

# International Brief

## Population Trends: India

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- Each year India adds more people to the world's population than any other country. In 1997, there were almost as many babies born in India (about 25 million) as in all of Sub-Saharan Africa and more than in China (21 million).
- The total fertility rate is declining—by 42 percent since the mid-1960's—but the continued increase in the number of women of reproductive age suggests continued high numbers of births.
- Contraceptive prevalence has risen substantially from 13 percent of married women using contraception in 1970 to 41 percent in 1993. Yet close to 35 million married women have an unmet need for family planning.
- HIV/AIDS in India is spreading fast. With an estimated 2 to 5 million infected people in mid-1996, India has more adults living with HIV than any other country.
- India's States vary widely with respect to fertility, mortality, and contraceptive use. In general, there is a north/south gradient—most western and southern States have lower mortality, lower fertility, and higher contraceptive use. In the north, Uttar Pradesh, the most populous State, has high mortality, low contraceptive use, and the highest fertility.

### Population Size, Growth, and Structure

India, with a current population of 967 million, will most likely surpass China in population size by about the middle of the next century. India's population is currently growing at a rate (1.7 percent annually) about 70 percent higher than that of China and will continue growing faster than China for many years in the future.

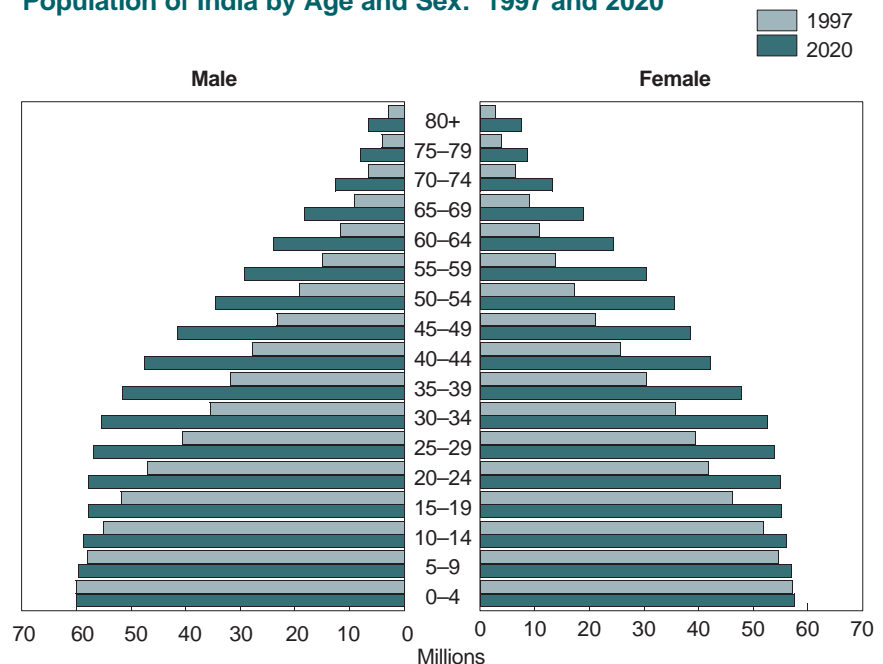
Currently, India has a young population which will grow somewhat older largely as a result of the fertility decline which is already underway. Between now and 2020, both the working age

population and the number of women in childbearing ages will grow more rapidly and will become larger proportions of the total population than now (figure 1).

### Mortality and HIV/AIDS

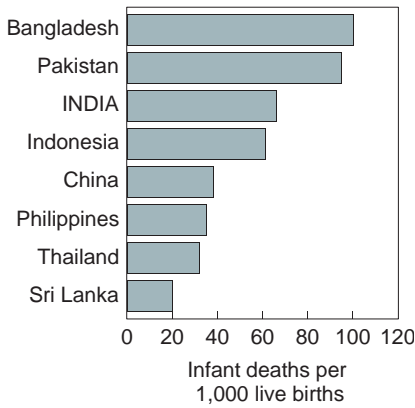
India, like other developing countries, has achieved substantial improvements in mortality. Since independence (1947), life expectancy has roughly doubled from about 32-33 years to 62 years in 1997. The infant mortality rate (IMR) has been reduced from 200-225 infant deaths per 1,000 births to 66. India has a lower IMR than its immediate neighbors—Pakistan and Bangladesh—but a

Figure 1.  
**Population of India by Age and Sex: 1997 and 2020**



Source: U.S. Bureau of the Census, IPC, International Database.

Figure 2.  
**Infant Mortality Rate for Selected Asian Countries: 1997**



Source: U.S. Bureau of the Census, IPC, International Database.

much higher rate than China, Sri Lanka, and various other South East Asian countries (figure 2).

Among India's major States, IMR's (1992-94) range from 15 to 109 per 1,000 births. Uttar Pradesh, the largest State, has one of the highest rates (93).

Inadequate antenatal care and delivery services, low levels of immunization among children, and a substantial proportion of high-risk births (see below) are some of the reasons for the relatively high mortality of infants and children in India.

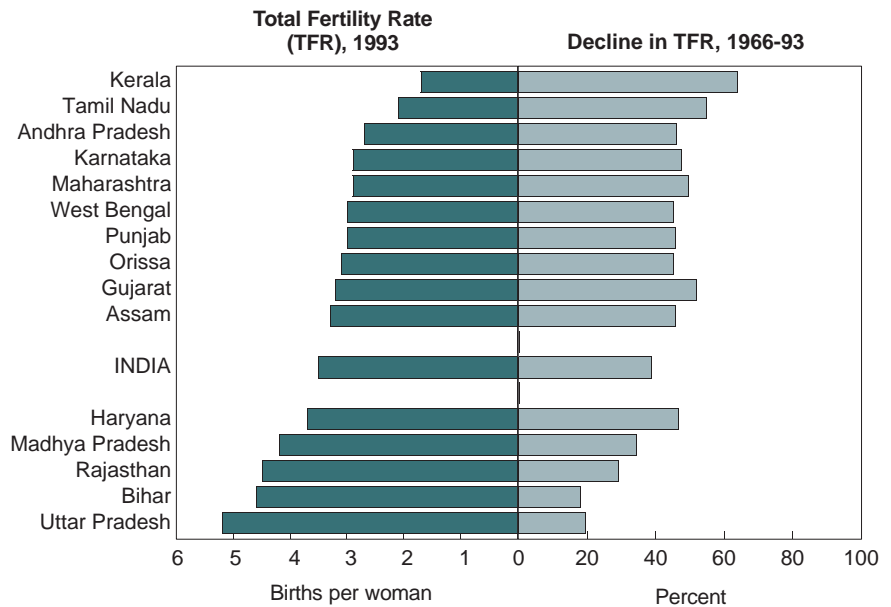
Future improvements in mortality may be slowed or even stalled by

the HIV/AIDS epidemic in India. While HIV was introduced into India at a later date than much of the rest of the world, the epidemic is extensive, with rapid growth in some geographic areas. Studies of high-risk populations (commercial sex workers, intravenous drug users, and sexually transmitted disease patients) show high and rapidly rising rates of HIV infection, exceeding 50 percent in some areas of the country. Recent studies show that the virus also is

spreading in the general population. For example, the level of HIV seroprevalence among pregnant women in the State of Tamil Nadu quadrupled between 1989 and 1991 from a rate of 0.2 to 0.8 percent; in Manipur it was 2 percent in 1994 (U.S. Bureau of the Census, 1995).

A recent report (AIDSCAP, et al., 1996) estimates that between 2 and 5 million people in India are currently infected with HIV. An

Figure 3.  
**Total Fertility Rate and Fertility Decline by State: 1966 to 1993**



Source: NRC, 1984; and IRG, 1996.

earlier report (WHO, 1995) had estimated that at the end of 1994, 1.75 million adults were infected.<sup>2</sup>

The level of HIV seroprevalence varies by regions. It is higher in south and west India compared with the rest of the country (AIDSCAP, et al., 1996).

**Fertility**

Fertility in India has declined substantially, from a total fertility rate (TFR) of 5.7 children per woman in

**Selected Health Indicators: 1992-93**

Percent of births which are high risk <sup>1</sup> .....	52
Percent of births whose mothers received:	
Antenatal care from a doctor or other health professional .....	49
Two or more tetanus toxoid injections .....	54
Percent of births in which mothers were assisted at delivery by:	
Doctor .....	22
Nurse/midwife .....	13
Traditional birth attendant .....	35
Percent of children 12-23 months who were fully vaccinated .....	35

<sup>1</sup> Births falling in one or more of the following categories: occurring to women under age 18 or over age 34, occurring within 24 months of last birth, and birth order higher than 3.

Source: IIPS, 1995.

<sup>2</sup> The population and other projected indicators for India have not been adjusted to take account of AIDS mortality due to lack of sufficiently reliable data.

the mid-1960's to 3.3 children in 1997. Since the mid-1960's, India has covered two-thirds of the distance to the replacement fertility of just over two births per woman.

Fertility varies widely among States; it is significantly below the national average in the southern and western States and higher in the others. With a TFR of 5.2 in 1993, Uttar Pradesh clearly stands out as having especially high fertility, nearly 50 percent above the national level (figure 3).

### Contraceptive Prevalence

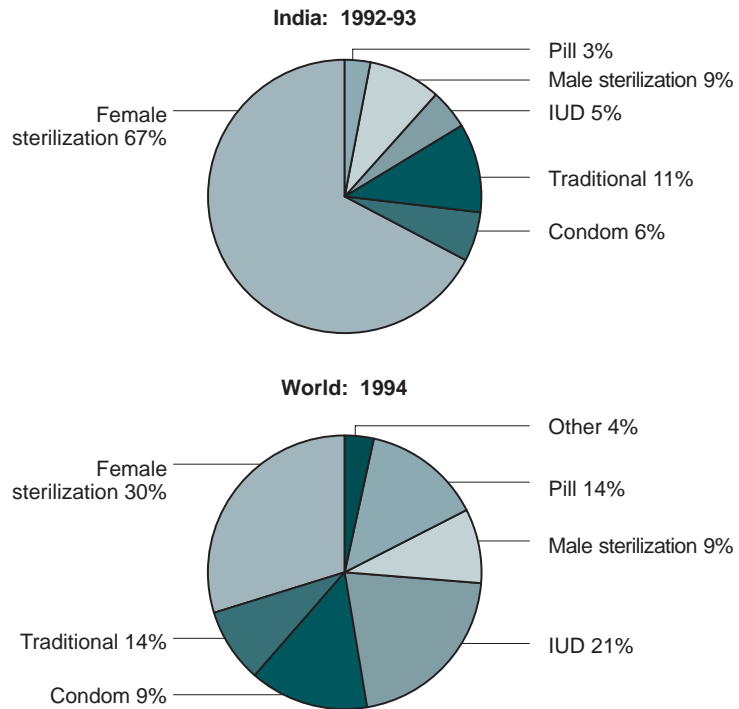
The national family planning program, which was established in 1952, has played an important role in India's fertility decline. When the program began, there was little awareness or use of modern birth control methods. Four decades later, the 1992-93 National Family Health Survey (NFHS) found nearly universal knowledge of family planning, with 96 percent of married women ages 13 to 49 years having heard of at least one modern method, and almost 41 percent, or almost 70 million women, using contraception.

Eighty-nine percent of married women who practiced family planning in India relied upon modern contraceptive methods. Female sterilization, the method which is strongly promoted by India's family planning program, was by far the most widely used method. Nearly 67 percent of married women who were using contraception, or 47 million women, had been sterilized compared with an average of only 30 percent for the entire world. Spacing methods, primarily available through the private sector, were used by a small proportion of users: the pill by 3 percent, IUD by 5 percent, and condom by 6 percent (figure 4).

Education, religion, place and State of residence are among the factors that strongly correlate with contraceptive use in India

Figure 4.

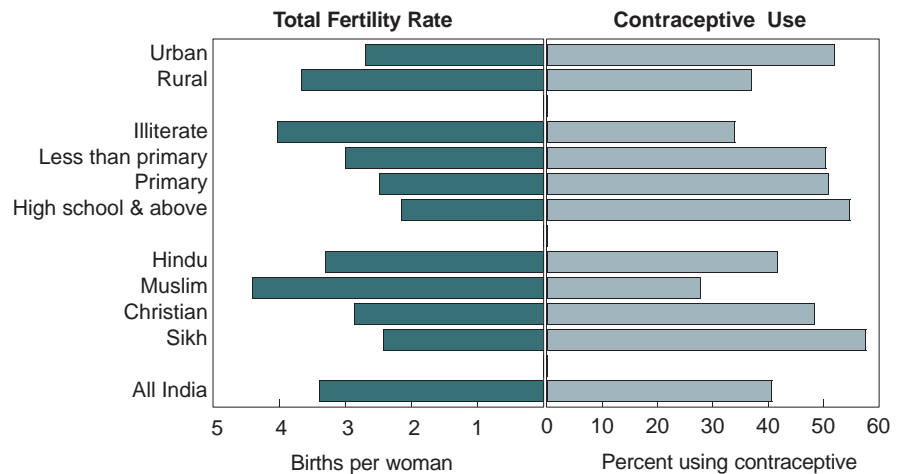
### Percent Distribution of Contraceptive Users by Method



Source: IIPS, 1995; and UN, 1994

Figure 5.

### Fertility and Contraceptive Prevalence: 1992-93

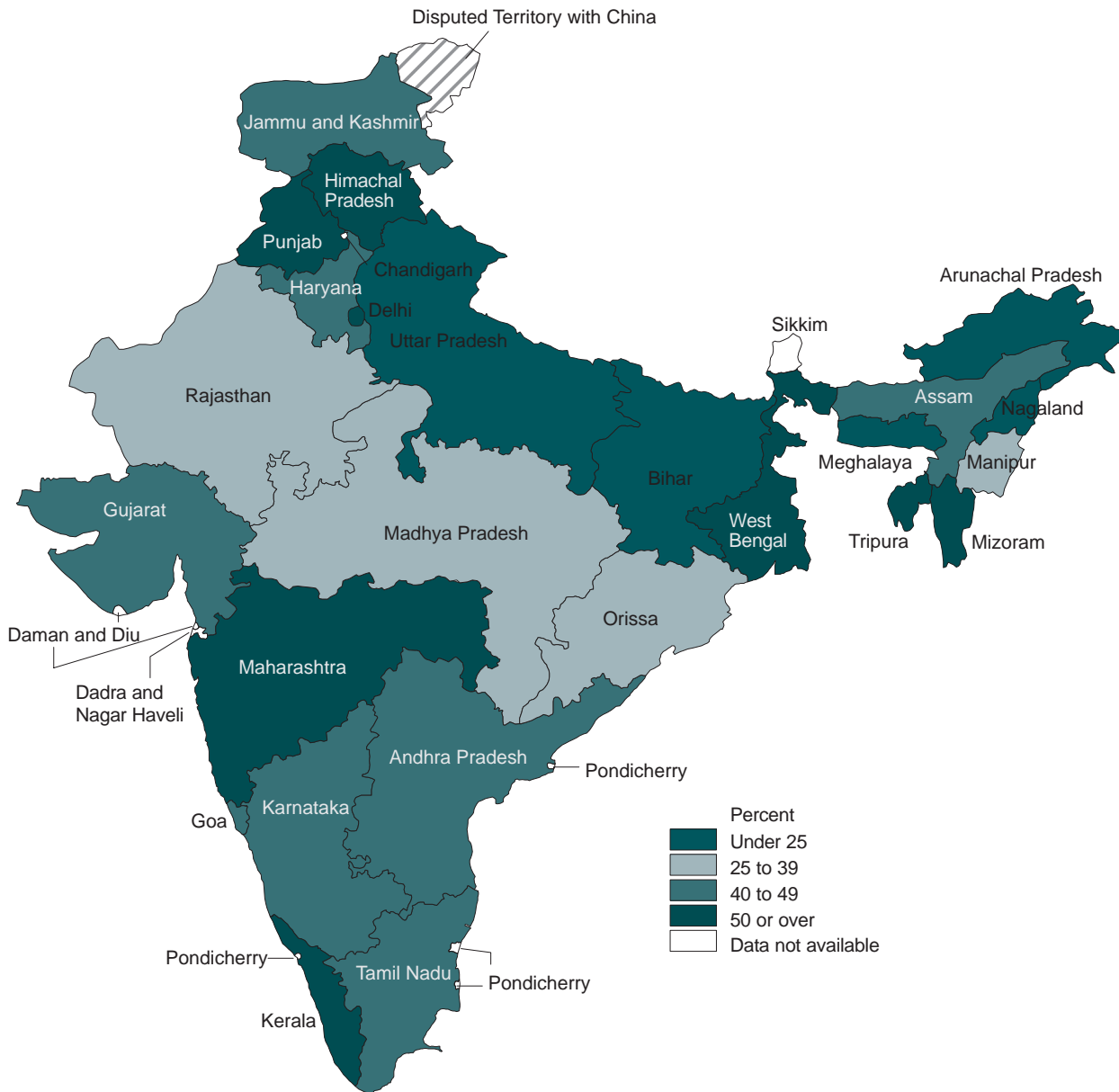


Source: IIPS, 1995.

(figure 5). Nearly half of the married women with some primary schooling use contraception compared with one third of illiterate women. Differentials by religion are also strong. Higher prevalence rates (48 to 63 percent) are found among small minority religions

(Jains, Sikhs, Buddhists, and Christians) than among Hindus (42 percent), and the lowest use (28 percent) is found among Muslims. A higher proportion of urban married women (51 percent) than rural married women (37 percent) use contraceptives.

Figure 6.  
**Percent of Married Women Using Contraception by State: 1992-93.**



Note: The Union Territories of Lakshadweep and the Andaman and Nicobar Islands are not shown on this map.  
 Source: IIPS, 1995

## Selected Population and Demographic Indicators by State for India

State or Territory	Population (In thousands) 1991	Life expectancy (years)		Infant mortality rate (per 1,000 births) 1992-94	Total fertility rate (per woman) 1993	Percent of married women 15 to 49			Percent of females illiterate (6 years and over) 1992-93
		Male 1988-92	Female 1988-92			Using any contra- ceptive method 1992-93	Using steriliza- tion 1992-93	With unmet need for family planning 1992-93	
<b>India, Total</b>	846,303	58.6	59.0	75.0	3.5	40.6	30.8	19.5	56.7
<b>Major States</b>									
Andhra Pradesh	66,508	59.1	61.5	66.0	2.7	47.0	44.8	10.4	61.5
Assam	22,414	53.9	54.4	78.0	3.3	42.8	14.4	21.7	49.3
Bihar	86,374	58.4	56.4	69.0	4.6	23.1	18.6	25.1	71.4
Gujarat	41,310	58.0	60.5	63.0	3.2	49.3	41.0	13.1	48.7
Haryana	16,464	62.1	63.2	69.0	3.7	49.7	34.8	16.4	54.1
Jammu and Kashmir <sup>1</sup>	(NA)	(NA)	(NA)	45.0	3.1	49.4	29.7	17.5	48.2
Karnataka	44,977	60.5	63.6	68.0	2.9	49.1	42.5	18.2	53.5
Kerala	29,099	68.1	73.4	15.0	1.7	63.3	48.3	11.7	17.6
Madhya Pradesh	66,181	53.8	53.2	102.0	4.2	36.5	31.5	20.5	65.7
Maharashtra	78,937	62.0	64.7	54.0	2.9	53.7	46.1	14.1	44.1
Orissa	31,660	55.8	55.1	109.0	3.1	36.3	31.6	22.4	58.6
Punjab	20,282	65.4	67.2	55.0	3.0	58.7	34.0	13.0	48.0
Rajasthan	44,006	56.2	56.7	85.0	4.5	31.8	27.7	19.8	74.6
Tamil Nadu	55,859	60.7	62.5	58.0	2.1	49.8	39.5	14.6	43.9
Uttar Pradesh	139,112	56.1	54.5	93.0	5.2	19.8	13.1	30.1	68.5
West Bengal	68,078	60.8	62.3	61.0	3.0	57.4	30.6	17.4	44.8
<b>Smaller States</b>									
Arunachal Pradesh	865	(NA)	(NA)	63.0	4.2	23.6	10.7	20.4	57.9
Goa	1,170	(NA)	(NA)	14.0	1.9	47.8	30.5	15.7	26.9
Himachal Pradesh	5,171	63.2	63.0	63.0	3.0	58.4	45.8	14.9	42.6
Manipur	1,837	(NA)	(NA)	23.0	2.8	34.9	13.8	21.7	37.0
Meghalaya	1,775	(NA)	(NA)	49.0	3.7	20.7	10.0	25.1	39.8
Mizoram	690	(NA)	(NA)	15.0	2.3	53.8	44.6	11.9	11.1
Nagaland	1,210	(NA)	(NA)	6.0	3.3	13.0	6.4	26.7	28.2
Sikkim	406	(NA)	(NA)	37.0	(NA)	(NA)	(NA)	(NA)	(NA)
Tripura	2,757	(NA)	(NA)	43.0	2.7	56.1	19.1	13.5	35.6
<b>Union Territories</b>									
A and N Islands	281	(NA)	(NA)	30.0	(NA)	(NA)	(NA)	(NA)	(NA)
Chandigarh	642	(NA)	(NA)	32.0	(NA)	(NA)	(NA)	(NA)	(NA)
Dadra and Nagar Haveli	138	(NA)	(NA)	78.0	(NA)	(NA)	(NA)	(NA)	(NA)
Daman and Diu	102	(NA)	(NA)	43.0	(NA)	(NA)	(NA)	(NA)	(NA)
Delhi	9,421	(NA)	(NA)	43.0	3.0	60.3	23.3	15.4	29.2
Lakshadweep	52	(NA)	(NA)	27.0	(NA)	(NA)	(NA)	(NA)	(NA)
Pondicherry	808	(NA)	(NA)	31.0	(NA)	(NA)	(NA)	(NA)	(NA)

(NA) Not available.

<sup>1</sup>1991 Census was not taken in Jammu and Kashmir. The estimated population for the State is 7,718,700. The total population for India includes this estimate for Jammu and Kashmir. Other information shown for Jammu and Kashmir is for only the Jammu Region of the State.

Sources: 1991 Census Population: IRG 1992. Total fertility rate for major States (except Jammu and Kashmir) and infant mortality rate (except Mizoram): IRG 1996. Life expectancy: IRG, 1995. All other data: IIPS, 1995.

Among the major States, contraceptive use ranges from more than 63 percent of married women using contraceptives in Kerala to less than 20 percent in Uttar Pradesh (figure 6).

**Fertility Preference and Unmet Need for Family Planning**

According to the NFHS, a large majority of married women in India

(77 percent) prefer to regulate their fertility: 26 percent do not want another child, 31 percent (or their husbands) were sterilized, and 20 percent want to postpone their next birth.

However, the survey found an incongruence between women's desire and actual practice to regulate their fertility. Nearly 23 percent of births during the 4-year period be-

fore the survey were not wanted by women: 14 percent of all births were mistimed and 9 percent were not wanted at all. If there were no unwanted births in India, its TFR would be lower by nearly three-quarters of a child. For Uttar Pradesh, avoidance of unwanted births could reduce the TFR by at least one child.

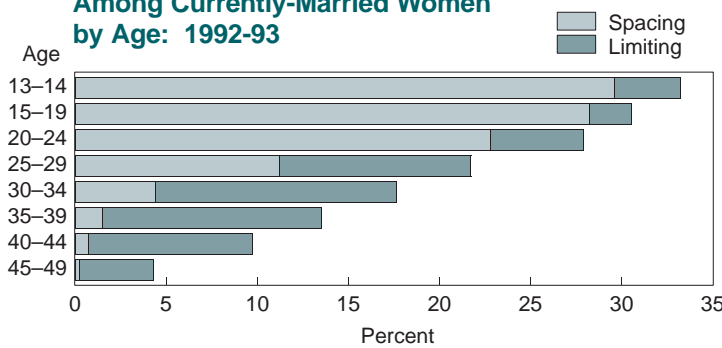
A substantial portion of the total demand for family planning services remains unsatisfied. According to the NFHS, nearly 20 percent of married women in India have an unmet need for family planning: 8.5 percent want to stop having children and 11.0 percent want to postpone their next birth.

Unmet need for spacing is a substantial portion of the total unmet need for family planning—most of the unmet need among younger women is for spacing (figure 7). This suggests that more attention should be given to methods other than sterilization, such as condom, the pill, and IUD.<sup>3</sup> Further, fully meeting today's unmet need for family planning, that is, providing services to an additional 35 million women, will require substantial additional resources.

If this were accomplished, India could meet its goal for 2016 of having 60 percent of married women practicing family planning. To meet this goal in 2016, will require that 159 million women practice family planning (about double the current number).

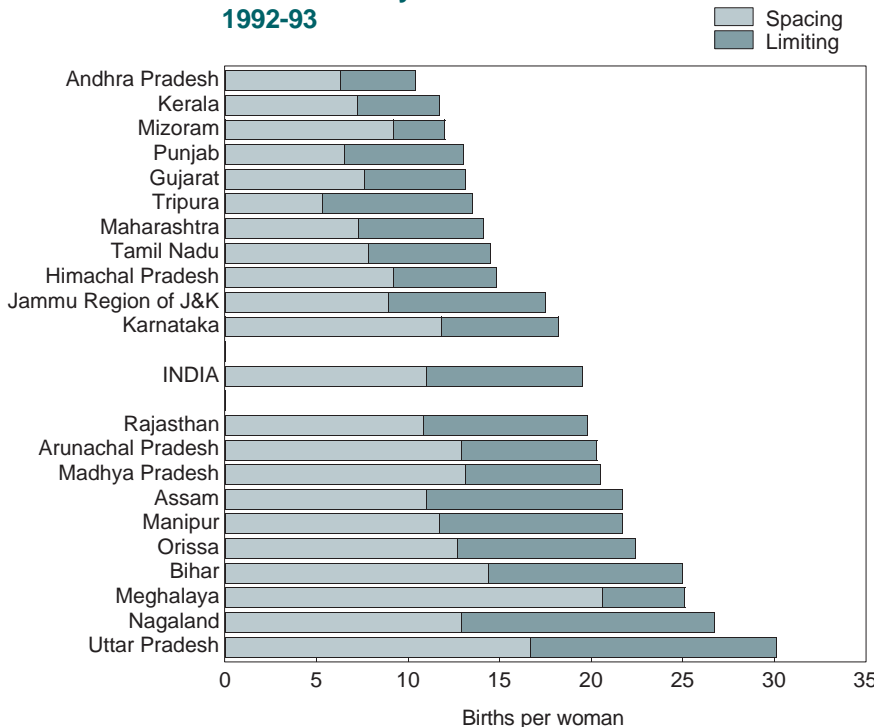
<sup>3</sup> Further direct evidence supporting the view that the family welfare program should pay greater attention to temporary methods of family planning—the pill, IUD, condom, and injections—comes from the responses of intended users in the future which show that the potential demand for these methods is substantial. According to the NFHS, nearly 31 percent of non-contracepting married women in India who intend to use family planning in the future indicate preference for temporary methods. A recent survey carried out in the state of Uttar Pradesh in 1995 found that as large as 42 percent of the intended users in the state prefer such methods (SIFPSA, et al., 1996).

Figure 7. **Unmet Need for Family Planning Among Currently-Married Women by Age: 1992-93**



Source: IIPS, 1995.

Figure 8. **Unmet Need by States of India: 1992-93**



Source: IIPS, 1995.

Unmet need for family planning also varies by States. In most southern and western States, where the family planning program is considered to be more effective, unmet need is 15 percent or less. In contrast, 30 percent of women in Uttar Pradesh, or 8 million, have unmet need for family planning (figure 8).

### Literacy

Literacy and education, especially of females, affect fertility through greater access and practice of contraception and desire for smaller family size. Literacy in India has improved steadily. The adult literacy rate (ages 15 and over) has risen from 34 percent in 1971 to 52 percent in 1995. Although female literacy in India has improved at a faster rate than that of men, in 1995 women continued to have a much lower rate (38 percent) than men (66 percent) (UNESCO, 1995). Efforts continue to improve schooling and literacy, especially for girls and women. Many States have begun "total literacy campaigns" to eliminate illiteracy among the disadvantaged population ages 15 to 34 (Visaria and Visaria, 1995).

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*The International Programs Center (IPC) collects, assesses, and analyzes population and related statistics from all countries. Based on these data, IPC produces the demographic estimates and projections used in this series of reports. This report was prepared with the support of the U.S. Agency for International Development. More detailed information is available from the International Programs Center, Population Division, Bureau of the Census, Washington, DC 20233-8860.*

Table 1.  
**Population Indicators for India:  
1990 to 2020**

Indicator	1995	1997	2000	2020
<b>POPULATION (thousands)</b>				
Total country . . . . .	933,252	966,783	1,016,118	1,334,914
Urban . . . . .	250,111	266,832	290,610	551,319
Rural . . . . .	683,140	699,951	725,508	783,594
<b>Male, total country</b>				
All ages . . . . .	483,197	500,005	524,635	681,114
0 to 14 . . . . .	171,370	173,421	175,443	178,643
6 to 12 . . . . .	78,583	80,092	81,281	83,141
13 to 18 . . . . .	61,960	63,449	65,544	69,779
15 to 44 . . . . .	224,906	234,848	249,411	327,395
15 to 49 . . . . .	246,921	258,173	274,907	368,964
15 to 64 . . . . .	290,327	304,049	325,089	456,859
65 and over . . . . .	21,500	22,536	24,103	45,613
<b>Female, total country</b>				
All ages . . . . .	450,055	466,778	491,483	653,799
0 to 14 . . . . .	160,657	163,434	165,764	170,595
6 to 12 . . . . .	73,858	75,308	76,399	79,385
13 to 18 . . . . .	54,908	57,404	61,213	66,516
15 to 44 . . . . .	209,847	218,870	232,802	308,519
15 to 49 . . . . .	229,472	239,917	256,331	345,034
15 to 64 . . . . .	268,824	281,625	302,300	435,262
65 and over . . . . .	20,573	21,719	23,419	47,942
<b>Married females</b>				
15 to 49 . . . . .	180,538	188,902	201,764	277,560
15 to 19 . . . . .	16,978	17,699	18,963	21,180
20 to 24 . . . . .	32,417	33,116	34,752	43,638
25 to 29 . . . . .	35,307	36,225	37,083	49,430
30 to 34 . . . . .	31,483	33,198	35,363	48,982
35 to 39 . . . . .	26,301	27,965	30,714	44,147
40 to 44 . . . . .	21,312	22,746	24,818	37,329
45 to 49 . . . . .	16,740	17,953	20,071	32,854
<b>DEPENDENCY RATIO</b>				
Both sexes . . . . .	66.9	65.1	62.0	49.6
<b>LIFE EXPECTANCY AT BIRTH (years)</b>				
Both sexes . . . . .	61.5	62.4	63.9	72.1
Male . . . . .	60.8	61.7	63.0	70.2
Female . . . . .	62.1	63.2	64.9	74.2
<b>INFANT MORTALITY RATE (per 1,000 births)</b>				
Both sexes . . . . .	70.1	65.5	58.5	25.9
Male . . . . .	71.4	66.8	59.8	27.6
Female . . . . .	68.7	64.1	57.1	24.1
<b>UNDER-FIVE MORTALITY RATE (per 1,000 births)</b>				
Both sexes . . . . .	101.8	94.2	82.8	33.1
Male . . . . .	98.2	91.3	80.9	34.9
Female . . . . .	105.6	97.3	84.8	31.3
<b>TOTAL FERTILITY RATE (per woman)</b>				
	3.4	3.3	3.1	2.3

Note: Dependency ratio is the number of persons under age 15 and age 65 and over per 100 of those ages 15 to 64 years.

Source: U.S. Bureau of the Census, International Programs Center, International Data Base.

Table 2.  
**Contraceptive Prevalence Among Currently  
Married Women 15 to 49 Years of Age, by  
Method: Selected Years**

Method	Percent current users			Percent distribution of users		
	1980	1988	1992-93	1979	1988	1993
All . . . . .	35.0	44.9	40.7	100	100	100
Pill . . . . .	1.0	1.4	1.2	3	3	3
Condom . . . . .	5.0	5.3	2.4	14	12	6
IUD . . . . .	0.0	1.9	1.9	—	4	5
Sterilization . . . . .	22.0	31.3	30.9	63	70	76
Traditional . . . . .	7.0	5.0	4.3	20	11	11
<b>CHILDLESS WOMEN: 1992-93</b>						
Percent of currently married women ages 45 to 49 . . . . . 2.4						
<b>AVERAGE DURATION OF POSTPARTUM INFECUNDABILITY: 1993</b>						
Number of months . . . . . 11.1						

Sources: ORG, 1990, tables 7.1 and 7.28; and IIPS, 1995, tables 5.8 and 5.24.

Table 3.  
**Average Age of Users of Selected Methods:  
1993**

Method	Average age
All . . . . .	34.0
Pill . . . . .	28.4
Condom . . . . .	29.6
IUD . . . . .	29.3
Female sterilization . . . . .	34.6
Male sterilization . . . . .	39.8
Traditional . . . . .	31.2

Note: Average age of user is calculated at the U.S. Bureau of the Census using the 1992-93 NFHS data on contraceptive prevalence by age.

Source: IIPS, 1995, table 6.5.

Table 4.  
**Fertility Rates**  
(Per 1,000 women)

Age	1980	1988	1993
15 to 19 . . . . .	93	88	70
20 to 24 . . . . .	261	248	234
25 to 29 . . . . .	241	209	190
30 to 34 . . . . .	173	130	114
35 to 39 . . . . .	103	75	61
40 to 44 . . . . .	47	35	28
45 to 49 . . . . .	21	12	10
Total fertility rate per woman . . . . .	4.7	4.0	3.5

Source: U.S. Bureau of the Census, International Programs Center, International Data Base; and IRG, 1995, Statement 18.