India Country Report

Population and Development: 10 Years since ICPD

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Executive Summary

Ten years ago, 179 countries agreed on a Programme of Action that revolutionalised international population policy. The programme of action adapted by acclamation endorses a new strategy which places emphasis on the establishing linkages between population and development and focus on meeting needs of individual women and men rather than on achieving demographic goals.

Over the last 10 years, countries have undertaken several initiatives to translate promises made at Cairo in to policy and programmatic actions. ICPD goals were to be achieved by year 2015. A review of achievements made, constraints during the mid points of programme will help in identifying key future actions to guide policy and programes in next 10 years.

The present document is an attempt to provide on analytical account of issues and processes impacting population and development in India. India crossed the mark of 1 billion in 2000 and emerging as a major economic power in the region. The major challenges remain in improving quality of life for its people. This country paper attempts to provide some insights into current scenario of population and development issues and what are the challenges in achieving population and development goals as articulated in the different policy instruments.

India is in the middle of demographic transition. Both fertility and mortality levels have started falling throughout the country. The lag in the decline in fertility in relation to mortality has resulted in the sizeable growth of India's population so far that will continue in the coming several decades.

Given the scale and diversity of India's population, decline in both mortality and fertility is a significant achievement. Close to 30 percent of India's total population has lowered its fertility to replacement level. Fertility has fallen for women at all ages both in rural and urban areas. Also, fertility has fallen under a wide range of socio-economic and cultural conditions and rising levels of education, influence of mass media, economic changes, continuing urbanization and declines in infant and child mortality have all contributed to fertility decline and will continue to be movers in continuing the fertility transition. The National Population Policy, 2000 has also set the goal of achieving TFR of 2.1 or replacement level of fertility by 2010. Many states will attain that demographic goal or would be very close to attaining it within the time horizon. But some states, especially those in the northern region, will need much more investments not only in the provision of family planning services but in overall development and especially in the heath care for children and women, in order to hasten the pace of fertility transition.

The decline in infant mortality rate has also been quite impressive – from a level of more than 200 per 1000 live births in the 1940s it has come down to less than 70. However, post-neonatal mortality has fallen at a faster rate than the neonatal mortality implying that availability and utilization of antenatal and obstetric services are limited, age at marriage and childbearing continue to be low in India, thereby increasing the risk of complications at the time of childbirth for both the infant and the mother. New programmes for increasing access to skilled birth attendance at birth will result in accelerating the pace of decline.

India has succeeded in combating some of the communicable diseases and is on the verge of eradicating poliomyelitis. At the same time the continuing presence of communicable diseases such as measles, tuberculosis, malaria, indicates that the country is currently experiencing double burden of disease. Along with health problems related to under-development and poverty, the life-style induced illnesses such as heart diseases, cancers that are linked to use of tobacco, alcohol, and pollution are becoming important killers. The National Health Policy clearly recognizes the epidemiological scenario and accordingly the programmes are being recasted.

Since inequality of income is often combined with inequality in access to public services including education, nutrition and health, the Indian government's commitment to step up public spending on health and education is expected to help improve their access and quality for the poor who rely largely on the public sector for accessing these basic services.

To fully understand the distribution of population within the country, migration flows and urbanization process need to be understood. In India, although migrants accounted for nearly 28 percent of the total population in 1991, most of them moved over short distance and women dominated the migration streams; because of the practice of village exogamy, they moved on marriage to live with husbands' families. Notwithstanding the evidence of increasing trend towards rural to urban migration, and reclassification of some rural areas as urban, India has a low level and slow pace of urbanization. At the same time, the million plus cities in India increased from five in 1951 to 35 in 2001 and more than 60 percent of India's urban population lived in them. India's level of urbanization is projected to rise from around 28 percent in 2001 to 36 percent by 2026, when the total population living in urban areas could reach half a billion. Addressing the development needs of urban poor is increasingly getting attention through innovative programmes. In health sector, interventions are underway to engage the private sector in meeting health care needs.

The share of the elderly (age 60 and older) in India's population merits some consideration because their absolute number has continued to grow, and is expected to grow from an estimated 57 million in 1991 to 113-124 or more than double by 2016. A good understanding of their demographic, social and economic characteristics would help design appropriate policy measures and programmes especially for those who are poor and vulnerable, including old age homes, day care centers, and pension schemes.

By sheer number adolescents constitute an important group in India. A large percent of women in India experience pregnancy and childbearing at early age, despite the rising age at marriage, and laws prohibiting early marriage. Early marriage implies early onset of sexual activity, pregnancy and childbearing exposing many adolescent girls to obstetric risks in the form of damage to the reproductive tract, maternal mortality, pregnancy complications, peri-natal and neonatal mortality, abortion related complications, and low birth weight. In the RCH programmes interventions are being planned to address unmet needs of the adolescents for information, counseling and services. The National Population Policy, 2000 has also recognized that adolescents and youth are an under-served group having sexual and reproductive health needs. Along with the efforts to promote schooling among both boys and girls, and reducing gender disparities in education, the NPP 2000 has emphasized the importance of measures to delay marriage in order to create greater awareness among the young people about the consequences of risky sexual behaviour.

The National AIDS Control Organization (NACO) estimated that out of 512,000 new HIV infections in India in 2003, a little over a quarter were women. In more than 85 percent of the cases the source of infection is believed to be unprotected heterosexual sex.. It is also spreading among married women with a single partner. The HIV/AIDS epidemic is expected to have significant impact on the economy due to loss of productivity, both because the disease involves long periods of sickness, and because people in the prime working ages tend to be most severely affected. Its treatment becomes long drawn and the costs mount because the disease stimulates and interacts with other infections such as hepatitis, diarrohea, malaria and tuberculosis. The programme has recently rolled out access to ART for people living with HIV/AIDS. Programme is also supporting targeted interventions, VCTCs, modernizing g blood banks and family health awareness campaigns to raise awareness. Forging partnerships with NGOs, corporate sector and members of civil society is also a very important element in the programme. International foundations have also supporting AIDS prevention, care and support programmes in the country.

Despite the National Policy for Empowerment of Women, 2001 which aims to 'empower women through creating an enabling environment where they can freely exercise their rights both within and outside their homes as equal partners along with men", gender bias in India continues to exist in accessing health care, education, livelihood security, etc. The most glaring gender inequality is evident in the deficit of women in India's population or the sex ratio of the population. Underlying this trend is the preference for male children in India. With fertility transition

under way, the issue of son preference would have to be addressed through providing widespread education to all children, designing a curriculum that is gender-sensitive and emphasizing the worth of daughters or women in family and society and spreading these messages through awareness programmes.

The Indian Government launched in October 1997, the Reproductive and Child Health (RCH) programme aimed to change not only the family welfare policy but also its management and implementation. The goals of RCH included removal of method specific contraceptive targets, increasing utilization of existing facilities rather than creating new structures, and using the voluntary and private sectors to increase access to services and fill gaps left by public sector providers. Under the RCH, the issues of meeting the unmet needs of the couples for limiting fertility as well as spacing the children are being addressed by expanding the choice of methods and improving access to services by involving the private sector, the NGOs and the providers of Indian System of Medicine and social marketing of reversible contraceptive methods. The management of unwanted pregnancy is addressed through provision early and safe abortion services To make motherhood safe, the specific interventions envisaged are enhancing skills of birth attendants, providing basic emergency obstetric care at primary health centers and at community health centers and comprehensive emergency care at the first referral unit hospitals.

The overall goal is to increase institutional deliveries, however, the Government recognizes that in some remote and backward areas creating infrastructure to ensure institutional care will require large resources and take time.

Among the developing countries of the world, India is very fortunate to have wealth of information and data to monitor its developmental activities, and design evidence-based policies. In recent years, the two national family health surveys conducted in the 1990s in all the states of India provide a wealth of information at state level on mortality, fertility, health, family planning situation and a host of other population and health indicators. The district level Reproductive and Child Health surveys give information on the progress of programme interventions as well as their impact. In addition, research is conducted and training imparted on population and health issues in a number of research institutes, including voluntary organizations, and university departments in India with the result that the volume of information, the number of people trained in conducting demographic research has increased. Similarly there is very impressive network of research and training institutions in the country.

There is increasing recognition of higher allocations in the social development sectors. This clearly underlines the political support. It has been envisaged that public spending in the health sectors will go up to 2-3 percent of GDP and in education sector up to 6 percent of GDP. These resources along with policy interventions for efficiency in pvt. sector spending will address the problem of resource shortfalls in the sector.

Section 1:

Fertility Levels, Trends, Patterns and Prospects

Fertility Levels, Trends, Patterns and Prospects

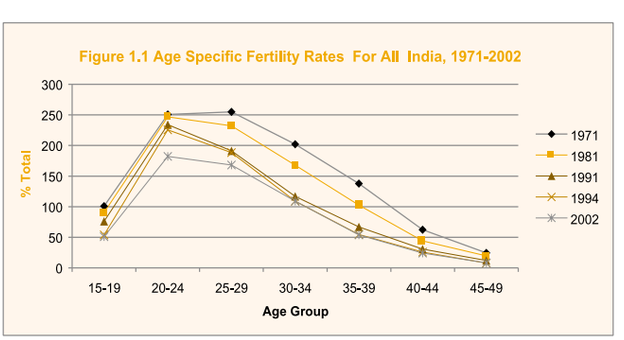
Given the scale and diversity of India's population, a decline of total fertility rate of 5.2 per woman in 1971 to 2.9 (NFHS 2) within a span of 38 years is a significant achievement. This down by half a child from NFHS-1 in 1992-93. Fertility has declined throughout the country, though at varying pace in rural and urban areas and in different states. In spite of this achievement, many in the country are concerned that the pace of fertility decline is not fast enough. The concern stems from the fact that the decennial censuses indicate that the population growth had remained fairly constant at about 2.2 percent per year during 1961-91 and only marginally declined between 1991-2001. However, it may be noted that the decline in the birth rate has been offset by the welcome decline in the death rate.

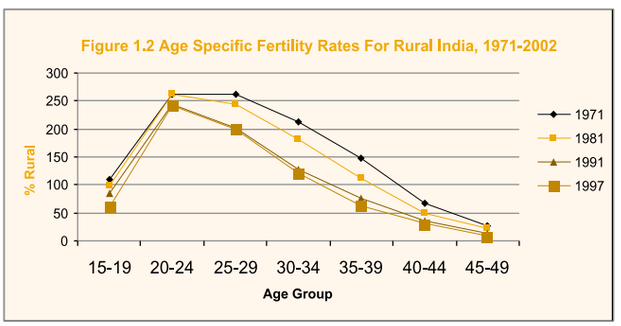
Comparatively robust direct estimates of fertility available from around 1970 from the Sample Registration System suggest that for the country as a whole, the total fertility rate (TFR) in urban areas was about 30 percent lower than the rural fertility throughout most of the period 1970-2000. Fertility fell first in urban areas but rural areas were not far behind both in the timing and the pace of fertility decline. Between the early 1970s and the late 1990s the urban fertility fell from 4.1 to 2.4 births per woman and the rural TFR fell from 5.4 to 3.6.

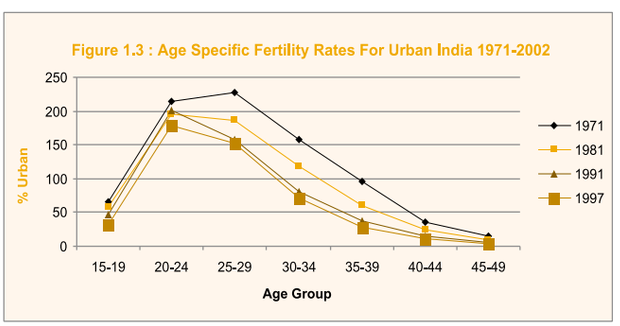
Total fertility has declined in all states since the early 1970s. The southern states of Kerala, Tamil Nadu and Goa have already reached the replacement level or below replacement level TFR of 2.1. Moreover, the estimated urban TFR has been close to replacement level not only in Kerala and Tamil Nadu (where the rural-urban differentials have virtually disappeared), but also in Andhra Pradesh, Karnataka, Maharashtra, Punjab, Orissa and West Bengal. In these states the rural total fertility rate has also come down to around 3. These achievements are by no means insignificant.

Compared to the southern states, fertility has been appreciably higher in the northern states of the country. In fact, the regional fertility differentials have widened, because TFRs have declined more in states with initially low levels of fertility. In the southern states of Karnataka and Andhra Pradesh and in the northern and western states of Maharashtra, Gujarat, and Punjab and in West Bengal in the East, at the turn of the 21st century, the reported TFR declined to between 2.4 and 3.0. Fertility has also begun to fall in the large north Indian states mainly in recent years between 1985 and 2000, but it is still relatively high in this region and ranges between TFR of 4.0 (Madhya Pradesh) and 4.8 (Uttar Pradesh).

As evident from Figures 1.1, 1.2 and 1.3, showing age specific fertility rates for selected years during 1971-2002, fertility has fallen for women at all ages both in rural and urban areas. The greatest fall, however, has occurred at older ages within the reproductive span, indicating that fertility is increasingly being controlled within marriage through the adoption of family planning. At the younger age group of 15-19, fertility decline mainly reflects a rise in the age at marriage of girls, which increased from around 17 years in 1971 to around 20 years now. The proportion of 15-19 year old girls who were married dropped from 71 percent in1961 to 35 percent in 1991. There is also a shift over time in the pattern of childbearing evident in the Figure. Compared to the earlier period when fertility peaked at 20-24

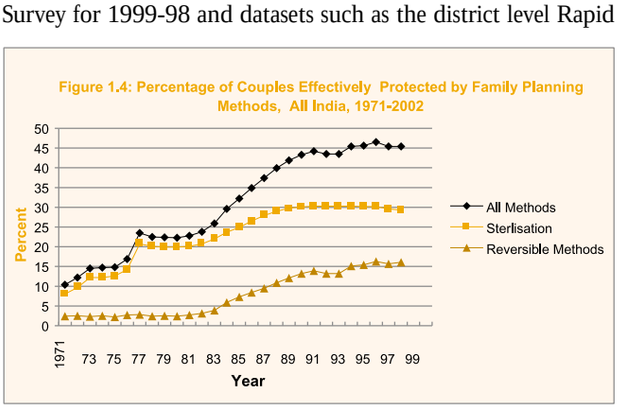






and 25-29, it now peaks only at 20-24 implying that the average span of childbearing has declined considerably. In the states of Andhra Pradesh, Tamil Nadu and Kerala, with already low fertility that is still falling, the childbearing span has become very short – ranging 6 to 7 years only.

Steady increase in the use of contraception has been the major determinant of fertility decline in India, although rise in the age at marriage has also played some role in lowering fertility. At the national level, the use of modern contraception rose from about 10 percent of couples protected around 1970 to over 45 percent in 2000. Available data suggests that the use of reversible contraceptives has increased since the mid-1980s, shown in Figure 1.4 However, the evidence from the National Family Health Survey for 1999-98 and datasets such as the district level Rapid



Household Surveys conducted in 2002 indicate that female sterilization is the predominant method of contraception in all the states often accounting for more than 80 percent of all current use of modern methods of contraception, barring few exceptions.

The regional pattern of contraceptive use corresponds to and largely explains the regional variation in fertility levels. The proportion of women using contraception was more than 55 percent in Andhra Pradesh, Karnataka, Kerala, Maharashtra, Gujarat, Haryana, Punjab and West Bengal. Elsewhere in the country, especially in the large North Indian states, contraceptive use was appreciably lower and fertility appreciably higher; in Bihar and Uttar Pradesh, according to the data for 2000, around 22 percent of couples were using contraceptives. Also these are the states with very high-unmet need for family planning as estimated in NFHS-2.

Fertility in India has fallen under a wide range of socio-economic and cultural conditions. Rising levels of education, the influence of mass media, economic development, continuing urbanization and declines in infant and child mortality have all contributed to fertility decline and will continue to be driving fertility transition. The diffusion of new ideas and greater aspirations for their children has led even uneducated parents to limit their family size. In fact, nowhere in India, couples desire large family size. According to the NFHS-2 data for 1998-99, there was no state where ever-married women aged 20-24 desired more than three children; and the views regarding the ideal number of children are fast approaching the two-child norm. At the same time, the preference for sons is evident especially in Northern states of India where women report that they want or desire more sons than daughters. However, with appropriate communication messages and social mobilisation, this phenomenon of son preference can also change, and fertility decline itself can generate a more balanced view of the desirability of having daughters. Various educational and other programmes initiated for adolescents to address their reproductive and sexual health needs are expected to delay entry into marriage and also encourage responsible parenthood.

It is clear that fertility transition in India is well established and will continue in the years to come. There is little reason to believe that the country's fertility will stall or plateau at a level

that is above replacement level. However, in the medium term, the regional differences in the levels of total fertility are likely to persist for some more time. It appears that over the long term, the northern states are most unlikely to continue experiencing fertility higher than the replacement level. A trend towards broad convergence is already underway and evident. The process of convergence will happen faster with appropriate policy and programmatic measures. New programmatic interventions focusing on 150 high fertility districts in five states with an objective of increasing access to quality family planning services through tapping private sector potential will reduce unmet need for contraception significantly.

In this context, one has to understand what should the future course of family planning programme in India be. Since its inception in early 1950s, the national family planning programme has aimed to lower population growth by lowering birth rate. Crude high rate has come down from 36.9 in1971 to 25 in 2002. The National Population Policy, 2000 has also set the goal of achieving TFR of 2.1 or replacement level of fertility by 2010. Many states will attain that demographic goal or would be very close to attaining it within the time horizon. But some states, especially those in the northern region, will need much more investments not only in the provision of family planning services but in overall development and especially in the heath care for children and women, in order to hasten the pace of fertility transition. Increasing allocation to 2 - 3 percent of GDP for the health sector in next 5 years, will address the problem of resource short-fall in the sector.

It is also crucial that programme is geared to address the need for spacing, and provide access to safe, effective and affordable methods of reversible contraception. Efforts are underway to expand the basket of contraceptive choices. Social marketing of contraceptives and increasing the range of methods should help meet the needs of couples who are not ready to accept sterilization. Above analysis indicates that the continued efforts are required to accelerate the pace of fertility decline, especially in light of National Population Policy goal of allocating TFR 2.1 by 2010. New programmatic orientation in second phase of India's Reproductive & Child Health Programme are poised to help the country in achieving goals spelled out in the National Population Policy 2000.

Section 2:

Population and Development, with Specific Attention to Poverty

Population and Development, with Specific Attention to Poverty

Demographic Transition

India is in the middle of demographic transition. Both fertility and mortality levels have started falling throughout the country. As is the case everywhere, onset of decline in mortality preceded the onset of decline in fertility by a few decades. India's mortality level started falling since 1921 and the crude death rate declined from a high of 40-45 per 1000 population to around 32-33 at the time of India's Independence in 1947 to 15 by 1971 and further declined to 8.1 according to the 2002 estimates based on the Sample Registration System. The crude birth rate, on the other hand, hovered around 40 almost until 1971, after that noticeable descent became evident. It declined to about 29 per 1000 population by 1990 and is estimated at 25 in 2002. This lag in the decline in fertility in relation to mortality has resulted in the sizeable growth of India's population so far that will continue in the coming several decades.

Compared to the situation prevailing at the time of Independence with respect to mortality and fertility, India has seen great changes. Life expectation at birth doubled from 32 years to nearly 63 or 64 years in 50-55 years since Independence. Infant mortality rate has come down significantly during the same time period - from above 200 in the 1940s to 63 in 2002. Given the scale and diversity of India's population these are not insignificant achievements.

The reduction in the mortality level resulted in rise in the rate of population growth, which reached almost 2 percent per annum during 1951-61. It remained fairly constant around 2.2 percent in the following three decades. Decline in mortality was largely compensated by decline in fertility during the period 1961-91 in many regions of India, which accounted for the population growth rate remaining relatively stable and also not exceeding 2.2 percent. In the recent intercensal decade of 1991-2001 the birth rate fell faster than the death rate bringing about a decline in the rate of population growth to 1.9 percent per annum. According to the most recent estimates for 2002, the rate of natural increase of population is estimated to be 1.7 percent.

However, there are large interstate variations and within states rural-urban differences both in the fertility and mortality levels because the gains or progress in health indicators and decline in fertility have been uneven between and within states. This has primarily resulted in large variations in decadal population growth over time. During 1991-2001, for example, the average annual population growth among the major states ranged between 2.3 and 2.5 percent in the northern states of Rajasthan, Bihar and Uttar Pradesh but between 0.9 and 1.3 percent in the southern states of Kerala, Tamil Nadu and Andhra Pradesh. The natural rate of growth of population in the southern region has been considerably lower compared to that in the large north Indian states. The pace of fertility decline in the northern belt of India will determine the time and the level at which the country's population will stabilize.

Economic and Human Development

The fruits of development have also been unevenly shared between states in India, although for the country as a whole relatively high and sustainable rate of economic growth in the post reform era has reduced the number of people below poverty line. Reforms have paved the path for greater integration with the global economy. Policy reforms in key sectors of economy have raised the average rate of growth from 5.8 percent per annum in the 1980s to 6.1 percent in the 1990s. It is estimated that 6.3 percent growth in country's GPD every year could double India's per capita income by 2020.

There are also variations in terms of size of state GDP and rate of growth. During the 1990s, the economies of Gujarat and Maharashtra states grew quite rapidly and enjoyed rates of growth comparable with the East Asian economies. The performance of Punjab and Haryana was also good. At the other end of the spectrum the predominantly rural states like Bihar, Uttar Pradesh and Assam, experienced slow

economic growth. The differential in economic growth rates has widened the gap between the relatively prosperous and poor states leading to state regional inequalities. The reasons for the slow economic growth and consequent lower poverty reduction by the poorer states are their initial low levels of rural and human development and large disparities between rural and urban areas within the states. Also, factors such as very skewed land distribution and adverse agro-climatic features of the region have been responsible for slow growth. However, the quality of life or well-being of people is determined by not only by macro indicators of economic growth but also by improvements in other spheres of life such as access to important public goods, education, health and provision of basic rights. While the reforms of 1990s have paid dividends, growth is skewed as 7 out of 10 people still depends on a fourth of national income. Incomes are skewed not only rural and urban but also geographically. The increasing disparity and divergence has implications for attainment of millennium development goals and X five year plan objectives.

Since the 1950s the National Sample Survey Organization (NSSO), from the data on consumer expenditure, has estimated income poverty or incomes too low to afford the minimum necessities of life for India and for its major states. The poverty or headcount ratio on a 30-day recall basis for 1999-2000 was estimated at 27 percent in rural areas, 24 percent in urban areas and 26 percent for the country as a whole. The comparable figures of percent of people below the poverty line were 55 in 1973-74 and 36 in 1993-94, signifying a decline in poverty ratio. However, the absolute number of poor remained around 320 million during the twenty-year period between 1973 and 1993 due to a countervailing growth in population. It is during 1999-2000 that the absolute number of poor in the country is estimated to have declined to about 260 million.

Not unexpectedly, in the four large north Indian states and in Orissa and Assam, the poverty ratio, according to the 1999-2000 NSS data, was significantly above the national average and ranged between 33 percent in Uttar Pradesh and 47 percent in Bihar. At the same time, the annual rate of decline in poverty in these states during 1983-2000 has been considerably slower compared to that in the states like Gujarat, Maharashtra, Punjab, and Haryana. Thus the persistent disparities between people of the two major regions appear to be widening rather than narrowing.

Inequality of income is often combined with inequality in access to public services including education, nutrition and health. Lack of education, for example, contributes to poverty because it deprives people of skills and prospects of better jobs and also in turn contributes to poor health and to diminished productivity. However, as far as literacy is concerned, in India the inter-state gap seems to have narrowed a little for the first time during 1991-2001. Literacy rates have remarkably improved in India in the last decade, both for males (from 52 to 66 percent) and females (from 39 to 54 percent). In the country as a whole for the first time the absolute number of illiterates has come down. Many states have moved ahead in terms of achieving higher levels of literacy in last decade. States of Himachal Pradesh & MP have almost doubled the literacy level in 25 years. Several interventions, i.e., alternative education schemes, use of para-teachers provision of mid-day meals, free uniforms, textbooks, scholarships etc. to increase enrolment, retention and reduce dropouts have also helped improve schooling of children. However, the challenge of providing Universal Elementary Education to all children by 2010 is huge and daunting.

Since most parents are convinced about the value of education, and are willing to bear considerable hardship to provide reasonable quality of education to their children, it is hoped that the initiatives taken under Sarva Siksha Abhiyan would provide a big push to ensuring universal access to education and also improve the quality of elementary education. Also, the government's commitment to step up public spending on education to 6 percent of gross domestic product is expected to help improve quality of education, provision of learning aids to schools, etc. by increasing funds available for non-salary component of education.

It is hoped that the alternative schools set up in backward states, while providing access to a vast number of children, will also enhance learning achievements of the children. The socially and economically disadvantaged groups in India perceive education as a vehicle to upward mobility for their children, which have contributed to the progress in the spread of literacy in the past decade. It is the endeavour of the state to see that the increase in demand for schooling and improvements in the number of schools will improve the quality of education. The increase in demand is linked to the combined effects of falling poverty, decline in fertility and brighter economic prospects due to greater openness to international trade and investment. The demand for educated and skilled personnel has increased in the present regime of liberalization of economy and people are beginning to perceive higher economic returns to education. Expansion of educational facilities, including vocational education will contribute to overall development

of the nation. However, the needs of the disadvantaged including girls would have to be addressed in order to reduce social and gender gaps in attainment of literacy, basic education and skills. Interventions in education & skills development of adolescents will help India to reap the dividends in form of "demographic bonus".

In the area of health and nutrition there are some visible concerns. The country is going through an epidemiological transition, where the poor and vulnerable sections of the population continue to suffer from communicable diseases and under-nutrition, and the rising middle class are increasingly victims of the diseases of affluence such as cardiac, endocrinal and other degenerative diseases.

Among the health problems, malnutrition among both children and mothers has been a persistent feature of Indian population. The percent of moderately to severely malnourished children has remained quite high according to data compiled by National Nutrition Monitoring Bureau as well as by the National Family Health Survey, exceeding 50 percent in many of the states.

Malnutrition affects a disproportionately large number of children in India as compared with most other countries. Results of NFHS-2 indicate that 54 percent children below age of four years are underweight and 17 percent are wasted. The lower prevalence of wasting from than stunting or underweight indicates that chronic malnutrition is more prevalent in India than acute malnutrition.

A multivariate analysis of effects of selected demographic and socio-economic factors indicate that the strongest predictions of child nutrition in India are child's age, birth order, mother's education and standard of living. Boys and girls have about same level of stunting and under weight, but boys are somewhat more likely from girls to be wasted.

The vicious cycle of malnourished mothers giving birth to low birth-weight babies who have diminished survival chances can be broken only when all the factors contributing to it are addressed. Besides improvements in income, efficient public distribution system, increase in food-intake, hygiene, quality of drinking water, sanitation will also have to substantially improve achieve goals articulated in the National Population Policy.

In Table 2.1, the various human development goals for India and their indicators are shown. The situation as observed around 1990 and improvements 10 years later in 2001 along with the goals are also shown in the Table. Attainment of these goals would remain quite a challenge, especially in the poor states where besides infrastructure; governance also continues to be a difficult challenge. Achievements on some of these indicators during the decades of the 1990s have been fairly impressive; however, any further improvements in the spread of literacy, lowering of gender-gap in education, reduction in both infant and child mortality would be possible only if the states with adverse indicators are able bring measures of efficiency in delivery of the programmes.

Table 2.1: Human Development Goals for India as Outlined in Tenth Five Year Plan 2002-2007

Goal	Situation Circa 1990	Situation Circa 2000	Goal for 2007	Goal for 2012
Reduction in poverty ratio	36	27	22	15
Schooling for children: % 6-11 year old attending school				
Boys	76	85	100	
Girls	59	78	100	
All	66	82	100	-
Reduction in gender gap in literacy	0.71	0.77	1.0	1.0
Reduction in IMR	76	70	45	28
Reduction in MMR	480	407	200	100
% with provision of drinking water				
Rural	61	79	100	
Urban	88	95	100	-

Section 3:

Trends in Mortality, Morbidity, and Health Status

Trends in Mortality, Morbidity, and Health Status

Trends in Mortality

In the quarter century after India's Independence in 1947, mortality fell considerably due to control of several major communicable diseases and the absence of major famines. The decline in mortality continued in the last three decades of the 20th century and death rate fell to under 9 at the turn of the century. This reduction in mortality was evident in life expectation at birth, which rose from around 50 years in 1970 to more than 61 years 30 years later (see Table 3.1).

Neonatal and post-neonatal mortality rates have also continued to fall significantly, although the pace of their decline has varied. The post-neonatal mortality has fallen at a faster rate between 1970 and 2000 from 54 to 25 deaths per 1000 or by 54 percent. During the same period, the neonatal mortality fell from 75 to 46, or by about 39 percent. This implies that the share of neonatal mortality in infant mortality has increased over time. This is true the world over because neonatal mortality is inherently more difficult to reduce. Added to this is the fact that in large tracts of the country age at marriage and at childbearing among women continues to be unacceptably low, increasing the risk of complications at the time of childbirth for both the newborn and the mother.

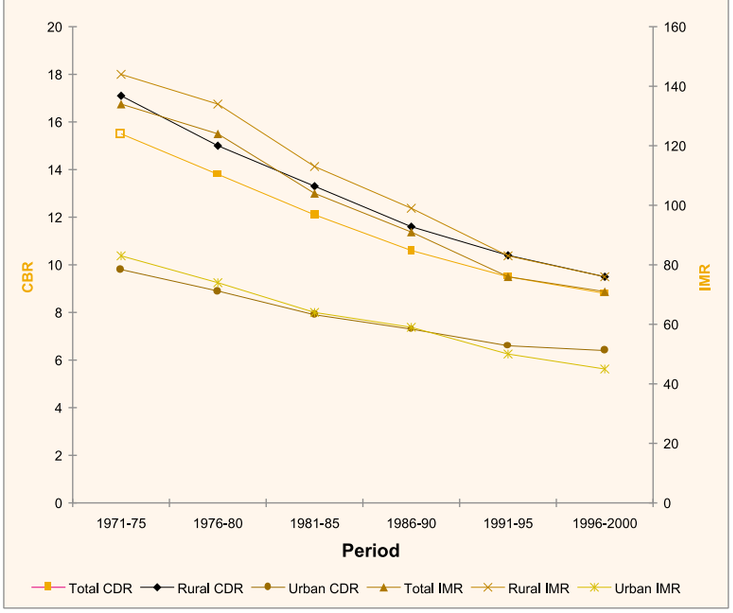
Nearly 80% of women in rural India are born at home.

Table 3.1: Mortality Estimates for all India and by Rural-Urban Residence, 1971-2000

Period	Crude Death Rate			Infant Mortality Rate		
	Total	Rural	Urban	Total	Rural	Urban
1971-75	15.5	17.1	9.8	134	144	83
1976-80	13.8	15.0	8.9	124	134	74
1981-85	12.1	13.3	7.9	104	113	64
1986-90	10.6	11.6	7.3	91	99	59
1991-95	9.5	10.4	6.6	76	83	50
1996-2000	8.8	9.5	6.4	71	76	45
2002	8.1	8.7	6.1	63	69	40

Efforts are underway to promote home based care of neonates. Management of children with pneumonia, diahorrea or Malaria by health workers is main strategy of Integrated Management of neonatal and childhood illnesses in India.

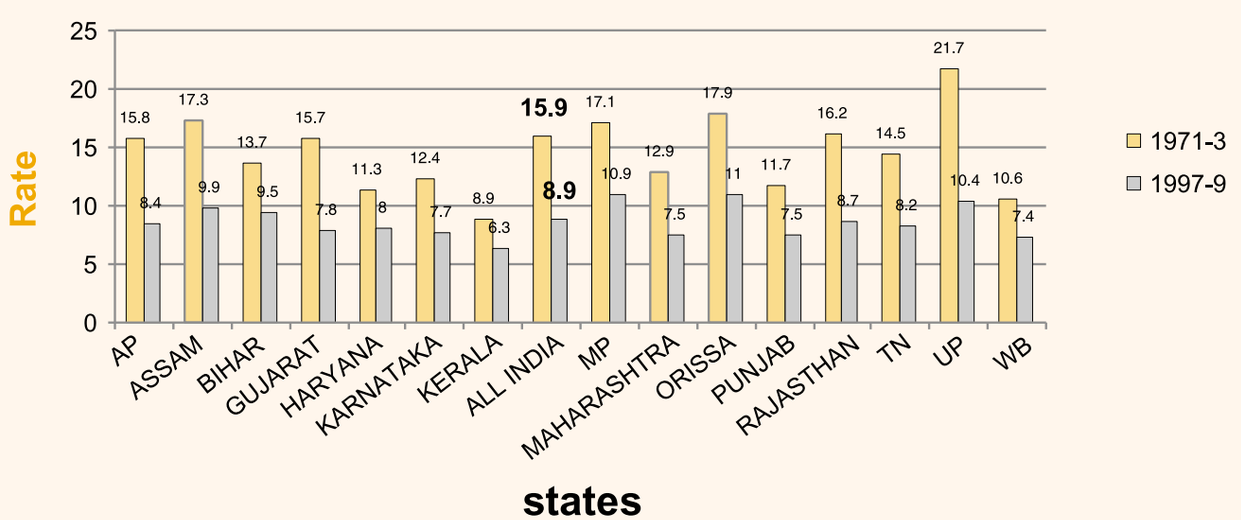
Figure 3.1 : Mortality Estimates for all India and by Rural Urban Residence,1971-2000



Within India the progress and achievement in lowering mortality have been uneven. Mortality rates have been appreciably higher in rural areas compared to urban areas. In fact, the life expectation of urban males and females in the late 1990s was almost six and eight years, respectively, higher than their rural counterparts. Similarly, inter-state differentials in mortality have also been quite wide. As in the case with fertility, mortality levels also have been lower in the southern states compared to the northern states of the country. Kerala has particularly done outstandingly well with infant mortality rate of 10 per 1000 live births and life expectation at birth above 70 years, its mortality rates are comparable to any developed country of the world. Punjab and Haryana have also made substantial progress in lowering mortality. At the other end of the spectrum are states like Orissa and Madhya Pradesh with IMR of over 85 and Uttar Pradesh and Rajasthan with IMR of around 80. Although in the last 30 years all states have reported decline in mortality, the regional pattern of interstate differentials have persisted and call for region specific interventions. (See Figures 3.1 and 3.2)

An anomalous feature of India's mortality situation has

Figure 3.2: Crude Death rates for Major States of India, 1971 - 1999



been gender differentials with young girls experiencing higher mortality compared to young boys. As per NFHS-2 female mortality rate below 5 years is slightly higher from male mortality rate (105 per 1000 live births for females) compared to 98/1000 for male children This pattern is evident in rural areas and not in urban areas. Compared to the experiences of most countries of the world, the excess female mortality in India is rather unusual. Many studies have shown that behavioural factors, including care-seeking practices operate against female children. Micro level in depth studies have established that girls are less likely to receive medical attention compared to boys and if they at all receive care, it tends to be too late and inadequate at times.

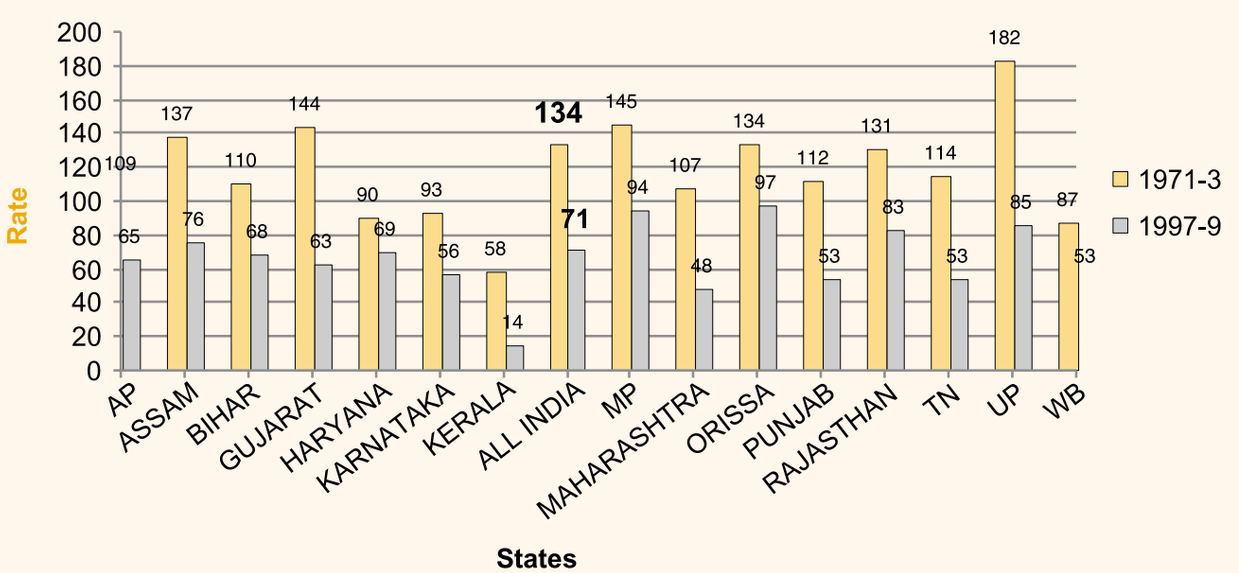
Health Situation

Generally speaking as mortality declines, there is a marked shift in the distribution of causes of death, from communicable diseases to those caused by non-communicable diseases. The available data on the causes of death in rural areas of the country, notwithstanding their limitations, are very revealing. India has succeeded in combating some of the communicable diseases very effectively, but some others continue to remain of great concern to the health system. As depicted in Figure 3.3, the share of communicable diseases in rural India's cause of death profile fell from around 48 percent in 1969-71 to 22 percent by the mid-1990s. This decline has been due to prevention of deaths due to ailments such as gastro-enteritis, dysentery and tetanus and decline in diseases such as leprosy. Intensive preventive and treatment measures to combat leprosy have resulted in a sharp decline in its prevalence and associated morbidity in states such as Tamil Nadu, Andhra Pradesh and Maharashtra.

At the same time, due to re-emergence of malaria and persistence of tuberculosis, these two communicable diseases have remained important causes of morbidity in spite of efforts to combat them through vertical disease control programmes. The DOTS strategy (Directly Observed Treatment-Short Course) is expected to achieve a cure rate of 85% and reduction in mortality at about 20 per 100,000 populations. Initial experiences from field indicate success of the strategy for bringing tuberculosis patients under the net of quality treatment.

The resurgence of malaria, in spite of the vertical programme since 1953 indicates that existing strategies need greater attention and close monitoring. As per NMEP report

Figure 3.3: Infant Mortality Rate for Major States of India, 1971-1999



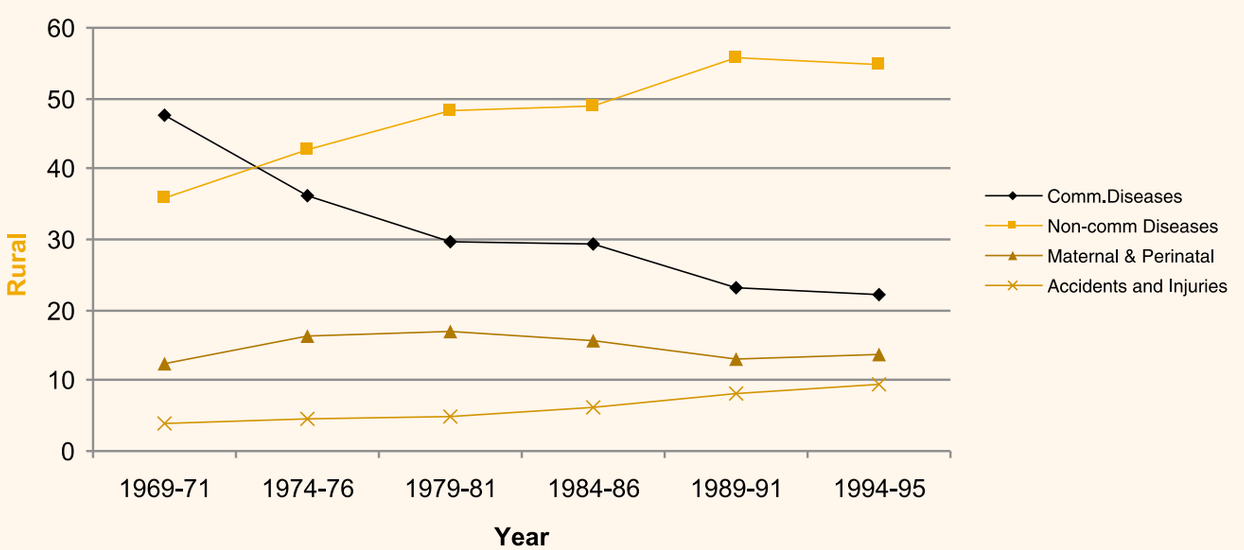
for 1995, the national average of falciparum Malaria has risen to 35.5 percent from a meager 9.72 in 1972. Annual parasite incidence for year 2002 is reported to be 1.62, which has come down from 2.3 in 1998. Although the number of deaths from malaria is not great, there is a concern over the loss of economic productivity due to malarial morbidity. The current strategy includes early case detection and prompt treatment, selective use of insecticides, promotion of personal proportions, capacity building and epidemic preparedness.

Polio eradication has become a distinct possibility in India, as number of new polio cases detected till July, 2004 is 34. Organisations of NIDs for last couple of years along with strengthened surveillance system have resulted in this decline.

Mortality from many of the communicable diseases has indeed declined but morbidity from some of them continues to remain high. Lack of access to potable drinking water, minimal liquid and solid waste management, results in the communicable diseases. Although mortality due to gastro-enteritis and dysentery has declined over time, diarrheal diseases continue to be an important cause of morbidity and mortality, especially among children. The continuing presence of communicable diseases in India is indicative of the fact that the country is currently experiencing double burden of disease. A major programme in form of medium term immunization strategy is under anvil to reduce burden of morbidity attributable to vaccine preventable diseases. There is yet an unfinished agenda of health problems related to under-development and poverty on the one hand and the emerging agenda involving life-style induced illnesses linked to new patterns of behaviour on the other hand. Increase in use of tobacco, alcohol and drugs are taking their toll.

As shown in Figure 3.3, the share of non-communicable diseases rose from 36 percent in 1969-71 to 55 percent in 1994-95. Bronchitis and asthma, various cancers, heart attack, and paralysis are all becoming more important in the mortality profile. The figures pertain to rural areas but their share in the mortality profile of urban areas could be even greater clearly reflecting the changing lifestyles. Tobacco use in various forms is one of the major health risk that India faces and will continue to face in the years to come. A comprehensive strategy to curb its use is not easy given the range of products manufactured in unorganized sector, stiff

Figure 3.4: The % Contribution to Total Deaths of Deaths from Selected specfic major course of death, Rural India, 1969-1995



opposition from both farmers and tobacco industry. According to the National Sample Survey for 1998, nearly 45 percent of men aged 10 years and above and 7 percent of women were regular users of tobacco products. The use is greater among disadvantaged socio-economic groups and in rural areas. Additionally, pollution from toxic industrial chemicals, from use of unprocessed fuels and emissions from vehicles all take their toll both in terms of increase in levels of morbidity and consequent mortality.

Another important cause of death shown in Figure 3.3 relate to maternal and perinatal factors. Their share around 14 percent has remained virtually constant throughout the period 1969-95. Although direct estimates of maternal mortality are not always dependable and have large standard error around the available estimates, India has unacceptably high maternal mortality, even though fertility decline might have contributed to lowering absolute number of maternal deaths to a certain extent in recent years. The Reproductive and Child Health programme that India has initiated after the ICPD, in 1997, specifically addresses maternal health by undertaking measures to promote institutional deliveries, providing emergency obstetric care and linking primary health care services to the first referral units.

Despite the welcome decline in mortality discussed earlier, there is still a huge scope for it to decline further in the decades ahead. The low level of mortality achieved by a state of Kerala clearly indicates that improvements elsewhere are possible. This would be true even if one makes allowance for the future impact of HIV/AIDS. Infant mortality in India is still quite high and measures to significantly lower it are known, and tested. Combating childhood diseases such as respiratory tract infections and diarrhoeal diseases are well within reach requiring low technology and little investments. Universal immunization against vaccine preventable diseases such as tetanus, whooping cough and diphtheria as well as measles can save many lives. However health sector reforms that responding to issues of access, quality and ultimate satisfaction with service need to ensure that health for all does not remain a pipedream and goals articulated in the National Health Policy are achieved.

Section 4:

Migration and Urbanization

Migration and Urbanization

Migration

The Indian census has included questions on people's place of last residence and their duration of resi dence at the place of enumeration. When the re sponses to these questions are tabulated, a migrant is someone whose place of previous residence differs form the place of enumeration. Although the data miss out many movements, for example, within the same town, they do capture the broad features of migration.

The salient feature of the three censuses from 1971 to 1991 is that migration patterns have been changing very slowly in India. (Migration data from 2001 census are not yet available.) Migrants accounted for nearly 28 percent of the total population in 1991. However, women in India formed a great majority of migrants; 41.8 percent of the total female population had migrated from their previous place of residence to the place of enumeration. This proportion among males was only 14.7 percent. Women dominated the migration streams because of the practice of village exogamy prevailing in many parts of the country. At marriage women move to neighbouring areas to live with their husbands' families. This explains why close to 60 percent of migration in India was reported to be intra-district indicating short distance moves. Another 25 percent of migration was inter-district but within the same state, which would also generally be short distance between adjacent districts. Only about 12 percent of migrants moved between states and 2.5 percent were international migrants largely from the neighbouring countries of Nepal and Bangladesh.

Given the fact that women moving at marriage account for major migration flows in India, rural to rural migration constituted 57 percent of all internal migration in 1991. Compared to the earlier periods, its share has come down a little. Rural to urban migration accounted for 21 percent of all internal migration, having increased from 17 percent in 1971. Urban to urban migration constituted 14 percent of the migration stream.

Although the inter-state migration is not very dominant in India, there are inter-state variations worth noting. Uttar Pradesh and Bihar have experienced net outmigration mainly to the neighbouring Delhi, Punjab, Haryana and West Bengal but also to more distant states such as Maharashtra and Gujarat. In fact, India has centers attracting people from practically all over the country – one is around Delhi and the other one is a corridor from Mumbai on West coast going northward in Gujarat. Indeed Delhi and Mumbai have become major urbanized centers attracting people from all states.

The number of people involved in different types of migration may increase in the coming decades, but many migration streams are likely to decline. For example, as the number of million-plus cities increase, inter-state migration rates may fall because people can move to such cities without having to leave their home state. International migration, although important for economic reasons, is also not likely to be very important in volume in relation to India's total population. On the other hand, the short distance migration, which is dominated by women, and primarily on account of marriage, will continue to be the most frequent type of migration in India.

Urbanization

Notwithstanding the evidence of increasing trend towards rural to urban migration, and reclassification of some rural areas as urban (the number of towns increased from 4609 in 1991 to 5161 in 2001), India has a low level and slow pace of urbanization as shown in Figure 5.1. According to the 2001 census, 27.8 percent of the total population lived in urban areas – an increase of only two percentage points from 1991. Given the population size of the country, the number of people living in urban areas exceeded 285 million. Some of the salient measures of India's urbanization and trends over time are presented in Table 4.1.

India's urbanization has increased at a much slower pace compared to many other countries in Asia. For example, in the two other large Asian countries of China and Indonesia, where the level of urbanization was lower compared to that in India in 1951 are reported to be more urbanized than India in 2001. One of the reasons for 'slow' urbanization is that compared to international standards India applies stringent criteria in classifying an area as urban. It is suggested that the 'true' level of urbanization may be somewhat higher than what the official figures indicate. For example, in 1991, there were 13,376 villages with population of 5000 or more. Were these villages with 113 million people were counted as urban, then the level of India's urbanization in 1991 would have been 39.1 percent as against 25.7 percent.

The natural increase of the urban population (the excess of births over deaths) has been the major factor contributing to India's urban growth. During 1991-2001, 55.8 percent of urban growth was due to natural increase. However, there are indications that due to steady decline in urban birth rate, its contribution to urban growth has begun to decline. There are indications that rural to urban migration has also slowed down and commuting to urban place of work from nearby rural areas is increasing both in response to relatively cheap transportation and higher housing and other costs involved in urban living. At the same time, sheer population growth would entail reclassification of localities from rural to urban, which is likely to play a significant role in urban population growth.

Another feature of India's urbanization worth noting is that the million plus cities in India increased from five in 1951 to 35 in 2001. Three of the urban agglomerations had more than 10 million people each - Mumbai (16.4 million), Kolkata (13.2 million) having fallen into second place and Delhi (12.8) coming up fast. Close to 30 percent of the total urban population lives in 35 million plus cities. An additional 30 percent lives in cities with more than 100,000 population. Thus, 60 percent of India's urban population lives in large cities as shown in Table 4.2. The number of medium sized towns with population ranging between 20,000 and 99,999 tripled between 1961 and 2001, whereas that of very small urban centers with population less than 5000 declined either due to growth in population thereby taking them to the next higher size class or due to declassification.

Within India, according to 2001 census, Tamil Nadu and Maharashtra are the most urbanized states (with 42 to 44 percent urban) with Gujarat not far behind with 37.4 percent urban. At the other end of the spectrum are states such as Assam, Bihar, Orissa, and Uttar Pradesh where levels of urbanization are quite low and range between 13 and 21 percent.

While urban centers contribute to employment and income generation and urban living is desired for better education, health care and entertainment, the Indian cities are increasingly facing serious problems of water supply, sanitation, drainage, solid waste management and pollution from vehicular and other emissions and urban waste. Despite this, urban areas are attractive to rural migrants. They earn higher wages in cities than what is possible in rural areas. It is also likely that the anonymity of the city provides some freedom from the social and economic barriers that they face in their villages.

Table 4.1: Summary Measures of India's Urbanization, 1961-2001

Census	Population (Million)	Urban Population (Million)	Percent Urban	Average Annual Population Growth Rate (Percent)		
				Total	Rural	Urban
1961	439.1	78.9	18.0			
1971	548.2	109.1	19.9	2.22	3.24	1.98
1981	683.3	159.5	23.3	2.20	3.79	1.77
1991	846.3	217.6	25.7	2.14	3.11	1.83
2001	1027.0	285.3	27.8	1.94	2.71	1.65

Table 4.2: Growth of Cities and Urban Population in India, 1961-2001

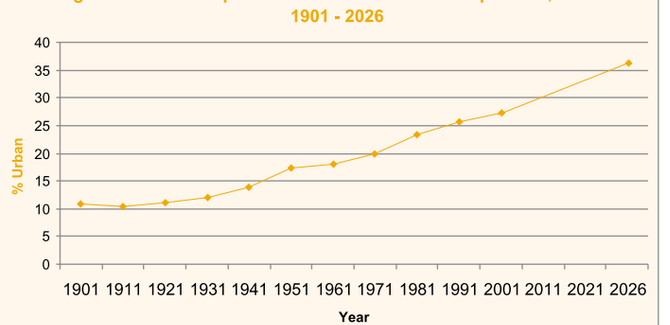
Characteristics	Size Class of Cities (Population in '000)				
	All Urban Areas	Large (100+)	Medium (20-99.9)	Small (5-19.9)	Very Small (<5)
Number of Towns					
1961	2700	107	657	1668	268
1991	3696	300	1292	1907	197
2001	5161	423	1894	2617	227
Urban Population (Million)					
1961	78.9	35.1	25.3	17.6	0.9
1991	215.3	139.7	52.3	22.6	0.7
2001	285.4	172.0	81.9	30.1	0.8
Urban Population (Percent)					
1961	100.0	44.5	32.1	22.3	1.1
1991	100.0	64.9	24.3	10.5	0.3
2001	100.0	60.3	28.7	10.5	0.3

India's level of urbanization is projected to rise from around 28 percent in 2001 to 36 percent by 2026, when the total population living in urban areas could reach half a billion. States like Maharashtra and Tamil Nadu, which are demographically and socio-economically advanced, will experience most of the population growth in urban areas; their rural areas are likely to experience very modest growth in the decades to come. Also, by then the number of million plus urban agglomerations or cities is also likely to increase to around 70. Given the concentrations of urban population in large cities, these could contain nearly half of all the urban population. It is difficult to gauge how much can cities like Mumbai and Delhi grow and what the sheer increase in number would do to their environment. In view of these likely trends, the urban planning, its environment and infrastructure development will demand concerted attention.

A centrally sponsored scheme of Integrated Development of Small and Medium towns was initiated in year 1979-80 to improve economic and physical infrastructure and also to provide essential facilities and services to slow down the growth of large cities by developing small and medium town through increased investments. Keeping in view the recommendations of National Commission of Urbanisation, a centrally sponsored scheme for infrastructure development of mega cities was initiated in 1993-94.

Migration and urbanization deserves greater attention in policy discourses in achieving population and development goals in India. Access to services for urban poor and migrants needs to be addressed through focused interventions. It is encouraging to note than urban health is an emerging priority in the second phase of RCH programme.

Figure 5.1 Urban Population as Percent of Total Population, India 1901 - 2026



Section 5:

Population Ageing and Its Implications

Population Ageing and Its Implications

Ageing is a global phenomenon. With a compara tively young population, India is poised to be come home to second largest number of older persons in the world. The share of the elderly (age 60 and older) in India's population increased slowly from around 5 to 6 percent between 1961 and 1981 but because the total population has continued to grow, the number of elderly has grown substantially. Notwithstanding the fact that many in India do not know their ages, and errors of age reporting typically lead to an overstatement of the number and proportion of the aged, an estimated 57 million Indians were age 60 or older according to 1991 Census. Compared with 25 million aged counted in 1961, this signifies an increase of nearly 190 percent in the 40-year period. By 1991, the share of the elderly in the total population also increased to 6.8 percent. The age data from the 2001 are not yet available but the official projections suggest that by 2016 there would be between 113 to 124 million aged in the country, depending upon the assumptions about the rate of decline in fertility and mortality in the years ahead. The number of aged will grow at a much faster rate than the total population; consequently their share in the total population will increase to close to 9 percent. The continuing decline in fertility coupled with increase in longevity together would be responsible for the increase in the number and proportion of aged in the Indian population.

Also, over the coming years, due to the gains in survivorship, the number and share of those above age 65 or 70 would increase at a faster rate relative to those in the age group 60-64. Among the aged, the share of those in the age group 60-69 or 'young-old' according to 1991 Census was 62 percent. However, the process of ageing will gradually lower their share and raise that of the 'old-old' or those above 70 years of age. Their share is expected to increase from 35 percent in 1991 to 42 percent by 2021. In absolute number, those above 70 years will increase from about 19 million to 63 million or more than threefold. They would be subject to a higher incidence of morbidity and disability and chronic illness as well as mental problems. These would have implications for the nature of health services that will be required and for the costs and burden of care.

Special features of elderly population in India include:

- 80 percent of them are in rural areas;
- Feminization of elderly population (51% would be women by 2015);
- Increase in number of "older old";
- Large percentages of elderly are below poverty line.

Ageing has occurred most rapidly in Kerala and Tamil Nadu, which have experienced relatively steep declines in fertility, and in states such as Punjab and Himachal Pradesh, where the out-migration of young adults to seek employment elsewhere has contributed to a higher proportion of the elderly in the population. According to the 1991 Census, the share of elderly ranged from 6.9 percent to 8.3 percent in these fours states of India. In the country as a whole as well as in most states, the increase in the length of life of the elderly has been quite low. Except in Kerala, where a 60-year-old woman can on an average expect to live 21 additional years and a man about 18.5 years, in some of the backward states such as Madhya Pradesh and Uttar Pradesh, women and men can expect to live for 13 to 15 additional

years. While many 60-65 year olds can be active, without any major ailments and manage their affairs well, among those above 70, who can expect to live additional 9 to 12 years, many would face debilitating ailments, financial problems, and also a sense of loneliness, especially when the spouse is no more.

The demographic, social and economic characteristics of elderly in India merit attention because of their implications for the well-being of the old people. One, given the Indian tradition of widows not remarrying but widowers generally remarrying, the number of widowed elderly women has been almost three times as many as widowers. Two, the aged in India are survivors of an era when schooling and education were very limited, much more so among women compared to among men. Thus, according to the 1991 census data, 79 percent of the rural elderly (66 percent of men and 92 percent of women) were illiterate. The situation in urban areas has been somewhat better. Three, most elderly in India stay within a family unit – almost 90 percent of those aged 60 and older lived with a spouse, a child, grandchild or other relative according to the NSS statistics. Further, a significant proportion of elderly, especially women, who are economically fully or partially dependent on their children or other members of the household for support, face considerable hardship in finding adequate allocation of household resources for taking care of their chronic illness and other needs. The associated tensions and psychic costs cannot easily be tackled by external sources of assistance.

In view of these facts, many elderly in India are quite vulnerable and are not able to live with dignity. Aged women in particular are not economically self-sufficient and are dependent for all their physical, financial and emotional needs on the relatives mainly on children. This is largely because of high incidence of widowhood among them, their high illiteracy rates as well as the patriarchal nature of Indian society, in which women rarely inherit any property and have few savings and assets of their own. The Ministry of Social Justice and Empowerment has estimated that nearly a third of the elderly are below poverty line, majority of whom are widows. Given the economic poverty on the one hand, and with age the increase in the incidence of chronic illness, many of the elderly face considerable hardship in meeting their heath care and other needs. With the decline in the family size as well as the increase in the frequency of mobility or migration among the urban population, the aged face an additional problem of loneliness.

Meeting the health care and emotional needs of the elderly is a growing concern for Indian social scientists and policy makers. The Indian government has also been playing an increasing role in the lives of older citizens. Its constitution enjoins the government to provide public assistance to the elderly within the limits of the economic capacity and level of development and assists voluntary organizations to establish old age homes and day care centers that provide services for older citizens. In March 1995, the central government announced a plan to establish a national old age pension for the elderly 65 years of age or older who live in poverty. The amount available to poor elderly under this scheme varies from state to state, but is generally in the range of Rs.75 to Rs. 250 a month. In 1999, the government announced the National Policy on Older Persons, which has identified a number of areas where interventions would be needed, specifically with regard to providing care and protection to the vulnerable elderly who are widows, handicapped, and destitute. Further, in view of lack of adequate instruments available to enable those engaged in unorganized sector to provide for their future, the government has commissioned the Old Age Social and Income Security (OASIS) programme. The programme is aimed at providing through public provident fund, the employees provident fund, etc., better rate of returns to the elderly.

The Indian government has also launched a scheme to provide financial assistance of up to 90 percent to the Non-governmental organizations for establishing and maintaining old age homes, day care centers, and mobile medicare units. However, the number of old age homes set up is far from adequate in number and the potential demand for them appears quite large. At the same time, how many elderly living alone or living with children in less than cordial relationship, would be willing to move to

the old age homes is a moot question, given India's social setting. Financial security for older population has also received attention from Government. More recently government has launched a saving instrument exclusively for older population, providing attractive returns on the investments. Such measures will result in ensuring financial security for the elderly population.

Section 6:

Adolescent Reproductive Health and Development

Adolescent Reproductive Health and Development

There are by 2004, an estimated 350 million young people (10 – 24 years) in India representing one-third of the population. Specifically about 22 percent of the population falls into the adolescent age group (10 – 19 years) (IIPD and ORC macro 2000, United Nations 2001). A large number of adolescents are out of school, get married early, work in vulnerable situations, are sexually active; and are exposed to peer pressure. These factors have serious social, economic and public health implications. It is critical to influence the health seeking behavior of adolescents as their situation will be central in determining. India's health mortality and morbidity and population growth scenario. In fact, female mortality exceeds male mortality until the age of 35 years in India. According to the SRS data that is largely due to maternal death experienced by young women. Obstetric complications and maternal deaths among adolescent mothers are significantly higher than among older mothers. There is tremendous social pressure to prove fertility immediately after marriage. The age specific fertility for this age group (15 – 19 years) is 107 per 1000. In a son-preferring society, the pressure to bear sons on newly wed girls is tremendous. The consequence often is repeated pregnancy.

Despite the rising age at marriage, and laws prohibiting early marriage (Child Marriage Restraint Act of 1929 and its amendment in 1978), the average age at marriage of girls continues to be around 20 yrs, with sizeable inter-state variations. According to the NFHS data for 1998-99, half of all women aged 20-24 were married by the time they were 15, and a quarter were married by the time they were 15. In contrast, few young males are married in adolescence. In the large north Indian states such as Rajasthan and Bihar, 68 to 71 percent of girls were married by age 18 but in Kerala and Tamil Nadu, this percentage was 17 and 25, respectively. Married adolescents face social vulnerability. A host of factors, such as lack of awareness, limited mobility and decision making authority, lack of control over resources, lack of communication with husbands have an important bearing on the ability of adolescent girls to make informed choices and seek appropriate care.

For young women in India, sexual relations occur overwhelmingly within marriage. However, there is growing evidence from small case studies of pre-marital onset of sexual activity mostly among young males, but also among young females. Sexual relations among adolescents tend to start early, involve multiple partners and often are casual. They are also characterized by lack of contraception or condom use, and occasionally involve coercion and non-consensual experiences. Misconceptions among adolescents are widespread in every aspect of sexual and reproductive health. For example, many are unaware of the links of STIs to HIV or even the correct way of using a condom. Young people between the ages of 10 – 25 years make up 50% of all new HIV infectious. Yet only 59% adolescents know about condoms and 49% about oral

contraception. Unmet need for contraception remain high (27% among married adolescents as opposed to 16% among women in general).

Events such as the Programme of Action of ICPD at international level and the shift away from contraceptive targets towards a client-centred approach at the national level have had considerable direct and indirect consequences for programmes for youth of India. As a signatory to the ICPD Programme of Action, Indian government has recognized young people's health needs and rights and the importance of providing information, counselling and reproductive health services to the youth. Adolescent vulnerabilities need to be properly understood and served, and it is only over the last decade that they have been recognized as a special group in need of special attention. The sexual and reproductive health needs of the adolescents have been articulated in the National Population Policy of 2000. While the overarching goals of NPP 2000 are to address unmet needs for contraception, provide integrated service delivery for basic reproductive and child health care, and to achieve a stable population by 2045, it recognizes for the first time that adolescents constitute an under-served group. Along with the efforts to promote schooling among both boys and girls, and reduce gender disparities in education, the NPP 2000 also emphasizes the importance of measures to delay marriage in order to create greater awareness among the young people about the consequences of risky sexual behaviour.

The National Youth Policy 2003 has laid stress on the need for a multi-sectoral approach to youth, with a thrust on empowering the youth through education, skills building and leadership and providing population and family life education. The Indian government has launched a number of schemes aimed at empowering young, especially girls, which can indirectly help create sexual and reproductive health awareness and exercise reproductive choices. On the other hand, a number of NGO programmes have responded successfully to young people's sexual and reproductive health needs in innovative and acceptable ways, and have been providing access to information, counseling and services, including reproductive health services

In view of the HIV/AIDS epidemic in India, especially among young people, the Indian government has begun to address issues relating to adolescent and sexual reproductive health among them with more openness. Several states have initiated specific programmes for youth, both in school and community settings. In these programme initiatives, different departments have come forward, such as, Women & Child Development, Education & Youth departments. School-based AIDS education programmes have also been launched under the National Population Education Programme of the GOI, health/RH messages are being transacted using a life skills approach for providing reliable information to the young.

The heterogeneity of the conditions of adolescents will have to be recognized in policies and programs that are being undertaken in the country. The aim is to provide services that enable young to attain safe and healthy adulthood, and legal provision for ensuring a non-discriminatory environment to those living with or affected by HIV. Further, coordination among various agencies engaged in providing services to the young is equally essential, not only to achieve synergy and cost-effectiveness, but also to avoid duplication of efforts. Policies such as the NPP and National Youth Policy which recognize adolescents as a distinct group provide a window of opportunity for action. However, programmes and schemes need to be implemented in a culturally sensitive manner, while also recognizing the diversities in this age group. For example, while it is accepted that postponement of the age at marriage of girls is desired, for parents of out-of-school adolescent girls,

it is not easy because of the concern about their safety in many parts of the country. The issue may be addressed by promoting continuing education through open schooling, distance learning, and vocational training. Similarly, while the need for sexuality education is appreciated, the issues of nomenclature, age group, the stage at which it should be imparted, and the manner of transacting the information would need attention along with addressing the inhibitions of teachers, facilitators, and parents, as well as societal constraints.

Section 7:

HIV/AIDS and Its Implications

HIV/AIDS and Its Implications

India's HIV/AIDS estimates are based on sentinel sur veillance system established since 1998. This dataset is used to estimate number of HIV infections based on certain assumptions, evolved after services of consultation with national and international systems. The number of sentinel surveillance sites identified has increased over time. In 2003, the number of sites was 455 and included 166 sexually transmitted disease (STD) clinics, 271 antenatal clinics, 13 intravenous drug users (IDUs) sites, 3 sites for MSM and 2 sites for commercial sex workers (CSWs). The number of estimated HIV infected people has steadily increased from 3.47 million in 1998 to 5.1 million in 2003. Nearly 60 percent of infections are from rural areas and 40% in urban areas. Similarly out of total infections 3.22 million are males and 1.88 million are females. Also two-third of HIV positive are concentrated in 6 high prevalence states. This is the second largest number of infected people in the world after South Africa. Although the prevalence of HIV in India may seem relatively low at 0.7% of the general adult population compared with rates of 20 percent and over in South Africa, Zimbabwe, and Botswana, the infection has now been detected in all states and union territories. It is no longer confined to vulnerable groups, such as sex workers and transport workers or to urban areas.

It has been suggested that if effective prevention efforts are not implemented immediately, and sustained over long term, the infected people in India could reach an alarming number in short time. Also, the rising HIV rates would also fuel the tuberculosis. Tuberculosis is already a major cause of death in India before the advent of HIV epidemic, and it is the most common opportunistic infection among AIDS patients. In view of these grave concerns, the Indian government launched a National AIDS Control Programme in 1987 to conduct surveillance, screen blood and blood products and provide health education to people. In 1992 the National AIDS Control Organization (NACO) was established. NACO carries out India's National AIDS programme, which includes formulation of policy, prevention and control programmes. To carry out the functions at the state level, State AIDS control societies in 25 states and 7 union territories have also been set up.

In comparison to 4.58 million HIV infections, in year 2002, there has been an increase of about 5.12 lacs infections as compared to increase of 6.1 lacs last year. There is no significant upsurge in number of new infections. During 2003 round none of the state has moved from category of low prevalence state to medium or high prevalence state.

The information collected on the transmission route from the AIDS cases has revealed that in 86 percent the probable source of infection was through unprotected heterosexual sex, in about 2.4 percent of cases the source was infected blood or blood products, and in about 2 percent of cases it was sharing of needles/syringes associated with intravenous drug use. In nearly 3 percent of cases the transmission route was perinatal or from. mother-to-child. (For the rest, information was not available.) HIV has spread rapidly among high-risk groups; levels of infection among commercial sex workers in Maharashtra reportedly increased form around 3 percent in 1987 to over 70 percent in 1997. Levels of HIV prevalence appear to be somewhat higher in the country's southern states. But the most severely affected location is the small northeastern state of Manipur, bordering the so-called Golden Triangle region

of South East Asia. HIV has spread very rapidly by way of intravenous drug use, a practice that is not widespread elsewhere in India.

Although Mumbai and Chennai have been the main focus of HIV/AIDS, the disease is no longer restricted to the major metropolitan areas. It is spreading to rural parts, carried, for example, by migrant labourers and workers such as lorry drivers, in the transport sector. It is also spreading among married women with a single partner. The future will see increasing levels of HIV infection among Indian women, who, largely monogamous themselves, have virtually no control over their husbands' sexual behaviour. As large numbers of women become infected, the number of children infected through vertical transmission is also likely to increase. Although the programmes are being implemented to prevent transmission of parents to child infection through provision of ART drug/s.

In spite of some measures undertaken to curb the onslaught of the disease, it is likely that the HIV/AIDS epidemic will eventually have significant impact on the economy. There may be losses of productivity, both because the disease involves long periods of sickness, and because people in the prime working ages tend to be most severely affected. Since HIV/AIDS stimulates and interacts with other infections such as hepatitis, diarrohea, malaria and especially tuberculosis, the treatment becomes long drawn and the costs mount considerably. This is likely to pose a big burden on already resource poor health sector. At the household level, the poor have to bear a huge cost of an adult member's prolonged illness because they rely primarily on their own resources. In the process, such households become further impoverished.

There are uncertainties in assessing the demographic impact of HIV/AIDS on the composition and structure of population, because it is hard to anticipate developments in technology such as vaccines and medicines, and human behaviour, such as sexual conduct. Nevertheless, estimates of population projections with the effect of AIDS and without the effect of AIDS do give some rough idea of the potential demographic effects of the disease. The UN's projections for India indicate that by 2010-15 life expectation with AIDS (68 years) would be one year lower than without AIDS (69 years). At the same time, in view of the fact that the impact of AIDS related mortality is uneven between Indian states, similar projections at the state level suggest that in Maharashtra for example, male and female life expectation may reduce by 3.2 and 2.3 years, respectively. Also, because HIV/AIDS is generally more prevalent in the southern states, there will probably be a reduction in the mortality advantage hitherto seen in these states.

Since AIDS is often associated in the minds of people with promiscuity and homosexual behaviour, families and individuals conceal the illness for a long time for fear of discrimination, and stigmatization that affect life in families, communities, workplaces, schools and health care settings. In response to many of these concerns, NACO in India has developed several strategies and guidelines on consent and confidentiality issues. HIV voluntary counseling and testing has been shown to be a gateway for prevention and treatment. This has become integral part of HIV prevention, as it is a relatively cost effective intervention in preventing HIV transmission.

National AIDS Control Programme has also launched a blood safety programme with the objective of ensuring access to supplies of safe and quality blood and blood components. 815 blood baskets have been modernized so far. A National Blood Transfusion Policy has been formulated to provide necessary directions and guidance for better management of blood transfusion services.

Behavior change communication continues to be one of the most important strategies in fight against HIV/AIDS. BCC strategy aims to raise awareness and promote desirable practices. Information from large scale data sets indicates encouraging knowledge levels on HIV/AIDS, causation, transmission and prevention.

In area of care and support, India has rolled out ART for AIDS patients from 1st April, 2004. National Guidelines for phased scale up of access to ART for PLWHA have been

released. Similarly guidelines for post exposure prophylaxis are also available.

Admittedly there is need to do much more. The National Common Minimum Programme, promises major expenditure as primary health care and communicable diseases with political backing for HIV/AIDS Control. Similarly engagement of large number of stake-holding belonging to civil society in HIV/AIDS control efforts will result in slowing down the pace of epidemic in India.

Section 8:

Addressing Gender Concerns in Population and Reproductive Health Policies

Addressing Gender Concerns in Population and Reproductive Health Policies

The Indian Government has taken seriously issues related to women's empowerment, employment, access to social sector services such as health and education and attaining equality between men and women in these spheres. There are references and chapters devoted to women in the Five Year Plan documents; special policies are framed and various national and state-level bodies are set up to handle women's affairs. There has also been an increase in special development schemes for women and in gender training of government functionaries. The women's movement in India has also had considerable impact on policy developments especially in the context of liberalization and globalization.

The Government of India set up a National Commission on Women in 1992, which is empowered to inquire and provide redressal to women in cases of violation by state or civil society. The government ratified Convention on Elimination of Discrimination Against Women (CEDAW) in 1993 and has taken up various other initiatives to ensure protection and empowerment of women. Family and women's courts have been set up at various places and special cells have been established in police stations to investigate crimes against women and ensure speedy justice for women. More recently, the Indian Government also adopted National Policy for Empowerment of Women, 2001 to 'empower women through creating an enabling environment where they can freely exercise their rights both within and outside their homes as equal partners along with men". Another landmark effort is the amendment of the constitution to provide 33 percent reservation of seats for women in local governments.

Notwithstanding these efforts at mainstreaming gender concerns, gender bias continues to exist in India at several levels: in access to health care, education, and livelihood security and in other social and economic services. The inequalities exist within the household in food allocation and in spending on health care and education. There are also gender biases in service delivery. The combined result is that girls are less likely to receive medical care than boys, less likely to be admitted to hospital for treatment, and, in some instances, less likely to survive illnesses than boys. The poor nutritional status of girls and women means that their illnesses are of longer duration. Girls are less likely to be enrolled in schools or drop out soon after initial enrolment due to their usefulness at home. Many schools both in rural and urban areas lack basic amenities such as toilet for girls. When schooling beyond primary level is available at some distance away from home, girls are much less likely to be sent for further education. While there is enough evidence through research on factors accounting for lack of access to health care or education, the intervention measures take a long time to be implemented in a continental country that is so diverse.

Among the gender inequalities, the most glaring is the deficit of women in India's population which has progressively increased as evident from the sex ratio of the population; the number of women per 1000 men steadily declined from 972 in 1901 to 933 in 2001. In recent period, the decline in the sex ratio has become much more evident and stark at younger ages. The juvenile sex ratio for the country as a whole dropped by 4.5 percent between 1981 and 2001 or from 971 to 927 girls per 1000 boys. At the same time, the deficit of young girls, which was not at all evident in 1981 except in the

traditionally and historically masculine states of Haryana and Punjab, became so by 2001 in other neighbouring states such as Himachal Pradesh, Gujarat, and also in parts of Rajasthan and Maharashtra. In fact, according to the 2001 Census there were 49 districts in the country, where for every 1000 male children aged 0-6 years there were less than 850 female children. Majority or 38 of these districts were located in just three northern and western states of Punjab, Haryana, and Gujarat.

Underlying these practices is the preference for male children in India. There is considerable evidence from a large number of studies, including the NFHS 1 and 2 that the preference among Indian couples is for more boys than girls. Also, the use of family planning among those who have two or more sons but no or one daughter is significantly higher compared to those who have two or more daughters but no or one son. With fertility transition under way, the issue of son preference would have to be addressed through providing widespread education to all children, designing a curriculum that is gender-sensitive and emphasizing the worth of daughters or women in family and society and spreading these messages through awareness programmes.

In view of these concerns, the Indian government, responding to the petition made by non-governmental organizations and women's groups, has passed an Act prohibiting the practice of pre-natal diagnosis of sex of the foetus (Pre Natal Diagnostic Techniques (PNDT) Act of 1994). Under the Act individual practioners, clinics or centers cannot conduct tests to determine the sex of the foetus or inform the couples about it. Also, the widespread campaign around the PNDT act has led to high awareness about it among people. However, concerted efforts and sending out correct messages to providers and clients would help expand access to safe abortion and not deny abortion to women, which is recognized as their right and legal in India since 1972.

Family Planning and Health Care

As far as family planning is concerned, female sterilization remains most popular method of contraception. While that is the case, it is the men who take the reproductive decisions. In recent years, through awareness raising, training and promotion, no-scalpel vasectomy, which is comparatively a straightforward procedure, is being promoted in the country. However, family planning based on women's individual "right to choose' can be provided only when the limitations on women's control over and choices about their sexuality and reproductive behaviour are addressed first. Equally important in the context of achieving equity is the recognition that since women are rarely independent decision makers, educating men about responsible family planning and reproductive decision-making is equally important and must be taken up. Under the Reproductive and Child Health Programme, male involvement and responsibility in use of family planning and other reproductive health matters are being addressed.

Women suffer from many of the diseases that men suffer from and at the same time they are prone to morbidity arising from anemia, gynecological morbidity, and problems associated with childbearing. There are also differences by gender in the duration and intensity of illness due to poor nutritional status and inadequate health care used by women. Though the focus on addressing reproductive morbidity in the programme context is limited, there are interventions to provide services for prevention and management of reproductive tract infections.

Women's health is also affected by the nature of work they are engaged in both at home and at workplace. The relationship between work and health is quite complex. While participation in economic activity can increase incomes and thereby spending on food and health care, however, women themselves may not necessarily benefit. The longer working hours and occupational hazards (majority of women work in unorganized hazardous settings) can impact negatively on women's health especially because women do not get respite from the domestic duties. In fact, ill-health, poverty and poor working conditions form a vicious cycle with relatively greater impact on women.

Awareness raising about women's health problems is very important to promote early recognition and treatment of illness. Health delivery systems need to be designed to take account of limitations on women's flexibility in timing and mobility in attending health facilities. Overall, under the

RCH, the institutional environment and health care system must become responsive and sensitive to the needs of the women if gender equity in health care is to be achieved. In order to ensure women's access to services, strategies both on the demand and supply side are seen as important. On the supply side, greater access needs to translate into access to quality services within reach. This would include increase in the number of women health providers at the primary level. Possibility of having an additional female health worker at peripheral facilities is a welcome sign. It also involves skill-building of providers at the primary level in using quality and technologically advanced services closer to women. Another critical event on the supply side is the overall responsiveness and accountability of the health as system to understanding women's needs, concerns and predicament in accessing services. Though capacity building of providers in understanding differential access of men and women to services, differential health seeking behaviour and resultant consequences of illness can improve client – provider intervention and enhances provision of need-based client oriented services. The partnership and dialogue between women's groups and the government on design and implementation of RCH that is gender sensitive, that enhances access, can hope to bring about some measure of equity in health care.

Section 9:

Reproductive and Child Health Programme: Achievements and Challenges

Reproductive and Child Health Programme: Achievements and Challenges

The Programme of Action adopted by 179 countries at the International Conference on Population and Development (ICPD) held in Cairo in September 1994 departed in a major way from all the previous population conferences that had been held. ICPD and the World Conference on Women held in Beijing the following year acknowledged the reproductive rights of women, and made commitments to provide comprehensive health care to all. Women's advocates persuaded the governments to reject population policies focused solely on reducing fertility and to forge a new approach that focused instead on meeting individual women's needs of a wide array of reproductive health services. By placing reproductive health in a broader context of a rights based approach, the ICPD hoped that the governments could provide tools to analyse the root causes of health problems and inequities in service delivery.

As a signatory to the ICPD programme of action, India also responded positively by undertaking landmark paradigm shift in its family planning programme. In less than one year of the Cairo Conference, the Ministry of Health and Family Welfare of the Government of India removed method-specific contraceptive targets that had governed the programme for more than two decades from one or two districts from all the major states on an experimental basis. The following year in 1996 the government announced that the centrally determined contraceptive targets would no longer 'be the driving force behind the programme'. Instead, the contraceptive needs of the couples would be assessed at the level of community.

In October, 1997, the Indian Government launched the Reproductive and Child Health programme (RCH). It entails a change not only in the policy but also in management and implementation of the programme. The essential components of the RCH as outlined were: prevention of unwanted pregnancy by promoting contraception for both spacing and limiting children, providing services for safe motherhood, providing services for improving child survival by expanding immunization coverage, providing treatment for diarrhea diseases and acute respiratory infections, etc. and providing treatment for reproductive tract infections, and sexually transmitted infections.

Unwanted Fertility

Information on the extent of unwanted fertility available from the NFHS surveys shown in Table 9.1 has indicated that there are significant inter-state variations. As a percent of TFR in 1992-93 it varied between 9 percent in Kerala and around 30 percent in Haryana and Himachal Pradesh. By 1998-99, some decline was noted in the extent of unwanted fertility but in the large north Indian states it continues to be high. If the unwanted fertility were eliminated, in most parts of India the TFR would come down to replacement level or even somewhat below replacement level. According to some long-term population projections, the effect of unwanted fertility on total expected population growth was estimated to be around 24 percent. In the southern states, where TFR is closer to replacement level, the share of unwanted fertility was estimated to be around 10-15 percent. On the other hand, in states such as Bihar, Madhya Pradesh and Uttar Pradesh and Rajasthan, where the initial levels of fertility have been high and the decline has been relatively slow, the share of unwanted fertility was estimated to range between 25 and 40 percent. This is indicative that the family planning programmes in these states need to be strengthened.

Under the RCH, the issues of meeting the unmet needs of the couples for limiting fertility as well as spacing the children are being addressed by expanding the choice of methods and improving access to services by involving the private sector, the NGOs and the providers of Indian System of Medicine. Comparison with NFHS-1 indicates that proportion of women with unmet need for fertility planning has declined from 20 to 16 years, within a period of 6 years in NFHS-2. Unmet need is relatively higher in small areas from urban areas and there are large inter-state variations. Social marketing of reversible contraceptive methods is also being promoted. In RCH programme interventions are being planned to increase access to quality family planning services by engaging private sector providers in EAG states.

Table 9.1: Total Fertility Rate and Unwanted Fertility as a Percent of TFR by State, 1992-93 and 1998-99 (NFHS Data)

State	TFR in 1992-93	Unwanted Fertility	Unwanted Fertility as Percent of TFR	TFR in 1998-99	Unwanted Fertility	Unwanted Fertility as Percent of TFR
All India	3.39	0.75	22.1	2.85	0.72	25.3
Kerala	2.00	0.18	09.0	1.96	0.15	07.7
Tamil Nadu	2.48	0.72	29.0	2.19	0.48	21.9
Andhra Pradesh	2.59	0.50	19.3	2.25	0.37	16.4
Himachal Pradesh	2.97	0.93	31.3	2.14	0.64	29.9
Karnataka	2.85	0.67	23.5	2.13	0.57	26.8
Maharashtra	2.86	0.73	25.5	2.52	0.65	25.8
Punjab	2.92	0.77	26.4	2.21	0.66	29.9
West Bengal	2.92	0.70	24.7	2.29	0.51	22.3
Gujarat	2.99	0.66	22.1	2.72	0.64	23.5
Orissa	2.92	0.60	20.5	2.46	0.56	22.8
Assam	3.53	1.01	28.6	2.31	0.56	24.2
Haryana	3.99	1.18	29.6	2.88	0.78	27.1
Madhya Pradesh	3.90	0.69	17.7	3.31	0.91	27.5
Bihar	4.00	0.82	20.5	3.49	0.91	26.1
Rajasthan	3.63	0.85	23.4	3.78	1.21	32.0
Uttar Pradesh	4.82	1.00	20.7	3.99	1.16	29.1

Note: Rates are based on births in the period 1-36 months preceding the survey to women aged 15-49.

Source: International Institute of Population Sciences (IIPS), National Family Health Survey, 1992-93 and 1998-99, Bombay, IIPS.

Management of Unwanted Pregnancy

The Indian Government has recognized that under a range of circumstances, women need to resort to abortion of unwanted pregnancy and legalized it more than 30 years ago in 1972 as Medical Termination of Pregnancy (MTP) Act. The MTP Act does not advocate abortion as a family planning method. It encourages the promotion of family planning services to prevent unwanted pregnancies but recognizes that under certain circumstances women would need to resort to termination of unwanted pregnancy. The abortion policy is thus consistent with safeguarding reproductive rights as articulated in the ICPD and other agreements. The MTP Act does aim to regulate and ensure access to safe abortion care by stating when, where and under what circumstances abortion is permissible. The recent amendments made in the Act aim to decentralize its regulation by transferring the task of registration of the facilities and of providers to the district level.

The proximate causes for seeking abortion reported in a number of studies undertaken on abortion within the country are: desire to limit family size, space pregnancies, failure of contraception, preference for son, medical advice. The underlying determinants are poverty, violence and belief system. However, majority of women resort to unsafe abortion, which contributes to the burden of maternal morbidity and mortality. This is partly due to the low awareness of the legality of abortion among women. It has also been noted in a number of studies that there are misconceptions about the abortion law among the providers as well. Liberal policies and legislation by themselves are clearly not adequate to ensure access to safe abortion services.

Also, it has been pointed out that in spite of offering simpler technologies such as manual vacuum aspiration (MVA) now available and found to be very effective, many of the providers continue to rely on dilation and curettage to perform abortions because of their earlier training and long experience with using it. In order to take advantage of the emerging advances in reproductive technology, making abortion services much more accessible, the Government is providing training in MVA to the providers as part of the RCH package. Access to medical methods of abortion will also lead to reduction in proportion of women seeking induced abortion from unsafe and illegal providers.

Safe Motherhood

In spite of growing concern about reproductive health, information on levels, trends and differentials in maternal mortality has remained fragmentary for India and policy initiatives have generally rested on judgments made on the basis of a small, selective cross-section of the population. For India, the NFHS 1 and 2 conducted in the 1990s have for first time provided national estimates of maternal mortality ratios. Although the reported 540 maternal deaths per 100,000 births in the two years preceding the 1998-99 survey were larger than 424 estimated from the 1992-93 survey, the increase was not statistically significant because of large standard error. Also there is considerable overlap in the confidence intervals from two surveys, indicating that differences are not significant statistically. The surveys could not produce regional or state level estimates because the sample was not adequate.

In the RCH programme, there has been focus on promoting institutional deliveries. Recent rapid house-hold survey data indicates that skilled attendants (Doctors & Nurses) at births have gone up to 54 percent, although still nearly 60 percent of deliveries are being attended at home.

Increasingly programmes are being recasted to promote skilled attendance at birth, access to facilities, providing emergency obst. care and capacity building of providers. Efforts are also underway to promote institutional deliveries by giving financial assistance to pregnant women from below poverty line families.

Advocacy network, e.g., White Ribbon Alliance – India and other NGOs and also actively engaged in social mobilization efforts. Govt. of India in 2003, declared April 11, the birth anniversary of Kasturba Gandhi as “Janani Suraksha Diwas”.

Child Survival

All measures of infant and child mortality have declined in last decade. Despite the decline in infant and child mortality, over one in 11 children died before reaching age five. Under five mortality is 64 percent higher in rural areas than as urban areas. As shown in Table 9.2, there was a marginal improvement, from about 52 percent in 1992-93 to 55 percent in 1998-99, in the proportion of children who were protected by three doses of triple antigen vaccine, that cover diphtheria, pertussis and tetanus. The

Table 9.2: Percentages of Children Aged 12-23 Months Who Had Received Specific Vaccinations at Any Time before the Interview, Major States and All-India, 1992-93 and 1998-99

State	Type of Vaccination							
	BCG		DPT(3)		Polio(3)		Measles	
	1992-03	1998-99	1992-93	1998-99	1992-93	1998-99	1992-93	1998-99
Andhra Pradesh	73.9	90.2	66.1	79.5	68.0	81.6	53.8	64.7
Assam	48.2	53.5	31.0	37.5	32.7	37.9	25.8	24.6
Bihar	33.9	37.7	29.1	24.2	31.6	41.0	14.6	16.6
Gujarat	77.1	84.7	63.8	64.1	62.9	68.6	55.9	63.6
Haryana	77.4	86.8	66.8	71.1	67.7	74.3	60.9	72.2
Karnataka	81.7	84.8	70.7	75.2	71.4	78.3	54.9	67.3
Kerala	86.1	96.2	73.7	88.0	75.2	88.4	60.5	84.6
Madhya Pradesh	56.8	64.9	43.7	37.0	46.6	56.7	40.7	35.5
Maharashtra	86.9	93.7	83.1	89.4	81.6	90.8	70.2	84.3
Orissa	63.3	84.7	56.3	61.9	56.7	68.4	40.2	54.0
Punjab	77.4	88.7	73.6	82.0	73.4	83.6	64.8	76.5
Rajasthan	45.7	53.9	29.7	26.1	32.8	44.6	31.2	27.1
Tamil Nadu	91.7	98.6	86.5	96.7	85.3	98.0	71.6	90.2
Uttar Pradesh	48.9	57.5	34.1	33.9	37.1	42.3	26.3	34.6
West Bengal	63.1	76.5	51.9	58.3	56.0	61.7	42.5	52.4
All-India	62.2	71.6	51.7	55.1	53.4	62.8	42.2	50.7

Note: The figures relate only to surviving children from among the two most recent births in the three years preceding the survey. The BCG vaccine provides immunization against tuberculosis; DPT provides immunization for diphtheria, pertussis (whooping cough), and tetanus. For DPT and polio the figures refer to those who had received a third vaccine dose.

Source: International Institute for Population Sciences (IIPS) and ORC Macro (1995, 2000).

situation in the large north Indian states was quite poor and needs concerted efforts to improve immunization coverage. The trends with respect to coverage against measles are also not much better and the inter-state variations are large. New strategy for immunisation is expected to provide access to quality immunization services leading to reduction of burden of diseases due to vaccine preventable diseases.

Among other measures to improve survival chances of children, efforts are underway to promote total breastfeeding up to six months, to provide home based care to treat respiratory tract infections and diarrhoeal diseases, the major killers of infants and young children in India. The diarrhea deaths can easily be prevented through timely and adequate replacement of fluids. Oral rehydration therapy (ORT) can help prevent deaths due to dehydration. Under the RCH programme, Oral Rehydration Solution packets are made available at the subcentres and primary health centers. However, the faith in this method of treating simple diarrhoeas is still lacking in many parts of the country and effective communication measures need to be taken up to educate people.

The present phase of RCH programme comes to close in March 2005. RCH-2 will help in consolidating gains made so far and strengthen the programme delivery for increased coverage of the population with evidence based preventive and promotive interventions.

Section 10:

Research, Data and Training for Population and Development

Research, Data and Training for Population and Development

Even before Independence, there was awareness about the need to conduct both demographic and biomedical research in India to understand and address population and health issues. Institute such as Indian Council of Medical Research was set up as early as 1911. After Independence this and other apex Institutes were set up or strengthened. They have been engaged in academic and operations research on population issues and in biomedical research on diseases and contraceptive technology and training researchers and functionaries of the health system at all levels. In order to fulfill the needs of the vast country many more institutes were set up in different regions. There is increasing recognition for strengthening capacity to conduct research and training in population and development issues.

Demographic Research, Training and Data Sources

The Demographic Sub-Committee appointed by the Planning Commission in 1955, recommended to the Ministry of Health to set up and support Demographic Research Centres (DRC) in north (Delhi), East (Calcutta) and South (Trivandrum) of the country to undertake research on various demographic, social and economic aspects of population growth in their respective regions. Since then, many more centers have been set up mostly in state universities and institutions of national repute. The nomenclature of DRC was changed to Population Research Centre (PRC) in 1978-79. Today, there are 18 PRCs scattered over 17 states of India carrying out research on various aspects of population stabilisation, conduct demographic and socio-demographic surveys and study communication aspects of population and family welfare programme.

To fulfill the need for building a nucleus of individuals trained as population researchers or experts both in India and other countries of Asia and the Pacific, the International Institute for Population Sciences (IIPS), formerly known as Demographic Training and Research Centre (DTRC) was established in Mumbai in 1956. It is an autonomous institute under the administrative control of the Department of Family Welfare, Ministry of Health and Family Welfare of Government of India. It is one of the few Institutes set up for teaching and studying demography that was declared as a deemed university in 1985. IIPS offers academic courses in Population Sciences and in recent years taken major initiatives to strengthen research and training in reproductive health.

In the 1990s, it coordinated two national family health surveys in all the states of India, whose national and state specific reports contain a wealth of information on mortality, fertility, health, family planning situation and a host of other population and health indicators in the country. It has also been responsible for two district level Reproductive and Child Health surveys that give information on the progress of programme interventions as well as their impact. They also generate estimates of many of the indicators relevant to RCH programme and its implementation. To assess the availability and utilization of various categories of health facilities, facility surveys have also been conducted.

In addition, there are a large number of research institutes, including voluntary organizations, university departments that conduct research and training. As a result of all these efforts, the volume of information, the number of people trained in conducting demographic research has increased. Many of these trained personnel have been providing their expertise to other countries, and to the international agencies.

Without doubt, the uninterrupted series of decennial Indian Census has been the main source of data on population and its characteristics since 1871 or 140 years. Among the developing countries, no other nation has such voluminous source of data over such a long period. In recent two decades, computerization of the data has helped their timely availability to researchers and other users of the population data. However, the civil registration system, which records the vital events, although initiated during the British period around 1876, has remained deficient in coverage. To overcome the problems with registration of vital events, beginning early 1960s the Government launched sample registration system that employs a dual record mechanism from representative sample of villages and urban blocks. A local enumerator records all the vital events on a continuous basis in the designated area, which are then checked and updated through retrospective half-yearly surveyed. The SRS is the major source of annual estimates of various fertility and mortality measures at state level and within each of the major states for urban and rural areas separately. The series available for more than 30 years now is a valuable source to understand the phases of demographic transition at regional level.

Biomedical Research and Training

Set up as the Indian Research Fund Association (IRFA) in 1911, and renamed as the Indian Council of Medical Research (ICMR) in 1949 by the Government of India, this apex institute sponsors and coordinates medical research in the country. The Government of India through the Ministry of Health & Family Welfare funds the ICMR.

The Council's research priorities coincide with the national health priorities such as control and management of communicable diseases, birth control, maternal and child health, control of nutritional disorders, developing alternative strategies for health care delivery, containment within safety limits of environmental and occupational health problems. Towards this end, relevant biomedical research is sponsored. Additionally, major non-communicable diseases like cancer, cardiovascular diseases, blindness, diabetes and other metabolic and haematological disorders are also priorities. Increasingly, mental health research, generally a neglected area is being addressed. All these efforts are undertaken with a view to reduce the total burden of disease and to promote health and well-being of the population.

The ICMR has set up its own research centers and institutes in different parts of the country to carry out research on specific diseases such as tuberculosis, leprosy, cholera and diarrhoeal diseases, viral diseases including AIDS, malaria, kala-azar, vector control, nutrition, food and drug toxicology, reproduction, etc. They also address regional health problems, and aim to strengthen or generate research capabilities in different geographic areas of the country. ICMR also sponsors multi-centric studies on specific diseases, drugs etc. that can be conducted in other research institutes, medical colleges etc. National Institute for Research in Reproductive Health, Mumbai conducts bio-medical research in contraception and operations research.

The Ministry of Health and Family Welfare funds another apex technical institute named National Institute of Health and Family Welfare (NIHFW), established in 1977, for promotion of health and family welfare programmes in the country through education, training, research, evaluation, consultancy and specialized services. In all the major states also State Institutes of Health and Family Welfare (SIHFW) are set up to provide training and education to the state level health and family welfare functionaries. Under the RCH programme, the NIHFW has steered interventions for capacity building of service providers and the programme managers.

Priorities in Research and Training

The Tenth Five Year Plan (2002-2007) has listed several concerns that need to be addressed through more in depth research, training of personnel and strengthening of infrastructure. Factors behind inter-state differences in fertility and mortality, slow decline in maternal mortality and plateauing of neonatal mortality need further research. Also, there is a need to probe and understand whether the lack of improvement in routine immunization services is due to emphasis on campaign mode adopted for individual components of the programme. Similarly, gaps in infrastructure, manpower and equipment and mismatch between them at the levels of primary health centers, community health centers and referral centers need to be

identified. Overall, various components of quality of care in provision of reproductive health and child care need more research and also through training creating sensitization among the functionaries.

The lessons of the efficient mode and logistics of drug supply implemented in some of the states need to be transferred to the states where availability of drugs at the primary health care level is still erratic and needs improvement. Gender sensitization of the health care functionaries needs to be undertaken so that the dignity of women is not undermined when they seek services for their reproductive health needs including that of family planning.

There is a felt need of basic and clinical research in the development of newer technology for contraceptives to expand the choice, development and testing of new drugs and vaccines to combat old diseases such as malaria and tuberculosis and the newly emerging ones such as AIDS. Already research interventions are underway for development of microbicides and AIDS vaccine.

Section 11:

Partnership and Resources

Partnership and Resources

Partnership

As is the case with many developing countries, India has also realized that neither market nor state intervention alone can create favorable environment for development or growth. Participation of civil society is very essential for finding solutions to problems like poverty, unemployment, improving health and education status of people and addressing the well-being of women and children through research and innovative programmes. There is also a recognition that not all civil society organizations engage in activities designed to provide better governance or substitute for the Government in service provision. Some may engage in innovative interventions, some may choose to act as watchdogs offering constructive feedback on the existing programmes.

In view of India's long history of work in various sectors by NGOs and the recognition by ICPD of the relevance and importance of NGOs in preparation and implementation of the Programme of Action, The NPP, 2000 envisages increasing role of NGOs in the government sponsored programmes. In the RCH programme, the NGO involvement is envisaged at several levels. Through their grassroots experience, the NGOs are expected to enhance awareness and advocacy for successful implementation of the various components of RCH. Towards this overall objective, NGOs are involved in training and preparing training material for functionaries at various levels, in monitoring programme implementation, in research and advocacy.

A number of schemes have been prepared to involve the NGO and voluntary sectors. One scheme is that of mother NGOs, where some of the national level or large NGOs are engaged in selecting, training, assisting and monitoring smaller field-based NGOs within the states. Specifically, the tasks that are undertaken relate to advocacy for maternal and child health with a focus on promotion of small family norm, counseling and motivating adolescents to delaying marriage, delaying birth of the first child and using appropriate contraceptive methods.

There are 102 mother NGOs working in more than 400 districts of the country. Some of the state governments have tried to involve NGOs in providing services or adopting a primary health centre. Some NGOs have demonstrated commendable success in delivery of services through such mechanisms. The driving force of such experiments has been to minimize duplication of resources and services since many NGOs are service oriented. Also, the experiment is expected to evolve a model PHC that can perhaps be replicated elsewhere and demonstrate through practice rather than through only advocacy that change in the way the functionaries deliver services is possible.

The Indian Government recognizes that their efforts alone or that of some NGOs would not be sufficient to achieve the desired goals of the family welfare programme. The organized industrial sector in India does provide to its workers health and family welfare services and can be sensitized to the current concerns, needs and providing appropriate services to their clientele. It is proposed that those industrial houses that provide health services to their personnel and families can extend these facilities to the people living in the vicinity of factories. Some of them can even adopt an area or a group of villages. Their managerial skills can help in improving social marketing of contraceptives, and improve the overall efficiency.

Resources

An important issue relevant to the implementation of the ICPD agenda relates to the extent to which the Indian government commits additional resources for the promotion of

RCH and other programmes. In order to achieve the goal of providing comprehensive high quality health and family welfare care to people, increased resources would have to be allocated.

Central Government provides to the states almost whole of public finance for family welfare as centrally sponsored scheme support. The per capita expenditure by the Central Government during the last 10 years has increased by Rs.9 in real terms or roughly at 5.7 percent annual average growth rate. The current per capita expenditure is about Rs.43 at market price and Rs.24 at constant price (1993-94 = 100).

In the 9th Five Year Plan, a number of major projects, e.g., RCH, PPI, strengthening of immunization services was added as schemes with large outlays and received significant donor support. The 10th plan, however, attempted to rationalize allocation system. The number of schemes after rationalization reduced to 54.

However there has been considerable variation by state with per capita expenditure on health and family welfare. Such as in Punjab in 2000-2001, it was Rs.275, almost three times as spent by UP (Rs.92/-).

Health is primarily state subject and strengthening of health sector, depends on the states' ability to allocate more resources. This inter-alia also depends on the current level of spending, percentage spending on health and family welfare. The data on public expenditure of 14 major states in India on health suggest that at state level, Government have target of allocating only 0.43 percent of state gross domestic product to health and family welfare. Clearly there is considerable scope for the states to step up the investments in the health and family welfare sector.

The weakness of public funding in the sector may have contributed to dominance of out-of-pocket expenditure. Such payments put the poor at high financial risk and skews the provision of critical health services to the richest. In the reproductive health sector, such inequities and distortion will effect treatment-seeking for obst. complications and life threatening childhood illnessess.

The National Health Policy (2002) fixed 2 percent of GDP as the optimum government health spending. The National Common Minimum Programme too recognizes this by stating that public health spending will be increased to at least 2 – 3 percent of the GDP over next five years. The Government is well set to implement "sharply targeted population control programme" in 150 high fertility districts of the country, primarily in five demographically weak states of Northern India, i.e., Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan and Jharkhand. There are also emerging indications of significant increase in the allocation for the second phase of RCH programme. There are clear evidences of stepping up investments in this sector, which will allow access to quality services and achieve programme goals.