nonusers report that they do not intend to use contraception in the future, and 49 percent of this group do not intend to use because they want more children. Not surprisingly, this reason is more common among women under age 30 (81 percent) than among those age 30 or older (17 percent). In fact, one half of current nonusers who do not intend to use family planning in the future are under age 30.





Exposure to Family Planning Messages

- The effort to disseminate family planning information through the electronic mass media has succeeded in reaching less than one-quarter of ever-married women in Assam. This is not surprising given that only 12 percent of households in Assam own televisions and 30 percent own radios. The urban-rural differentials in media coverage are substantial. The percentage of women exposed to family planning messages on radio or television is 45 percent in urban areas and 21 percent in rural areas.
- Eighty-five percent of women say it is acceptable to have family planning messages on radio and television, only 5 percent say it is not acceptable and the rest (10 percent) are not sure. Younger women (under age 20) and older women (over age 35), rural residents, illiterate women, Christian women, and women belonging to scheduled tribes are less likely than other women to think it is acceptable to broadcast family planning messages on radio or television.

Need for Family Planning Services

- Overall, 22 percent of women in Assam have an unmet need for family planning. These are the women who are not using family planning even though they either do not want any more children or want to wait at least two years before having another child. The unmet need for spacing births and for limiting births is equal at 11 percent. If all of the women who say they want to space or limit their births were to use family planning, the contraceptive prevalence rate would increase from 43 percent to 65 percent of married women.

More than one-fifth of married women have an unmet need for family planning.

Figure 8
Unmet Need for Family Planning by Selected Characteristics

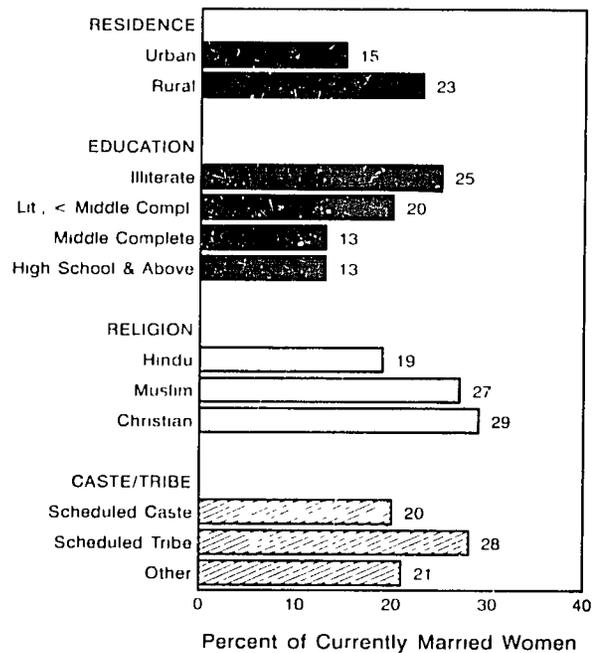
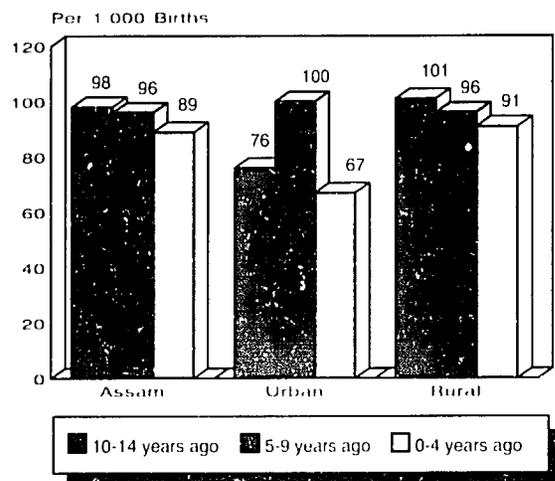


Figure 9
Infant Mortality Rates for Five-Year Periods
by Residence



Note: Rates are for 5-year periods preceding the survey

MATERNAL AND CHILD HEALTH

Infant and Child Mortality

- Infant mortality rates declined in Assam during the 15 years prior to the NFHS in 1992-93. The infant mortality rate for the total population declined from 98 per 1,000 live births during 1978-82 (10-14 years prior to the survey) to 89 per 1,000 live births during 1988-92 (0-4 years prior to the survey), an annual rate of decline of one infant death per 1,000 live births. Despite the overall decline in the infant mortality rate (10 percent over a 10-year period), 1 in every 11 children born in the five years before the NFHS died within the first year of life and 1 in every 7 children died before reaching age five. Therefore, child survival programmes need to be intensified to produce further reductions in the level of infant and child mortality.

One in 11 Children dies before reaching the age of one year.

- The infant mortality rate is 10 percent higher and child mortality is 86 percent higher in rural areas than in urban areas for the ten-year period preceding the survey. The infant mortality rate declines sharply with increasing education of woman overall, as expected, ranging from a high of 101 per 1,000 live births for illiterate women to a low of 43 per 1,000 live births for women with at least a high school education.

- The neonatal mortality rate, which reflects a substantial component of congenital conditions, is higher for males than for females. However, the risk of dying between ages one and five (child mortality) is slightly higher for females than for males (60 compared with 53 per 1,000)
- The infant mortality rate is highest for children of mothers under age 20 (115 per 1,000 live births). Infant mortality is almost twice as high for children with a preceding birth interval of less than 24 months as for children with a preceding birth interval of 48 months or more (125 compared with 69 per 1,000 live births).

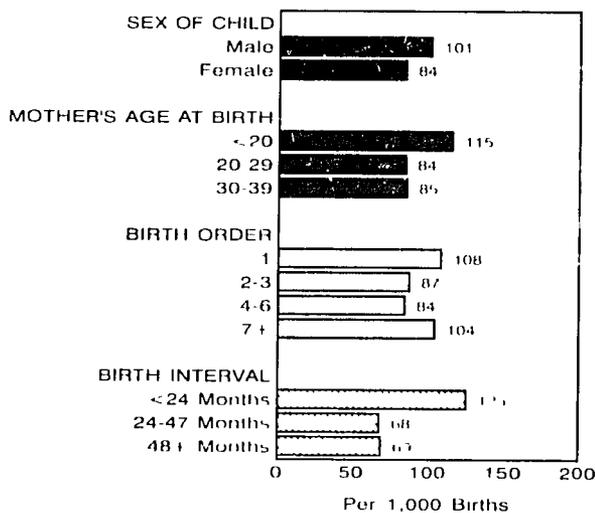
Antenatal Care and Assistance at Delivery

- Utilization of both antenatal care and delivery care is poor in Assam. A sizeable proportion of women receive no antenatal care. During the four years preceding the survey, mothers received antenatal care for only 49 percent of births. Mothers received at least two doses of tetanus toxoid injections for only 35 percent of births and iron/folic acid tablets for only 39 percent of births.

Mothers received antenatal care for only 49 percent of births, and only 11 percent of births were delivered in health institutions.

- There are substantial differences in antenatal care by residence and by education. The proportion of births for which mothers received antenatal care is 81 percent in urban areas and 46 percent in rural areas. The

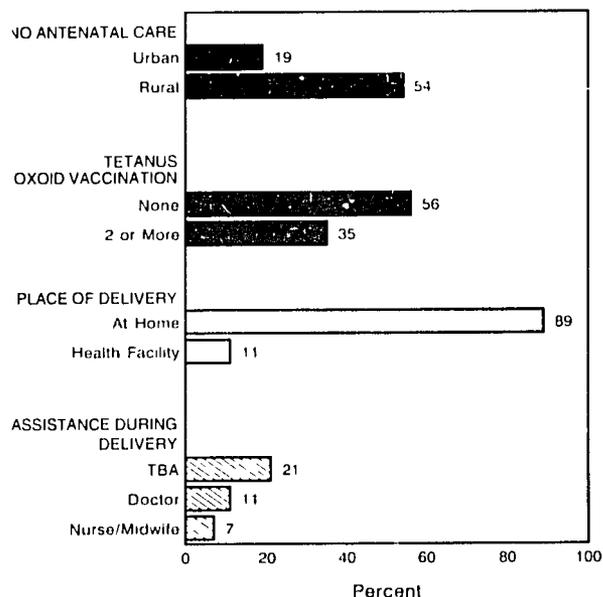
Figure 10
 Infant Mortality Rates by Selected Demographic Characteristics



Note: Based on births in the 10 years preceding the survey



Figure 11
Antenatal Care, Place of Delivery, and Assistance During Delivery



proportion receiving antenatal care ranges from 37 percent for births to illiterate mothers to 100 percent for births to mothers with at least a high school education.

- Most babies (89 percent) are delivered at home, 8 percent are delivered in public health facilities and 3 percent in private health facilities. Only 18 percent of deliveries were assisted by a doctor or nurse/midwife, 21 percent by a traditional birth attendant, and a majority (59 percent) by a relative or other person.

A sizeable proportion of births are delivered by untrained persons.

Breastfeeding and Supplementation

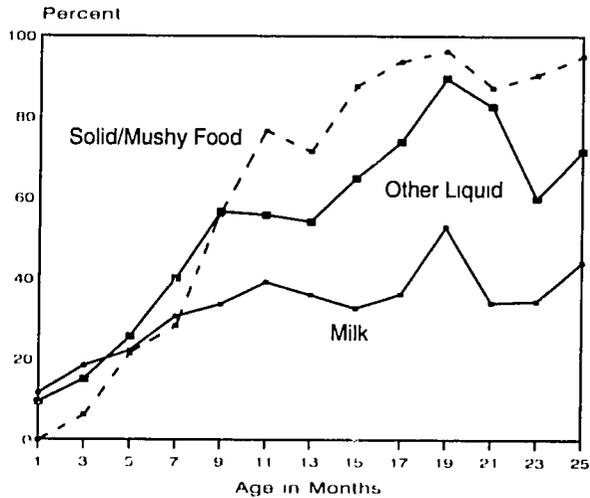
- Breastfeeding is nearly universal in Assam, with 96 percent of all children having been breastfed. It is recommended that the first breast milk should be given to children because it contains colostrum, which provides natural immunity to children. However, a substantial majority (74 percent) of women who breastfeed squeeze the first milk from the breast before they begin breastfeeding their babies. Only 20 percent of the babies in Assam are put to the breast within 1 hour of birth, and 53 percent within 24 hours of birth, indicating the need to educate mothers concerning the importance of immediate commencement of breastfeeding.

A substantial majority of women squeeze the first milk containing colostrum from the breast before breastfeeding their babies.

- Exclusive breastfeeding (which is recommended for all children through age 4-6 months) is quite common for very young children, but even at age 0-1 months almost one-fifth of babies are given water or other supplements. On average, 65 percent of infants under four months are given only breast milk (i.e., are exclusively breastfed). The percentage of babies being exclusively breastfed drops off rapidly after the first few months of life, to almost nil at age 10-11 months.
- By 6 months of age, infants need adequate and appropriate complementary solid foods in addition to breast milk in order to prevent undernutrition. Hence all children in the age group 6-9 months should receive solid or semi-solid food in addition to breast milk. In Assam, 40 percent of all children in this age group receive solid or mushy food in addition to breast milk.
- The use of bottles with nipples among breastfed children is relatively rare, increasing from 10 percent in the first month after birth to a high of 14 percent for children age 6-7 months, after which it declines to zero for children approaching four years of age.

Figure 12

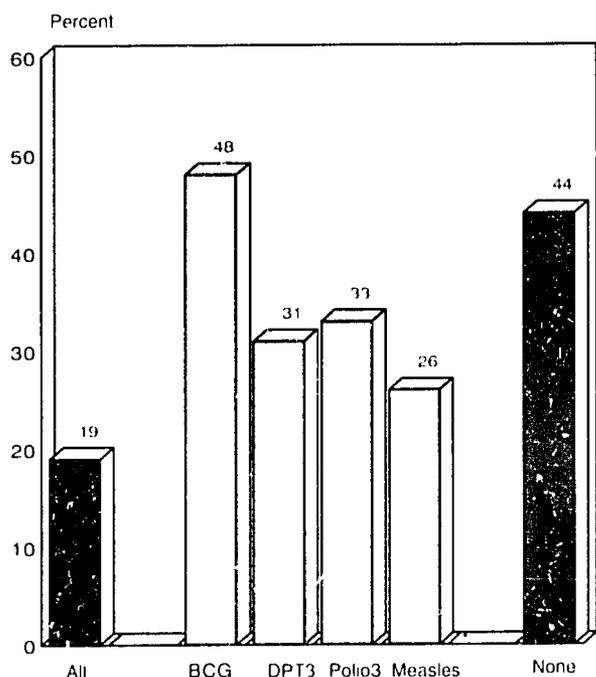
Percentage of Children Given Milk, Other Liquid, or Solid/Mushy Food the Day Before the Interview



Note: Based on youngest child being breastfed, Milk refers to fresh milk and tinned/powdered milk



Figure 13
Vaccination Coverage Among Children Age 12-23 Months



Vaccination of Children

- The Universal Immunization Programme (UIP) aims to vaccinate all children against six preventable diseases, namely tuberculosis, diphtheria, whooping cough (pertussis), tetanus, poliomyelitis and measles. The performance of the UIP has been poor in Assam. Among children age 12-23 months, only 19 percent are fully vaccinated against the six common childhood diseases. Forty-eight percent have been vaccinated against tuberculosis (BCG), nearly one-third have received all three doses of DPT (31 percent) and polio (33 percent) vaccines, and 26 percent have been vaccinated against measles. However, 44 percent of children age 12-23 months did not receive any vaccination at all.

Only 19 percent of young children are fully vaccinated against six serious but preventable childhood diseases and 44 percent have not received a single dose of vaccine.

- Forty percent of children in urban areas are fully vaccinated, compared with 17 percent in rural areas. The percentage fully vaccinated is 18 and 20 percent, respectively for boys and girls.

Child Morbidity and Treatment Patterns

- During the two weeks preceding the survey, 11 percent of children under age 4 had a cough accompanied by fast breathing (symptoms of acute lower respiratory infection), 25 percent had fever and 6 percent suffered from diarrhoea. Two percent of children had an episode of diarrhoea during the preceding 24 hours. Between 32 and 41 percent of these sick children were taken to a health facility or provider for treatment.
- It is significant to note that 26 percent of children suffering from diarrhoea were not given any treatment at all, either at home or in a health facility. Moreover, 55 percent of children with diarrhoea were not given Oral Rehydration Salts (ORS) or the recommended home solution or increased fluids. Fifty-three percent of mothers who had births during the four years preceding the survey know about ORS packets, and only 32 percent have ever used them.

Nutritional Status of Children

- Both chronic and acute undernutrition are very high in Assam. One half of all children under age four are underweight and 52 percent are stunted. The proportion of children who are severely undernourished is also notable — 19 percent in the case of weight-for-age and 26 percent in the case of height-for-age. Wasting, which is the most serious nutritional problem, is also quite evident in Assam, affecting one in every ten children.

Half the young children are underweight for their age and half are stunted.

Figure 14
Treatment of Diarrhoea in the Two Weeks Preceding the Survey (Children Under 4)

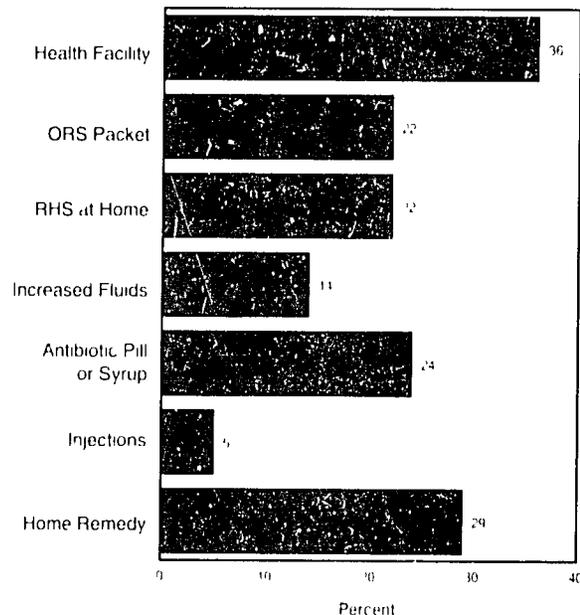
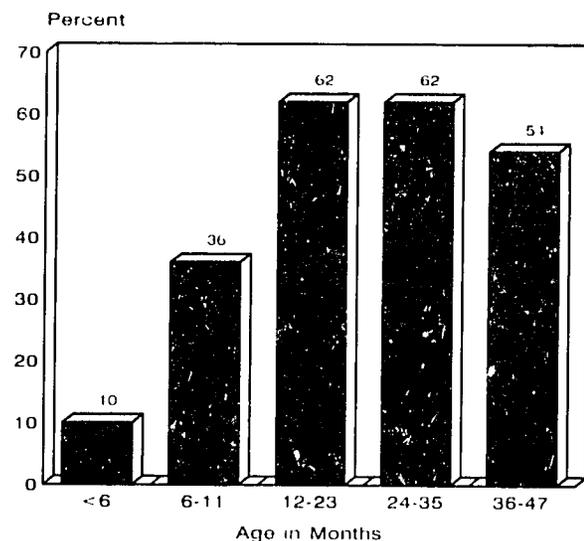
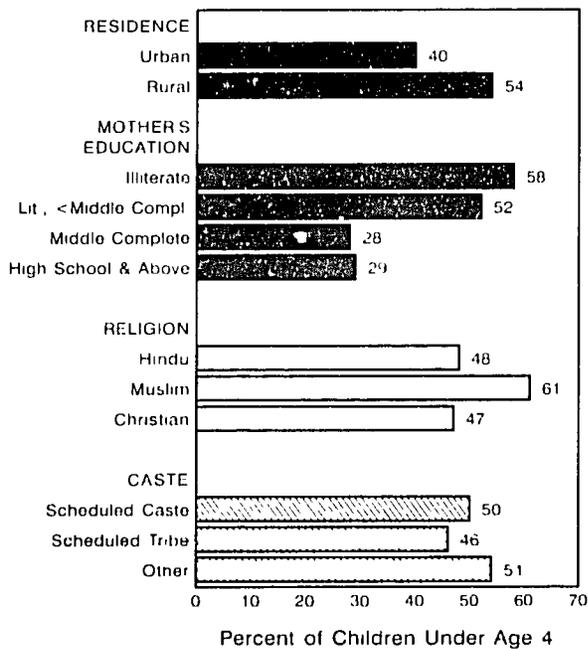


Figure 15
Percentage of Children Under Age Four Who Are Underweight, by Age



Note: Percentage of children more than 2 standard deviations below the median of the International Reference Population

Figure 16
Chronic Undernutrition (Stunting) by Selected Characteristics



- Undernutrition is least common among the youngest children (under 6 months). However, nutritional status deteriorates dramatically over the first 3 years of life. Boys in Assam are slightly more likely to be undernourished than girls. Undernutrition is considerably higher in rural areas than in urban areas.
- The variability by educational level is striking, although here as elsewhere, it must be noted that the majority of all children, more than 60 percent, have illiterate mothers. Children of illiterate mothers are more than twice as likely to be undernourished as children of mothers with at least a high school education. But even among the latter group, 22 percent of the children are underweight and 29 percent are stunted.

KNOWLEDGE OF AIDS

- Knowledge of the existence of Acquired Immune Deficiency Syndrome (AIDS) is very limited in Assam, with only 8 percent of women age 13-49 indicating that they had ever heard of the illness. Women age 35 or more, those living in urban areas, and Hindu women are more likely to have heard of AIDS than others. Women of scheduled tribes are less likely to have heard about AIDS than others. The largest differentials in knowledge of AIDS are by educational level. Less than 1 percent of illiterate women have heard of AIDS compared with 70 percent of women who have at least a high school education.

Only 8 percent of women age 13-49 had ever heard of AIDS.

- Among women who have heard of AIDS, the percentage with misconceptions about different ways of getting AIDS ranges from 32 percent who think it can be contracted from shaking hands with someone with AIDS to 69 percent who think that AIDS can be contracted from stepping on urine/stool of a person who has AIDS. Thirty-three percent of women who have heard of AIDS think it is curable, and 9 percent think an AIDS vaccine exists. Thirty-six percent correctly think that AIDS can be avoided by practising safe sex, 25 percent or less have knowledge of any one of the other means of prevention, such as use of condoms, checking blood before transfusions, sterilizing needles and syringes for injection, and avoiding pregnancy when infected with AIDS.
- Television is the major source of information about AIDS among women who have heard of the disease, followed by radio and newspapers.



CONCLUSIONS

Fertility and Family Planning

- The total fertility rate estimated from the NFHS in Assam is 3.5 children per woman. Currently, only 43 percent of currently married women use a contraceptive method, more than half of whom practise traditional methods. If all the women who say they want to space or limit births were to use family planning, the contraceptive prevalence rate would increase from 43 percent to 65 percent. The majority of women who intend to use contraception in the future (66 percent) prefer to use modern methods and only 19 percent prefer to use traditional methods. Among the modern methods, preference is greater for spacing rather than terminal methods. This indicates that the potential demand for modern methods, especially modern spacing methods, is quite strong and suggests that in view of the inefficiency of traditional methods in fertility control, increasing attention should be paid to promote modern methods of family planning.
- Although unmet need for family planning is substantial, 46 percent of women say they do not intend to use contraception at any time in the future. This finding suggests that it will be difficult for the family planning programme to attain its goals without a strong Information, Education and Communication (IEC) component to motivate more couples to use contraception. The accessibility of modern methods of family planning and quality of services also need to be improved to overcome low motivation and to encourage the continued use of modern methods of family planning.

Maternal and Child Health

- Various indicators of maternal and child health show that in almost every respect, Assam is not faring well. Despite the decline in infant mortality (10 percent over a ten-year period), 1 in every 7 children dies before reaching age five. Most babies (89 percent) are delivered at home, and less than one-fifth of deliveries are assisted by a doctor or a nurse/midwife. Only 19 percent of children age 12-23 months are fully vaccinated, and 44 percent of children have not received any vaccinations at all.
- Inadequate nutrition continues to pose a serious problem: half the children are underweight and 52 percent are stunted. Mother's level of education is the single most important factor related to nutritional status of children as undernutrition declines steadily with the increasing educational attainment of the mother. Part of the reason for high prevalence of undernutrition among children is the late initiation of breastfeeding and late introduction of solid/mushy foods in the child's diet. Although breastfeeding is universal, and breastfeeding is continued for a fairly long duration, half of babies are not given breast milk within the first day after the birth. It is important that infants should be exclusively breastfed until age 4 months, but even at age 0-1 months, one-fifth children are given water or other supplements along with the breast milk. Only 40 percent of the children 6-9 months of age receive both breastmilk and solid foods as is recommended.
- The improvement of services is crucial to the success of the Child Survival and Safe Motherhood (CSSM) programme. The importance of a strong IEC package in the

CSSM programme cannot be overemphasized. Such a package is necessary to inform couples about the importance of antenatal care and safe delivery conducted under hygienic conditions, the advantages of giving colostrum to babies, the correct timing for introducing supplementary food to a child's diet, the importance of immunizations against six serious but preventable diseases, the use of oral rehydration therapy for children suffering from diarrhoea, the advantages of a small family and the disadvantages of early childbearing and inadequate childspacing. The lack of exposure of most women to electronic media and their inability to read indicate the need for alternative communication strategies, such as the distribution of video cassettes with culturally appropriate programmes that can be shown on community television sets.

rate of 50 per 1,000 live births (the infant mortality rate in Assam during 1988-92 was 89); an under-five mortality rate of 70 per 1,000 (under-five mortality in Assam during 1988-92 was 142); a crude death rate of 9 per 1,000 population (the crude death rate in Assam was 11 during 1991-92); and a crude birth rate of 27 per 1,000 (the crude birth rate in Assam during 1990-92 was 30). The national targets for service coverage include 100 percent coverage of antenatal care (women in Assam received antenatal care for only 49 percent of their pregnancies in 1989-92); 100 percent of deliveries by trained attendants (only 18 percent of deliveries were attended by a doctor or a nurse/midwife in 1989-92), and a couple protection rate of 75 percent among couples in the reproductive ages (in Assam only 43 percent were using family planning in 1992-93). These comparisons reveal the task ahead for Assam.

Achievement of Programme Objectives

- Major national objectives of the CSSM programme adopted in the Eighth Five Year Plan (1992-97) are to achieve an infant mortality



FACT SHEET: ASSAM

1991 Population Data Office of the Registrar General and Census Commissioner

Total population (millions)	22.4
Percent urban	11.1
Percent scheduled caste	7.4
Percent scheduled tribe	12.8
Decadal population growth rate (1981-91)	24.2
Crude birth rate (per 1,000 population)	31.3
Crude death rate (per 1,000 population)	10.3
Life expectancy at birth (years) ¹	
Male	53.6
Female	54.2

National Family Health Survey, 1992-93

Sample Population

Ever-married women age 13-49	3,006
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Background Characteristics of Women Interviewed

Percent urban	12.1
Percent illiterate	59.3
Percent completed secondary school or higher	7.1
Percent Hindu	67.1
Percent Muslim	28.5
Percent Christian	4.0
Percent working	18.4

Marriage and Other Fertility Determinants

Percent of women 15-49 currently married	65.5
Percent of women 15-49 ever-married	71.9
Singulate mean age at marriage for females (in years)	21.6
Singulate mean age at marriage for males (in years)	27.9
Percent of women married to first cousin ²	1.6
Median age at marriage among women age 25-49	16.9
Median months of breastfeeding ³	27.8
Median months of postpartum amenorrhoea ⁴	10.2
Median months of postpartum abstinence ⁴	2.9

Fertility

Total fertility rate ⁵	3.5
Mean number of children ever born to women age 40-49	5.7

Desire for Children

Percent of currently married women who	
Want no more children or are sterilized	62.2
Want to delay next birth at least 2 years	22.7
Mean ideal number of children ⁶	3.2
Percent of births in the last four years which were	
Unwanted	9.7
Mistimed	19.2

Knowledge and Use of Family Planning

Percent of currently married women	
Knowing any method	97.5
Knowing a modern method	96.9
Knowing a source for a modern method	89.7
Ever used a method	62.5
Currently using any method	42.8

Percent of currently married women currently using:

Pill	2.8
IUD	0.9
Injection	0.0
Condom	1.7
Female sterilization	12.1
Male sterilization	2.3
Periodic abstinence	15.7
Withdrawal	6.3
Other method	0.9

Mortality and Health

Infant mortality rate ⁷	88.7
Under-five mortality rate ⁷	142.2
Percent of births ⁸ whose mothers	
Received antenatal care from a doctor or health professional	46.4
Received 2 or more tetanus toxoid injections	34.9
Percent of births ⁹ whose mothers were assisted at delivery by	
Doctor	11.1
Nurse/midwife	6.7
Traditional birth attendant	21.1
Percent of children 0-1 months who are breastfeeding	100.0
Percent of children 12-13 months who are breastfeeding	92.6
Percent of children 12-23 months who received ⁹	
BCG	48.2
DPI (three doses)	31.0
Polio (three doses)	32.7
Measles	25.8
All vaccinations	19.4
Percent of children under 4 years ¹⁰ who	
Had diarrhoea in the 2 weeks preceding the survey	6.3
Had a cough accompanied by rapid breathing in the 2 weeks preceding the survey	11.3
Had a fever in the 2 weeks preceding the survey	24.6
Are chronically undernourished (stunted) ¹¹	52.2
Are acutely undernourished (wasted) ¹¹	10.8

¹ 1986-90

² Based on ever-married women

³ Current status estimate based on births during the 48 months preceding the survey

⁴ Current status estimate based on births during the 36 months preceding the survey

⁵ Based on births to women age 15-49 during the three years preceding the survey

⁶ Based on ever-married women age 13-49, excluding women giving non-numeric responses

⁷ During the five years preceding the survey (1988-92)

⁸ Births in the period 1-47 months preceding the survey

⁹ Based on information from vaccination cards and mothers' reports

¹⁰ Children born in the period 1-47 months preceding the survey

¹¹ Stunting assessed by height-for-age, wasting assessed by weight-for-height, undernourished children are those more than 2 standard deviations below the median of the International Reference Population, recommended by the World Health Organization