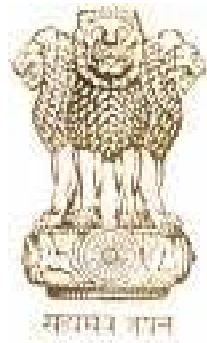# REPORT OF THE WORKING GROUP ON

POPULATION STABILIZATION

FOR THE

ELEVENTH FIVE YEAR PLAN

(2007-2012)

GOVERNMENT OF INDIA
PLANNING COMMISSION

NEW DELHI

Chapter 1

Introduction

India's successive five-year plans have provided the policy framework and funding for the development of nationwide health care infrastructure and manpower. In 1951, India became the first country in the world to launch a family planning programme to check the population growth. Since then, the family planning programme in India has undergone variety of forms. The passive, clinic-based approach of the 1950s, gave way to a more proactive, extension approach in the early 1960s. The late 1960s saw the emergence of a "time-bound", "target-oriented" approach with a massive effort to promote the use of IUDs and condoms. This was followed by even more forceful "camp approach" to promote male sterilization in the 1970s. The excesses of these campaigns lead to a severe backlash from which it took years for the programme to recover. After re-christened as Family Welfare Programme in 1978, maternal and child health services began to receive greater attention under the programme's plan of action. The centrally funded programme has been providing the states additional infrastructure, manpower and consumables needed for the delivery of services.

In the 1990s, Government of India began to reorient the programme in the light of recommendations made by a subcommittee of the National Development Council, an expert group headed by Dr. M. S. Swaminathan, and more specifically to address the concerns expressed at the International Conference on Population and Development held at Cairo in 1994. Following a major review undertaken with the support of the World Bank and other agencies in 1994-95, method-specific contraceptives targets were abolished and the emphasis shifted to decentralized planning at district level based on community needs assessment, and implementation of programmes aimed at fulfilling unmet needs. The first phase of the Reproductive and Child Health Programme was launched in 1997 as a flagship programme that covered the entire gamut of safe motherhood, child health and RTI/STI diagnosis and care. The National Population Policy (NPP) articulated the new broad-based approach towards population stabilization, and set long-term policy goals. A National Population Commission was also set up under the chairmanship of the Prime Minster of India to review, monitor and give directions for the implementation of the NPP, and to promote inter-sectoral coordination.

Goals under National Population Policy, 2000

The two important demographic goals of the National Population Policy (2000) are: achieving the population replacement level (TFR 2.1) by 2010 and a stable population by 2045. The National Population Policy envisages the following socio-demographic goals to be achieved by 2010.

1. Address the unmet needs for basic reproductive and child health services, supplies and infrastructure.
2. Make school education up to age 14 free and compulsory, and reduce dropouts at primary and secondary school levels to below 20 percent for both boys and girls.

3. Reduce infant mortality rate to below 30 per 1000 live births.
4. Reduce maternal mortality ratio to below 100 per 100,000 live births.
5. Achieve universal immunization of children against all vaccine preventable diseases.
6. Promote delayed marriage for girls, not earlier than age 18 and preferably after 20 years of age.
7. Achieve 80 percent institutional deliveries and 100 percent deliveries by trained persons.
8. Achieve universal access to information/counseling, and services for fertility regulation and contraception with a wide basket of choices.
9. Achieve 100 percent registration of births, deaths, marriage and pregnancy.
10. Contain the spread of Acquired Immunodeficiency Syndrome (AIDS), and promote greater integration between the management of reproductive tract infections (RTIs) and sexually transmitted infections (STIs) and the National AIDS Control Organization.
11. Prevent and control communicable diseases.
12. Integrate Indian Systems of Medicine (ISM) in the provision of reproductive and child health services, and in reaching out to households.
13. Promote vigorously the small family norm to achieve replacement levels of TFR.
14. Bring about convergence in implementation of related social sector programmes so that family welfare becomes a people-centered programme.

Working Group on Population Stabilization

In this context, the Working Group on Population Stabilization for the Eleventh Plan (2007-2012) was constituted by Planning Commission with the following terms of reference (TORs) under the chairmanship of Secretary (Health & FW) (**Annexure 1A**). The meeting of the Working Group was chaired by Smt. S. Jalaja, Additional Secretary (Health & FW)

a) Review the current demographic projections for the 11th Plan and beyond: the time by which the country's population is likely to stabilize; and to review the goals indicated in the National Population Policy (NPP), 2000.
b) Suggest strategy for achieving population stabilization as early as possible keeping in view the current mortality, fertility & couple protection rates in different states; fixation of state wise goals for the 11th Plan & individual years for birth rate, IMR, couple protection rates, immunization, antenatal, intra-partum, neonatal & child health care, etc.
c) Assess the current status and future requirements (short, medium & long-term) of demographic, bio-medical, social and behavioural research aimed at meeting the felt needs for health care of women and children, adolescents and aged during the 11th Plan.
d) Project financial implications for implementation of family welfare programme during 11th Plan including the plan and non-plan requirements; and the Centre-State participation in the funding.
e) To deliberate and give recommendations on any other matter relevant to the topic.

As part of this Working Group, two sub-groups were formed. One sub-group would prepare the report keeping in view the terms of references while the second

sub-group would provide inputs based on the suggestions of various expert committees constituted under the National Commission for Population.

Chapter 2

Demographic Scenario and Projections for Eleventh Plan Period

Current Demographic Scenario

India, currently the second most populous country in the world, has 17 percent of world's population in less than three percent of earth's land area. India began the 20th century with the population about 238 million and by 2000 it ended up with 1 billion. According to estimates, India added another 100 million by 2006 when its population reached 1.1 billion. The country added 16 million people annually in the1980s and 18 million annually in the 1990s until the present. While the global population has increased threefold during the last century, from 2 billion to 6 billion, India has increased its population nearly five times during the same period (Table-1). India's population is expected exceed that of China before 2030 to become the most populous country in the world.

India is in the middle of demographic transition. Both fertility and mortality have started declining throughout the country, though the pace and magnitude of the decline varies considerably across the states. Like many countries of the world, the onset of mortality decline preceded the onset of fertility decline by few decades. The country has witnessed significant improvements in demographic and health indicators since Independence. But an accurate assessment of India's demographic achievements is hampered by data deficiencies, particularly for the period before the 1970s. The official estimates of fertility and mortality levels at the time of independence are believed to be gross underestimates. Nonetheless, even they suggest significant achievements in this field. The crude birth rate, which was officially put at 42 per 1,000 in 1951-61, has declined to 24 in 2004, as per the estimates available from the sample registration system (SRS). The life expectancy at birth, which was about 32 years at the time of independence, has doubled. Infant mortality rate has come down from about 150 in 1951 to 58 by 2004.

Considering the size and diversity of India's population, the decline in both fertility and mortality is a significant achievement. Nearly one-third of India's population has lowered its fertility to replacement level. Fertility in India has come down under a wide range of socio-economic and cultural conditions. Despite this achievement, many are concerned with the pace of fertility decline, particularly in the large, north Indian states. To overcome this, the northern region of India will need much more focused programmes and more investment not only in the provision of family welfare services but also for the overall socio-economic development.

Table 1: Population Size and Growth, India, 1901-2001

Census year	Population (000s)	Growth over decade		Multiple of 1901 population
		Number (000s)	Percent	
1901	238,396	-	-	1.0
1911	252,093	1,3697	5.7	1.1
1921	251,321	-772	-0.3	1.1
1931	278,977	27,656	11.0	1.2
1941	318,661	39,683	14.2	1.3
1951	361,088	42,428	13.3	1.5
1961	439,235	78,147	21.6	1.8
1971	548,160	108,925	24.8	2.3
1981	683,329	135,169	24.7	2.9
1991	846,421	163,092	23.9	3.6
2001	1,028,737	182,316	21.5	4.3

Source: Registrar General and Census Commissioner, India, Census of India 2001: Series-1: India, General Population Tables (2006).

Achievements of Family Welfare Programme

Although India's success in fertility reduction is not comparable to that of some other Asian countries (See **Annexure A**), its achievements are by no means modest. The total fertility rate (TFR), which used to be over 6 births per woman at the beginning of 1960s, has declined to 3.0 in 2003, as per the data from the Sample Registration System. Thus essentially, India has crossed two-thirds of the way towards its goal of replacement-level fertility of 2.1. Several states in the south, with populations as large as some other Asian countries, have either already reached replacement fertility or about to reach it in a few years (see Table 2).

Table 2. Total Fertility Rate around 2000 and the Expected Number of Years It Would Take to Reach Replacement-Level Fertility, Major Indian states

Year	TFR 2000	Mean fall During last 10 years @	Years required for TFR=2.1	Expected TFR 2010
Andhra Pradesh	2.5	0.81	4	1.8
Assam	3.2	0.61	18	2.6
Bihar *	4.3	1.08	20	3.2
Gujarat	3.0	0.41	22	2.6
Haryana	3.3	0.86	14	2.4
Himachal Pradesh	2.4	1.35	2	1.8
Karnataka	2.4	1.03	3	1.8
Kerala	1.9	0.17	0	1.8
Madhya Pradesh *	3.9	0.86	20	3.0
Maharashtra	2.7	0.79	7	1.9
Orissa *	2.9	0.89	9	2.0
Punjab	2.6	0.82	6	1.8
Rajasthan *	4.1	0.45	45	3.7
Tamil Nadu	2.0	0.49	0	1.8
Uttar Pradesh *	4.6	0.75	34	3.9

West Bengal	2.4	1.02	3	1.8
All India	3.3	0.74	16	2.5
			(18)**	(2.6) **
Mean for EAG	4.2	0.82	26	3.4

* EAG states.
** State-weighted average.
@ As per the SRS data.

The percentage of married women using contraception has increased from a level just over 10 percent in the early 1970s to 48 percent in 1998-99, and to 53 percent by 2004 (Table 3). Considering the logistical problems of supplying information and services to more than 250 million women of reproductive age, this increase is a remarkable achievement. Surveys have repeatedly shown that women's knowledge about contraception is nearly universal. Female sterilization remains the most common method of family planning. For the first time in recent decades, the 2001 Census has registered a fall in the growth rate of population below two percent, indicating that the decline in the birth rate has begun to overtake the decline in the death rate.

Table 3: Use of Contraceptive Methods in India, 1992-93 to 2002-04

	Percent of married women ages 15-49 using contraception		
	1992-93	1998-99	2002-04
Any method	40.6	48.2	53.0
Any modern method	36.3	42.8	45.7
Pill	1.2	2.1	3.5
IUD	1.9	1.6	1.9
Condom	2.4	3.1	4.8
Female sterilization	27.3	34.2	34.3
Male sterilization	3.4	1.9	0.9
Any traditional method	4.3	5.0	7.3
Periodic abstinence	2.6	3.0	4.1
Withdrawal	1.4	2.0	2.7
Other	0.2	0.4	0.5
Not using a method	59.4	51.8	47.0

Sources: International Institute for Population Sciences (IIPS), National Family Health Survey 1992-93 (1995); IIPS and ORC Macro, National Family Health Survey (NFHS-2) (2000); and IIPS, Reproductive and Child Health; District Level Household Survey 2002-04 (2006).

In the early 1970s, less than 15 percent of the deliveries were occurring in institutions. It has increased to 34 percent in 1998-99 and to 41 percent by 2002-04. Thirty percent of women had institutional delivery in rural areas as against 70 percent for their urban counterparts. Before the expanded programme of immunization was lunched in 1978, the percentage of children immunized against the six preventable diseases was negligible. As per DLHS, the percentage of fully immunised children has reached 48 percent in 2002-04 at the all-India level. The same source shows that nearly three-forth of pregnant women receive antenatal check-up.

However, there are also indications of slackening in the progress towards better health. During the 1990s, the SRS data suggest deceleration in the decline of

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infant mortality rate. In particular, neonatal mortality rate has hardly shown any sign of fall. The level of child immunization is also not increasing at the rate observed in the 1980s. During the six-year interval between NFHS-1 and NFHS-2, the proportion of fully immunized children increased by only one percentage point per annum. At this rate, India could hope to reach the goal of universal immunization only after 50 years! The surveys also indicate that the decline in maternal mortality rate may have also been stalled. The decline in the birth rate is yet to pick up speed in some northern states.

Regional Variations

The five Empowered Action Group states of Bihar, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh (together with the three new states formed in this region, Jharkhand, Chhattisgarh and Uttaranchal) had a combined TFR of 4.2 around 2000. For this region as whole it would take another 26 years to reach replacement fertility under the current rate of decline (see Table 2). Thus, without acceleration of fertility decline in EAG states, India cannot hope to achieve replacement fertility by 2010. Assuming the prevalence of below-replacement fertility in some southern states, at best, India could hope to achieve a TFR of 2.6 by this date.

What are the hopes for a faster reduction in fertility in the EAG states? Table 4 shows the position of EAG states with respect to some important determinants of fertility around 2000, the average change in the determinants during the last 10 years, and the number of years it may take the region as whole to reach the levels required to attain a TFR of 2.1. The current levels of the indicators in some southern states that have achieved, or close to achieve the mark have been taken as the required levels to reach replacement-level fertility. Under the current trends, it would take the EAG states at least 25 years for the use of contraception, female age at marriage, unmet need for contraception, ideal family size and regular exposure to mass media to reach their respective levels required to attain replacement-level fertility. Only the trends in infant mortality and female literacy suggest that they would be reaching the required levels earlier. But an important caveat with respect to their trends must be noted. Although the average decline in IMR during the last 10-years has been quite rapid, there has been substantial deceleration in the decline in recent years, and further decline could be more difficult. With respect to female literacy, the 2001 Census has recorded a substantial increase probably because of adult literacy campaigns. It is doubtful whether an increase in literacy by such means would have the same effect on fertility as through formal channels. Thus the prospects for India achieving replacement fertility by 2010 seem bleak, considering the demographic challenges posed by EAG states. The demographic key indicators for states, based on DLHS (2002-04) and Facility Survey (2003) of Reproductive and Child Health Project, have been presented in **Annexure B**. The time lag between Kerala and other states in selected demographic parameters is presented in **Annexure C**.

Table 4: Levels of Some Important Determinants of Fertility in EAG States and the Numbers of Years it May Take for Them to Reach the Level Required for Replacement-Level Fertility

Indicators	Level around 2000	Change during last 10-years	Required level for TFR = 2.1	Required no. of Years
Percent using contraception	34	10	65	31
Median age at marriage	15	0.5	18	60
Unmet need for contraception	21	5	5	32
Ideal family size	3	0.3	2	33
Female literacy rate, age 7+	45	15	80	23
Infant mortality rate	85	28	40	16
Empowerment of women	Low	?	High	?
Exposure to mass media	41	12	75	28
Home visit by ANM (%)	5	?	20	?

Population Projection

The Technical Group on Population Projections set up by the National Commission on Population has recently come out with population projections for India and states. As per this report, India's population is expected to reach 1.2 billion by 2011 and 1.4 billion by 2006 (see Table 5). According to this projection, population would grow by 1.4 percent during the Eleventh Five-Year Plan period (more precisely during 2006-11). Even by 2021-26, the population is expected to have a growth rate of 0.9 percent (see Table 6). An important assumption underlying this projection is that the total fertility rate would reach replacement level (approximately 2.1) only by 2021. The reason behind this gloomy expectation is the slow pace of fertility transition in several large, north Indian states. In fact, according the Technical Group, TFR would not reach the replacement level in some of these states even by 2031. Although the Technical Group did not carry forward the projection till the date of stabilization, the projected delay in reaching the replacement-level fertility would imply that India's population would not stabilize before 2060, and until population size nears 1.7 billion.

Table 5. Projected Population of India (in millions) by Broad Age Groups, 2001-2026

Year	2001	2006	2011	2016	2021	2026
Under Age 15	365	357	347	340	337	327
15-59	593	672	747	811	860	900
60+	71	84	98	118	143	173
Total	**1029**	**1112**	**1193**	**1269**	**1340**	**1400**
Source : Office of Registrar General, India						

One of the most chilling results of this exercise is the wide geographical disparity in the projected population growth. If the total population of the country is expected to grow by 36 percent between 2001 and 2026, in southern states, the growth is expected to be around 15-25 percent only, whereas in northern parts of the country, the growth is expected to be in the range of 40-50 percent (see Table 7). Of the expected addition of 370 million to India's population during 2001-26, Uttar

Pradesh alone would account for a whopping 22 percent, and the other three northern states - Bihar, Madhya Pradesh and Rajasthan – would account for another 22 percent. The population growth in these regions is also expected to cause population pressure in major migration destinations, chiefly Delhi and Maharashtra. Clearly, something urgent needs to be done to check population growth in these states.

Table 6. Projected Levels of Some Key Demographic Indicators, India, 2001-26

Indicator	2001-06	2006-11	2011-16	2016-21	2021-26
Population growth rate (%)	1.6	1.4	1.3	1.1	0.9
Crude birth rate	23.2	21.3	19.6	18.0	16.0
Crude death rate	7.5	7.3	7.2	7.1	7.2
Infant mortality rate	61	54	49	44	40
Total fertility rate	2.9	2.6	2.3	2.2	2.0
Life expectancy at birth for males	63.8	65.8	67.3	68.8	69.8
Life expectancy at birth for females	66.1	68.1	69.6	71.1	72.3
Source : Office of Registrar General, India					

Table 7. Some Key Results of Population Projection for States, 2001-26

State	Projected growth rate 2006-11 (%)	Projected population growth 2001-26			Total fertility rate	
		% growth	(000's)	% share	2011	2021
Andhra Pradesh	1.0	23.4	17,863	4.8	1.9	1.8
Assam	1.3	33.6	8,946	2.4	2.5	2.1
Bihar	1.5	37.2	30,848	8.3	3.0	2.2
Chhattisgarh	1.4	37.2	7,757	2.1	2.8	2.2
Delhi	2.8	102.0	14,131	3.8	1.8	1.8
Gujarat	1.4	36.7	18,587	5.0	2.2	1.9
Haryana	1.7	47.0	9,942	2.7	2.3	1.9
Himachal Pradesh	1.0	24.6	1,497	0.4	1.9	1.8
Jammu & Kashmir	1.4	32.4	3,290	0.9	2.3	1.9
Jharkhand	1.4	38.6	10,410	2.8	2.7	2.1
Karnataka	1.1	26.6	14,082	3.8	2.0	1.8
Kerala	0.8	17.0	5,413	1.5	1.8	1.8
Madhya Pradesh	1.7	45.4	27,381	7.4	3.0	2.4
Maharashtra	1.4	37.6	36,454	9.8	2.1	1.9
Orissa	0.9	23.1	8,519	2.3	2.1	1.9
Punjab	1.2	28.7	6,986	1.9	2.0	1.8
Rajasthan	1.7	44.2	24,994	6.7	2.9	2.2
Tamil Nadu	0.7	15.1	9,451	2.5	1.8	1.8
Uttar Pradesh	1.8	49.7	82,565	22.2	3.7	2.8
Uttaranchal	1.5	38.4	3,257	0.9	2.7	2.2
West Bengal	1.0	25.4	20,358	5.5	1.9	1.8
North-eastern states	1.2	31.0	3,782	1.0	2.0	1.8
India	1.4	36.1	371,228	100.0	2.5	2.1

Strategies to Achieve Population Stabilization

Fertility decline in India has been the effect of various socio-economic developments as well as government sponsored family welfare programme. Rising levels of education, increase in female age at marriage, influence of mass media, economic development, gender empowerment and measures for equality, continuing urbanization, diffusion of new idea, and declines in infant and child mortality have all contributed in lowering the levels of fertility. These factors, along with strong health infrastructure and focused family welfare programme, will continue to be driving the fertility transition. Even at the national level, the views regarding the ideal number of children are fast approaching the two child norm. But at the same time, preference for sons is clearly evident in many parts of India. The regional difference in fertility level is also likely to continue for many more years. Given this context, what are the strategies that can be adopted to achieve the population stabilization within a reasonable time period?

National Rural Health Mission (NRHM)

Recognizing the importance of health for social and economic development and for improving the quality of life, the Govt. of India launched the National Rural Health Mission (NRHM) in 2005 to carry out the necessary correction and strengthening of basic health care delivery system. The Plan of Action of NRHM envisages increasing public expenditure on health, reducing regional imbalances in health infrastructure, pooling resources, integration of organizational structures, optimization of health manpower, decentralization and district management of health programmes, community participation and ownership of assets and providing public-private partnership. The goal of the mission is to improve the availability of and access to quality health care of the people, especially for those residing in rural areas, the poor, woman and children.

<u>The expected outcomes from the Mission as reflected in statistical data are:</u>

- IMR reduced to 30/1000 live births by 2012.
- Maternal Mortality reduced to 100/100,000 live births by 2012.
- TFR reduced to 2.1 by 2012.
- Malaria Mortality Reduction Rate – 50% up to 2010, additional 10% by 2012.
- Kala Azar Mortality Reduction Rate – 100% by 2010 and sustaining elimination until 2012.
- Filarial/Microfilaria Reduction Rate – 70% by 2010, 80% by 2012 and elimination by 2015.
- Dengue Mortality Reduction Rate – 50% by 2010 and sustaining at that level until 2012.
- Cataract operations-increasing to 46 lakhs until 2012.
- Leprosy Prevalence Rate – reduce from 1.8 per 10,000 in 2005 to less than 1 per 10,000 thereafter.
- Tuberculosis DOTS series – maintain 85% cure rate through entire Mission Period and also sustain planned case detection rate.

- Upgrading all Community Health Centers to Indian Public Health Standards.
- Increase utilization of First Referral Units from bed occupancy by referred cases of less than 20% to over 75%.
- Engaging 4,00,000 female Accredited Social Health Activists (ASHAs).

The NRHM (2005-12) seeks to provide effective health care to rural population throughout the country with specific focus on 18 states that have weak public health indicators and poor health infrastructure.

Meeting the unmet demand for contraception

The NPP document lays great stress on meeting the unmet need for contraception as an instrument to achieve population stabilization. The presence of high level of unmet need for contraception in EAG states is not a myth, as it is supported by data from both NFHS and DLHS. But it would be a mistake to assume that inadequate access to services should be the dominant, or even a major, explanatory factor for its presence. As a carefully conducted in depth investigation in the Philippines had shown, unmet need for contraception could arise from several reasons, such as weak motivation, low female autonomy, perceived health risks, and moral objection to the use of contraception. The elimination of these factors, and thus the unmet need, could prove to be as difficult as generating fresh demand for contraception.

According to the DLHS Round 2 (2002-2004) 21 percent of women in India have an unmet need for family planning. The unmet need for limiting is higher (13 percent) as compared to unmet need for spacing (9 percent). Total unmet need is highest among the younger women and women of lower parity, particularly for spacing. If all the women who say that they want to space or limit their births were to use family planning, the contraceptive prevalence rate could increase from 53 percent to 74 percent. It is important to address the unmet need for contraception, particularly for spacing by providing access to safe, effective and reversible methods. To do so it may be necessary to expand the basket of contraceptive choices. Social marketing of contraceptives and availability of the range of methods would help to meet the needs of couples who are not ready to accept sterilization. In their annual surveys of eligible couples, ANMs should be asked to identify women with unmet need for contraception and address their concerns so that unwanted pregnancies could be avoided. Even if unmet need cannot be entirely eliminated, elimination of about half the unmet need would be sufficient to have the desired effect on birth rate.

Expanding the Basket of Contraceptive Choices

Female sterilization has been the mainstay of Indian family planning programme. The users of reversible methods form less than 15 percent of the users of all methods. A high level of infant and child mortality, and strong preference for sons, deter women from accepting a terminal method of contraception early. The data from the NFHS show that about half of the unmet need for contraception is for spacing. The Hindu-Muslim difference in fertility and use of contraception has become major political issue in India. Partly the difference stems from the religious objections for the use of sterilization among Muslims. Under these circumstances, there is an urgent need to expand the basket of reversible methods of contraception offered under the

programme. Research indicates that addition of a method to the basket of choices has an independent effect on the overall use. Injectibles and implants, which are not currently offered under the programme, must be introduced as early as possible by taking necessary safe guards. Female condoms would also be a welcome addition to the programme.

Increasing Male involvement

Male methods account for only 6 percent of current contraceptive use. Vasectomy, which used to be a popular method, went out of favour after the excesses committed in the 1970s. Vasectomy is safer and easier to perform in primary health centres than tubectomy. In recent years, the introduction of no scalpel vasectomy (NSV) has shown some signs of success in some states. Vigorous efforts should be made to promote this method, and train more doctors in performing this task. As males are the main decision makers in Indian households, IEC activities also need to focus on men for imparting knowledge on reproductive health of both men and women and about the advantages of small family.

Diffusion through Satisfied Users

It has become increasingly clear that fertility decline in India is the result of horizontal and vertical diffusion of a new reproductive idea and information about various methods of contraception. Strong spatial patterns in fertility decline, and systematic changes in fertility differentials by socio-economic status, support the innovation-diffusion hypothesis. The satisfied adopters of the method play a key role in this ideational change. By recruiting such couples for working in liaison with grassroots health workers, it may be possible to increase the rate of diffusion.

Research has shown that contraceptive use increases in closely-knit communities through diffusion of information and the idea of small family norm. Inter-personal communication plays a key role in the ideational change. Thus satisfied users can serve as active agent in this process. The Janmangal programme in Rajasthan is based on this idea. Janani also uses "Women Health Partners" for IEC. As the family planning programme has been there for half a century, there are already some users of contraception in every community. The scheme intends to use them to rapid transmission of small family norm.

ANMs would identify a 'satisfied' acceptor couple (SAC) of each method from caste and communities among whom the acceptance of the method is low. They would be requested to spread information about the method, and motivate others in their community. They would work in coordination with health workers at grassroots such ASHA, ANM and Anganwadi worker. For their services, a fixed honorarium could be provided. The performance of these SACs would be reviewed each year by the ANM to decide whether they could be retained for this work in the following year.

The Role of Mass Media

An instrument that has become increasingly important these days is the use of mass media in promotion of small family norm and providing information on reproductive and child health services. The rapidly increasing exposure to electronic media has made this an important channel of behavioural change communication. The

analyses of NFHS data have shown that the exposure to mass media, and family planning messages through these sources have strong independent effects on the current use of contraception, and future intention to use among non-users. It used to be contended that interpersonal communication is a more effective agent of behavioural change than the mass media. But recent research shows that messages though media stimulate discussion between husband and wife, among friends and neighbours and with health workers. Thus mass media and inter-personal channels should be seen as complementary rather than substitutes in the process of developmental communication.

Research shows that exposure to mass media has a strong independent effect on the use of family planning methods. Mass media has a wide reach, and would help to raise curiosity and create grounds for interpersonal communication to occur. However, surveys show that in EAG states, regular exposure to mass media has not yet reached desirable levels to have a wider impact. It is therefore required to raise exposure to mass media in EAG states by providing DVD/CD player and Television set to PHCs, FRUs and Mahila Mandals. As a part of this scheme, imaginatively produced DVD/CDs on reproductive and child health, including information on various methods of contraception, could be distributed.

Facility surveys show that less than 20 percent of the PHCs have telephone connections. For efficient referral services and monitoring of the programmes, telephone connections are essential. It is therefore important to provide telephone connections to every PHCs, FRUs and CHCs. PHCs and FRUs receiving at least 10 outpatients/maternity cases in a day in EAG states could be identified for the supply of DVD/CD Players and TV sets. For moving the TV set between OPD and inpatient ward, a trolley could also be provided. During fixed hours in a day, DVD/CDs on RCH and family planning could be played for viewing by the outpatients/women coming for delivery. DVD/CD players and TVs could also be supplied to Mahila Mandals on the condition that they would arrange DVD/CD viewing sessions (along with TV shows) at fixed hours in a day. ANMs during their field visits should check whether these are effectively used. The production of DVD/CDs could be out-sourced. Telephone connections should be supplied to all PHC/FRU/CHCs. There should be a fixed budget line to cover monthly telephone bills and maintenance, as in other government offices.

Arranging Group Meetings of Newly Wedded Couples and Pregnant and Nursing Mothers

In India, about 10 marriages occur for every 1,000 population. Many women marry at young age. It is therefore extremely necessary to impart knowledge on the responsibilities of parenthood to newly weds as early as possible. Similarly, group meetings of pregnant and nursing mothers can be arranged to provide them information about maternal and child heath care and contraception. It is not sufficient to just ask the ANMs to make home visits for IEC as it is difficult to monitor such activities. Surveys show that heath workers visit less than10 percent of eligible women during a whole year. To give a formal platform for such communication strategies, ANMs with the help of SACs, and ASHAs should be asked to arrange group meetings of newly weds in a village every year. Such formal meetings will also give the required visibility to the programme.

In villages with population more than one 1,000 the ANMs with the help of ASHAs and SACs will organise group meetings of newly weds, and pregnant and nursing mothers at least twice in a year. In villages with less than 1,000 populations, such meetings may be held once in a year. In these meetings, ANMs should provide information and knowledge on prenatal, natal and post natal care of women, new-born care, child immunization, virtues of small family size, interval between births, methods of contraception and abortion, STI/RTI and HIV/AIDS, with the aid of illustrative pamphlets and booklets. The active cooperation of Panchayat members should be sought to arrange these meetings.

Social Marketing

In spite of longstanding social marketing programme for condoms and oral pills, the use of these methods has not picked up. The growing epidemic of HIV/AIDS provides an opportunity to promote the use of condoms. The experience of our neighbouring countries suggests that substantial potential for greater use of pills by younger couples, if supported by counselling and IEC activities. The social marketing programme has suffered from (i) strong urban bias in the distribution network; (ii) low incentive to commercial participants; (iii) limited product range and (iv) simultaneous presence of wasteful, free distribution system.

Surveys have disclosed large unmet need for contraceptives, particularly in EAG states. Apparently, the government delivery system is not reaching the needy. As per the NFHS data, less than 10 percent of rural women report that they are visited by the ANMs during a year. This implies that ANMs are able to visit less than 100 households in a whole year. On the other hand, there is a large pool of formally or informally qualified Rural Health Practitioners (RHPs) who meet the day-to-day health care needs of rural folks. It is proposed to use them in the delivery of non-clinical methods of contraception and referring the clinical cases to the PHCs or FRUs, for a nominal fee. The successful experimentation of this approach by Janani in Bihar gives hope that this scheme could work if implemented with care and imagination.

Involvement of Private Sector

There is an urgent need to increase the involvement of private sector in the delivery of family planning services, especially in areas where the pubic sector is weak. This includes inner-city slum areas and large parts of EAG states. It is estimated that private medical practitioners provide more than two-thirds of all health care in India (see **Annexure**: **D**). In rural areas, they are more respected and accessible than government grassroots heath workers. As experience of Janani in Bihar has shown, rural heath practitioners could be recruited for social marketing of non-clinical methods and for referring clinical methods to public/private health institutions.

Increasing the Visibility of the Population Stabilization Programme

The inverted red triangle, the eye-catching logo of the Indian family planning programme of yesteryears, has slowly fading from the public memory. There is an urgent need to bring back the visibility to the population stabilization programme. The paradigm shift in the programme calls for a new but simple logo. An award may be announced for developing a simple but effective logo. A private agency could be hired

at the national level to publicise the logo and the programme. The strong presence of electronic media, particularly television, can be used for popularising small family norm and population stabilization programmes, both in rural and urban areas.

Strengthening Family Welfare Infrastructure

The sub-centre, manned by an auxiliary nurse midwife (ANM), is the most peripheral health institution available to the rural population. As per the norms established under the Basic Minimum Services programme in 1997, there should be one sub-centre for every 5,000 population in plain areas, and for every 3,000 population in hilly/tribal areas. In 2002, there were 1,37,271 sub-centres, or one sub-centre for 4,579 rural population.

The primary health centre (PHC) is a first referral unit for six sub-centres. In 2002, there were 22,975 PHCs , one for every 27,364 rural population. PHCs provide outpatient services and have 4-6 inpatient beds. According to the norm they should have one medical officer and 14 paramedical and other supporting staff. But in many remote areas there are no functional PHCs .

Community Heath Centres (CHC) are planned as first referral units (FRUs) for four PHCs for offering specialized care. According to the norm they should have at least 30 beds, one operation there, X-ray machine, labour room and laboratory facilities. The staff should consist of at least four specialists, a surgeon, a physician, a gynaecologist and a paediatrician who should be supported by 21 paramedical and other staff. Currently there are 2,935 community heath centres, or one for 2,14,000 population. But majority of CHCs do not function as FRUs as they either do not have the required number of specialists or the facilities.

The facility survey undertaken as a part of RCH project has brought out the serious shortfalls in physical infrastructure, staff and supplies at pubic heath institutions. The survey considered a heath institution as adequately equipped if it had 60 percent of the critical inputs. According to this criterion, at the all India level, only 36 percent of the PHCs had adequate physical infrastructure such as building, water and electricity supply, laboratory and labour room, vehicle etc., 38 percent had adequate staff in position, 31 percent had adequate supplies of kits, drugs, vaccines and contraceptives, and 56 percent had the adequate equipments in function, such as weighing machine, vaccine carrier, BP instruments, autoclave, etc. The position of CHCs, FRUs, and district hospitals were somewhat better, but they too had severe shortage of supplies. Only 10-15 percent of them had adequate supplies. The staff in position in CHCs (25 %) and FRUs (46%) was also far from adequate. In EAG states, the position of PHCs was far worse than the all India average. Only15-20 percent of them had adequate infrastructure, staff and supplies. It was also observed that only 12 percent of medical and paramedical staff (only 4 percent in EAG states) had received adequate in-service training. The FRUs/CHC and district hospitals attended only about 10 referred cases of delivery in a month.

Involvement of Local Self-Governments

The 73rd and 74th Constitutional Amendments made health and family welfare a responsibility of local bodies. Being closer to the people, a decentralized institution is

expected to meet their needs and preferences. The whole idea of decentralized governance is based on some key factors like people's participation, accountability, transparency and fiscal transfers. How far decentralization of services helps in improving the quality and coverage of healthcare delivery? Experiences from across the country indicate a precondition for enhancing the effectiveness in delivery of public health services is community participation in decision-making and programme implementation. This can be facilitated through the intervention of the PRIs by making health services responsive to local needs, more accountable to the local population, focusing on local problems, prioritizing the requirements, generating public demand for the services, and efficient use of available resources. The National Population Policy (NPP-200) reiterates the crucial role of panchayats in planning and implementation of health and family welfare programmes. Decentralization is expected to bridge the existing gap between the service providers and the clients to a great extent. However, for the PRIs to be effective in health service delivery, more responsibilities need to be given in the sector-specific budget allocations, revenue-raising powers and training. In reality, the functions and powers devolved to the Panchayats vary considerably across the states. Since one-third of elected members at the local bodies are women, this is a good opportunity to promote a gender sensitive, multi-sectoral agenda for population stabilization with the help of village level health committees. Under the National Rural Health Mission (NRHM), ASHAs would be selected by and be accountable to the village panchayats (the coverage under NRHM for various health facilities/functionaries is presented in **Annexure E**).

Expected Level of Achievement

Although the actual impact of the forgoing strategies to reach population stabilization is difficult to predict, if effectively perused, they should able to bring down the birth rate faster than what is projected by the Technical Group on Population Projections. Through these measures, it is anticipated that TFR would reach replacement if not by 2010, by 2015 - roughly by five years earlier than that projected by the Technical Group. By the end of the eleventh plan, at the all-India level, crude birth rate (CBR) is expected decline from 24 in 2004 to 19, and couple protection rate (CPR) to increase from 53 percent in 2002-04 to 64 percent. It is expected that the increase in CPR would result from reducing the unmet need for contraception by half, i.e., from 21 percent to 11 percent. The expected levels of achievement for the states are shown in Table 8.

Table 8. Expected Level of Achievement for CBR and CPR by the End of 11th Plan

State	Crude birth rate		Contraceptive use		Unmet need	
	SRS 2004	ELA 2012	DLHS 2002-04	ELA 2012	DLHS 2002-04	ELA 2012
Andhra Pradesh	19.0	16	62.8	68.7	11.7	5.9
Assam	25.1	20	57.5	68.8	22.5	11.3
Bihar	30.2	21	31.0	49.4	36.7	18.4
Chhattisgarh	27.4	21	46.6	57.5	21.7	10.9
Delhi *	18.4	16	64.1	72.3	16.4	8.2
Gujarat	24.3	16	59.2	67.4	16.3	8.2
Haryana	25.1	17	60.3	67.7	14.7	7.4
Himachal Pradesh	19.2	15	70.1	76.0	11.8	5.9
Jammu & Kashmir	18.7	18	54.8	67.2	24.8	12.4
Jharkhand	26.2	20	37.9	54.4	32.9	16.5
Karnataka	20.9	16	59.3	66.9	15.1	7.6
Kerala	15.2	14	68.5	76.1	15.2	7.6
Madhya Pradesh	29.8	22	50.5	61.0	21.0	10.5
Maharashtra	19.1	16	63.3	69.6	12.6	6.3
Orissa	22.1	17	54.7	64.3	19.1	9.6
Punjab	18.7	15	68.2	73.4	10.4	5.2
Rajasthan	29.0	21	46.9	57.8	21.8	10.9
Tamil Nadu	17.1	14	57.7	66.8	18.1	9.1
Uttar Pradesh	30.8	25	35.6	52.4	33.6	16.8
Uttaranchal	20.5	16	48.7	62.2	26.9	13.5
West Bengal	19.3	16	74.1	79.6	11.0	5.5
North-eastern states	17.6	17	40.2	58.1	35.7	17.9
India	24.1	19	53.0	63.6	21.1	10.6

Chapter 4

Research and Financial Requirements

Research Needs

Research studies on family planning and population stabilization are being undertaken by various governmental and private agencies. The International Institute for Population Sciences (IIPS) is the nodal agency for conducting the National Family Health Surveys (NFHS) and the District Level Household Surveys (DLHS-RCH) for the country as a whole. These surveys provided very valuable information on issues related to antenatal care, immunization, safe delivery, contraceptive prevalence, unmet need for family planning, awareness about RTIs and STIs, and utilization of government health services and user's satisfaction. The DLHS Round II survey is completed during 2002-04 in 593 districts. The second phase of facility survey was carried out in 307 districts in 2003 to assess the availability of healthcare facilities and their utilization in SCs, PHCs, CHCs and other hospitals. At the state level, the Population Research Centres (PRCs) are in a position to conduct studies related to the changing demographic and health requirements. The data collected periodically through Census, Sample Registration System and other governmental agencies are also helpful in assessing various demographic and health indicators.

Over the decades, though many micro-level research studies and large-scale demographic surveys have helped in strengthening India's family welfare programmes, more focused research may be required to address emerging issues and dimensions of demographic, epidemiological and health transitions in India. Though the fertility has declined throughout the country, the factors responsible for reduction in fertility considerably vary across the states. Well-organized and executed demographic surveys can highlight the reasons behind the declines in fertility and mortality and the changing attitudes of couples towards contraception.

1. The demographic research should focus on testing and validating of relationship between acceptance of family planning and socio-economic conditions of population. In recent decades there is a significant shift in the process from provision of family planning to quality of services. The research should highlight the current status and future requirements to understand the needs of women and children.

2. Research studies should be undertaken to document the successful family planning interventions in both pubic and private sectors, within India and abroad, and analyze the reasons for their success so that they could be implemented elsewhere.

3. The cost effectiveness and financial requirements of various health and family welfare programmes are yet to be studied in detail. This is a pre-requisite for future planning and programme implementation.

4. Rapidly demographic changes in the country call for more research in areas such as demographic dividend, labour migration and outsourcing of jobs, population ageing, and imbalances in population sex ratio.

5. With the introduction of new contraceptive methods and RCH services, it is necessary to find out the acceptability of contraceptive methods for men and women belonged to various socio-economic strata. This will help in understanding the misconceptions as well as side effects of various birth control methods. Based on the findings of these studies, the programme can be fine-tuned to meet the requirements.

6. The demographic surveys should also address factors responsible for changing value of children, gender preferences, and the attitude towards small family norms.

7. Demographic and behavioural surveys should also address issues related to reproductive rights, male involvement in family planning, adolescent reproductive health, and women's health status and autonomy.

8. Bio-medical research needs to be strengthened to develop appropriate contraceptive technologies. Institutions such as Indian Council of Medical Research (ICMR), National Institute of Health and Family Welfare (NIHFW) and Central Drugs Research Institute (CDRI) can play an important role in this regard.

9. Specific studies are required to find out the acceptability of emergency contraception in the Indian context.

Monitoring and Evaluation:

Regular procedures should be developed to evaluate and monitor various RCH programmes both at the district and state levels. This will also help in popularizing successful experiments and to draw lessons for better programme implementation. Regular monitoring will also help in identifying area specific problems and will facilitate the programme mangers to chalk out remedial measures. The DLHS surveys provided valuable inputs for evaluating the impact RCH programmes at district level. However, it should be noted that such surveys are not substitutes for monitoring the programmes through a regular management feedback system. If effective mechanisms were developed to fill and analyze the data in the forms devised under the Community Needs Assessment Approach, (CNAA), much of the current problems in monitoring the programmes could be solved. The dependency on annual surveys for evaluation could be reduced, and better informed planning by local bodies would be possible, if the civil registration system is streamlined and strengthened. Unfortunately, such long-term measures to improve the statistical system do not receive the attention they deserve.

Financial Implications

The National Rural Health Mission (NRHM) has envisaged increasing the share of central and state governments on healthcare from the current 20-80 to 40-60 sharing

in the long run. During the 11th Plan period the states would be expected to contribute 15 percent to make the share of the central government 85 percent. Regarding the additional resource needs, the National Commission on Macro Economics and Health (NCMH) had made a detailed assessment of investment requirements. The Commission has recommended additional non-recurring investment of Rs. 33,811 crores and a recurring investment of Rs. 41,006 crores, the expenditure to be made over a period of five to seven years. If we broadly agree with the overall calculation of the NCMH and allow for local variations within the overall resource envelope, the broad resource need for NRHM will be an additional Rs. 30,000 crores of non-recurring resources and a recurring need of Rs. 36,000 crores, over and above the current allocations for NRHM in 2005-2006.

11th Plan – Requirements

Table 9: Annual Resource needs for NRHM

	Central Govt. NRHM Allocation	Recurring	Non-Recurring	State Contribution	Total
2005-06	6,500			-	6,500
2006-07	9,500	9000	500	-	9,500
2007-08	12,350	11000	1350	2,179	14,529
2008-09	17,290	13000	4290	3,051	20,341
2009-10	24,206	16206	8000	4,272	28,478
2010-11	33,884	23884	10000	5,980	39,864
2011-12	47,439	42439	5000	8,372	55,811

Source: National Rural Health Mission, Framework for Implementation

Chapter 5

Recommendations

There are different ways of improving the responsiveness of health and family welfare system. Just increasing the budgetary provision will not yield the desired results unless it is accompanied by strategic reforms and programmes to involve communities in population stabilization. Health outcomes can be improved if local communities have a greater say in the provision of basic healthcare. To improve efficiency, based on the experiences so far, the following recommendations have been made:

1. Despite five decades of effort to promote the use of family planning methods, a large percentage of couples report unmet need for contraception. If this unmet need could be met, population stabilization goal would be achieved. Even meeting half of the unmet need could make significant dent on the birth rate. ANMs and ASHAs could be asked to identify the couples with unmet need in their area, and address their concerns. As more than half of the unmet need is for limiting family size, meeting the unmet need would call for significant expansion of sterilization services, especially in the large north Indian states, although the NHRM launched by the Government of India acknowledged this issue.

2. India's Family Welfare programme placed heavy emphasize on sterilization as the major method of family planning. Many other Asian countries started their family planning programmes with spacing methods and then gradually introduced sterilization. Providing sterilization services requires well-trained medical personnel and well-equipped facilities. A permanent method may not be preferred when levels of infant and child mortality are high, or because of religious beliefs. Therefore, sterilization should be the last resort than the first one in the contraceptive choices given to the public. So there is a need to expand the range of choices of contraceptives as well as to improve the quality of services provided to couples, both in rural and urban areas.

3. There is an urgent need to restructure the existing PHCs and SCs. Does it make sense to have the same number of ANMs per population in every state, given that birth-rates differ considerably from state to state? Whether the Government has the capacity and funds to adequately maintain and to operate the current level of infrastructure? How best we can attract qualified doctors to government health care institutions in rural areas. Answers to such persisting questions should be immediately found within the framework of NHRM. Some successful experiments made to address these concerns should be carefully looked into for implementation at a wider scale.

4. There is a need for specially focusing on poorly performing districts based on the available data from the DLHS and Facility Surveys. To bridge the gap in essential health infrastructure and manpower, state should have a more flexible approach. Care should be taken to ensure the uninterrupted supply of essential

drugs, vaccines and contraceptives of required quality and quantity to all the CHCs, PHCs and SCs.

5. The Panchayati Raj Institutions should play a bigger role in the supervision and monitoring of PHCs. In most states the PRI involvement is not very effective mainly because the health management committees are not functioning or not representing the poor. Even when the health committees are active they have no authority over medical and paramedical personnel. In many cases, there is the need to develop better co-ordination mechanism between local self-governments and health care institutions. It is necessary to orient the PRI members about their roles and responsibilities in providing better public health services as well as the need for assigning top priority to health issues among the activities of the PRIs. Although the NRHM Framework for implementation approved by the Union Cabinet specifically addresses this issue, the challenge lies in its implementation.

6. Concerted efforts are necessary to improve the coverage and quality of registration of births, deaths, marriages and pregnancies. A motivated ANM, Anganwadi Worker or ASHA can play an important role in this regard. The responsibility of ensuring the complete registration can be entrusted to the local bodies with clear-cut guidelines.

7. Strict enforcement of the Child Marriage Restraint Act, 1976, implying prevention of marriages of girls and boys below the legally permissible ages of 18 and 21, respectively, would facilitate not only reduction of high risk teenage pregnancies but also help in human resource development amongst these younger girls and boys during their formative years towards improvement in the quality of life in the long run. The Group recommends a national campaign against Child Marriages, sex selection against the girl child & for promoting institutional delivery by the Central & State Governments.

8. Focused attention on antenatal and institutional delivery care would help towards reduction in neo-natal component of infant mortality as well as maternal mortality, which in turn has externalities towards better acceptance of the family welfare program interventions and thus accelerate the process of fertility transition and population stabilization.

9. To improve the operational efficiency of the programmes, the Health Management Information System (HMIS) needs to be strengthened. The timely and accurate information gives the health managers the ability to monitor inputs and outputs of the system and help them to assess the costs and returns from various procedures. In many cases, measuring performance and distributing that information will automatically provide certain incentives for the service providers to perform.

10. The success of the Family Welfare Programme depends to a great extent on the personnel working in various institutions. Regular in-service training to enhance their knowledge and skills and to familiarize them with the new programmes should become a part of regular activity of the health department.

They should also be in a position to develop local level health plans taking into account the health conditions of the people and their requirements.

11. It is important to periodically assess the utilization of health services and customer satisfaction. Regular surveys, both for clients as well as for health care providers, to be undertaken. The findings from these periodic surveys should provide feedback to the health department as well as to the local bodies.

Annexure: A

India in comparison with other countries

Indicator	India	China	USA	Sri Lanka	Thailand
IMR/1000 live-births	68	<30	2	8	15
Under-5 mortality/1000 live-births	87	37	8	15	26
Fully Immunized (%)	67	84	93	99	94
Births by skilled attendants	43	97	99	97	99
Health expenditure as % of GDP	4.8	5.8	14.6	3.7	4.4
Government share of Total Expenditure (%)	21.3	33.7	44.9	48.7	69.7
Government health spending to total government spending (%)	4.4	10	23.1	6	17.1
Per capita spending in international dollars	96	261	5274	131	321

Source**: World Health Report, 2005,** World Health Organization, Geneva

No. 2(12)/ 06-H & F.W
Government of India
Planning Commission
(Health, Family Welfare & Nutrition)

Yojana Bhawan
Sansad Marg
New Delhi
25th May, 2006

ORDER

Subject: Constitution of Working Group on Population Stabilization for the Eleventh Five-Year Plan (2007-2012).

In the context of formulation of the Eleventh Five Year Plan (2007-12), it has been decided to set up a Working Group on Population Stabilization under the Chairmanship of Secretary, Department of Health & Family Welfare, Government of India. The composition of the Working Group will be as follows:

1.	Secretary, Department of Health & Family Welfare, New Delhi.	Chairman
2.	Representative, National Commission on Population, New Delhi	Member
3.	Representative, Deptt. of AYUSH, Ministry of Health & Family Welfare, New Delhi.	Member
4.	Representative, Department of Elementary Education & Literacy, Ministry of Human Resource Development, New Delhi.	Member
5.	Representative, Ministry of Panchayati Raj, New Delhi	Member
6.	Representative, Ministry of Information & Broadcasting, New Delhi	Member
7.	Representative, Ministry of Youth Affairs & Sports, New Delhi	Member
8.	Representative, Ministry of Rural Development, New Delhi.	Member
9.	DG/ Representative, Central Statistical Organization, New Delhi	Member
10.	Representative, M/o Women & Child Development , New Delhi	Member
11.	Registrar General of India/ Representative, New Delhi	Member
12.	Secretary (H&FW), Govt. of Punjab, Chandigarh	Member
13.	Secretary (H&FW)/Representative, Govt. of Chhattisgarh, Raipur	Member
14.	Shri. A. Kumar, H&FW Division, Planning Commission, New Delhi	Member
15.	Shri. K.M. Gupta, Director, Ministry of Finance, New Delhi	Member
16.	Representative, PP Division, Planning Commission	Member
17.	Representative, LEM Division, Planning Commission	Member
18.	Director, International Institute for Population Sciences, Mumbai	Member
19.	Director, National Institute of Health & Family Welfare, New Delhi	Member
20.	Dr. S.C. Gulati, Professor, Institute of Economic Growth, Delhi.	Member
21.	Prof. Ashish Bose, New Delhi	Member
22.	Representative, FICCI, New Delhi	Member
23.	Executive Director/Representative, Population Foundation of India, New Delhi	Member

| 24. | Dr. G Rama Rao, Former Director, IIPS, Mumbai | Member |
| 25. | Joint Secretary, NCP, Ministry of Health & Family Welfare, N.Delhi | Member-Secretary |

2.   The terms of reference of the Working Group will be as follows:

1) To review:

    a. The current demographic projections for the Eleventh Plan and beyond and the time by which the country's population is likely to stabilize;
    b. The goals indicated in the National Population Policy (NPP) 2000.

2) Keeping in view the current mortality, fertility and couple protection rate in different states, to suggest:

    a. A strategy for achieving population stabilization as early as possible;
    b. Fixation of goals for the Eleventh plan i.e. by the terminal year 2012 and individual years for birth rate and IMR, etc state wise;
    c. Fixation of state wise goals for couple protection rates, immunization/ ante natal, intrapartum, neonatal and child health care, etc;

3) To assess the current status and future requirement (short, medium and long-term) of demographic, bio-medical, social and behavioral research aimed at meeting the felt needs for health care of women and children, adolescents and aged during the Eleventh Plan.

4) To project financial implications for implementation of the Family Welfare Programme during the XI Plan including the plan and non-plan requirements and the Centre-State participation in the funding.

5) To deliberate and give recommendations on any other matter relevant to the topic.

3.   The Chairman may form sub-groups and co-opt official or non–official members as needed. The Working Group will submit its report by 31st August, 2006.

4.   Ms. Radha R. Ashrit, SRO (H & FW), Room No. 343, Planning Commission, New Delhi-110001 will be the nodal officer for all further communications. (Tel.No. 23096666-2383 Email radha-pc@nic.in).

5.   The expenditure on TA/DA in connection with the meetings of the Working Group in respect of the official members will be borne by the parent Department /Ministry to which the official belongs as per the rules of entitlement applicable to them. The non- official members of the Working Group will be entitled to TA/DA as permissible to Grade I officers of the Government of India under SR 190 (a) and this expenditure will be borne by the Planning Commission.

(Ambrish Kumar)

To Chairman and Members of the Working Group.

<u>Copy to:</u>

1. PS to Deputy Chairman/MOS(Planning)/ Members(KP)/(AS)/(VLC)/(BLM)/SH/(BNY)/(AH)/ Member-Secretary, Planning Commission, New Delhi
2. All Pr. Advisers/Advisers/ HODs in Planning Commission,
3. Prime Minister's Office, South Block, New Delhi
4. Cabinet Secretariat, Rashtrapati Bhawan, New Delhi
5. US(Admin.I) / Pay & Accounts Officer/ Accounts-I-Section, Planning Commission / DDO, Planning Commission
6. Information Officer, Planning Commission

(Ambrish Kumar)
Director (H & FW)

Annexure : C

Time lag between Kerala and other States in Selected Demographic Parameters in 2002

State/India	CBR 2002	CDR 2002	IMR 2002	Time lag for CBR	Time lag for CDR	Time lag for IMR
Andhra Pradesh	20.7	8.1	62	14	25	32
Assam	26.6	9.2	70	27	31	35
Bihar	30.9	7.9	61	23	25	31
Gujarat	24.7	7.7	60	19	24	31
Haryana	26.6	7.1	62	27	23	30
Karnataka	22.1	7.2	55	17	23	26
Madhya Pradesh	30.4	9.8	85	30	32	38
Maharashtra	20.3	7.3	45	14	23	22
Orissa	23.2	9.8	87	18	32	39
Punjab	20.8	7.1	51	15	23	25
Rajasthan	30.6	7.7	78	24	24	37
Tamil Nadu	18.5	7.7	44	12	24	23
Uttar Pradesh	31.6	9.7	80	30	32	37
West Bengal	20.5	6.7	49	14	20	24
India	25.0	8.1	63	20	25	30

Source: K. Srinivasan, **Proceedings of the Dr. C. Chandrasekaran Memorial Lecture**, **IIPS Newsletter,** 2006, IIPS, Mumbai.

Healthcare Workforce and Health Facilities in Public and Private Sectors in India.

Indicator and measure	Value
Doctors	
Total number (1998) (includes all systems) (CBHI)	1,109,853
Population per Doctor	880
Percentage of doctors in rural areas (1981) (census)	41
Percentage of all doctors in private sector (estimated)	80-85
Nurses	
Total number (1996)	867,184
Population per nurse	976
Doctor per nurse (1996)	1.4
Hospitals	
Total Number (1996)	15,097
Population per hospital	56,058
Percentage of hospital in private sector	68
Estimated total number of hospitals	71,860
Estimated population per hospital	11,744
Estimated percentage of hospitals in private sector	93
Hospital beds	
Total number (1996) (CBHI)	623,819
Population per hospital bed	1,357
Percentage of beds in rural areas	21
Percentage of beds in Private sector	37
Estimated total number of beds	1,217,427
Estimated population per bed	693
Percentage of beds in private sector	64
PHCs	
Total number	22,975
Rural population per PHC	27,364

Note: The estimate for manpower is based on Medical Council lists. The estimate for the number of hospitals and beds are based on the extent of underestimation in government. Data found in Andhra Pradesh in a 1993 census of all hospitals by the Director of Health Services and the Vaidya Vidhan Parishad; they found 2,802 hospitals and 42,192 hospital beds in the private sector in Andhra Pradesh as against only 266 hospitals and 11,103 beds officially reported by CBHI in that year. Thus, compared with the official (CBHI) data, the number of private hospital was larger by a factor of 10.5, and the number of beds by a factor of 3.8.

Source: as cited by Peters *et al*, **Better Health Systems for India's Poor: Findings, Analysis and Options,** The World Bank, Washington DC, 2002.

The Coverage under NRHM

The Mission has the following coverage:

Population coverage   -   740 million
Households   -   148 million (approx.)
Birth Rate in Rural Areas   -   26.6, nearly 20 million births
Sub Health Centres   -   1,75,000 (on population, distance
                                          and work load norm)
P H Cs   -   27,000 (single MO, 2 MO, 1 AYUSH)
C H Cs   -   7,000 (every Block)
Sub Divisional/Taluk Hospitals   -   1,800
District Hospital   -   600
ANMs at SHC   -   3.50 lakhs
Staff Nurses at PHC   -   81,000
Staff Nurses at CHC   -   63,000
MOs in PHCs   -   40,500
Specialists in CHCs   -   49,000
ASHAs   -   4 - 5 lakhs, in all distant
                                          habitations/villages
Village Health & Sanitation   -   7 lakhs – in all villages/big hamlets
Committees

Source: **National Rural Health Mission, Framework for Implementation 2005-2012**, Government of India.

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	780	407	200	100
% with provision of drinking water				
Rural	61	79	100	
Urban	88	95	100	-

Source: Government of India, **Population and Development: Ten Years after ICPD, India Country Report,** 2004.

KEY INDICATORS, INDIA
DISTRICT LEVEL HOUSEHOLD SURVEY- REPRODUCTIVE AND CHILD HEALTH, (DLHS-RCH), 2002-04

Sample size
Households surveyed	6,20,107
Currently married women age 15-44	5,07,622
Husband's of eligible women	3,30,820

Characteristics of households
Percent rural	66.9
Percent Hindu	86.4
Percent Muslim	8.6
Percent other religion (Christian)	3.5
Percent scheduled caste	22.7
Percent scheduled tribe	5.8
Percent with electricity	73.1
Percent with flush toilet	26.2
Percent with no toilet facility	60.8
Percent living in *Kachcha* houses	30.4
Percent living in *Pucca* houses	31.1
Percent with low standard of living	42.3
Percent with high standard of living	23.9
Percent with iodized salt (15+ppm)	29.7

Characteristics of currently married women age 15-44 years
Percent below age 30	51.2
Percent with age at first cohabitation below age 18.	55.2
Percent illiterate	48.5
Percent having 10 or more years of schooling	19.3
Percent with illiterate husband	26.7
Percent with husband 10+ years of schooling	34.6

Marriage
Mean age at marriage for boys	24.5
Mean age marriage for girls	19.5
Percent of boys married below age 21	20.5
Percent of girls married below age 18	28.0

Fertility
Mean children ever born women age 40-44 years	4.0
Percent of births of order 3 and above[1]	42.0

Current use of family planning method
Any method	53.0
Any modern method	45.7
Pill	3.5
IUD	1.9
Condom	4.8
Female sterilization	34.3
Male sterilization	0.9
Any traditional method	7.3
Rhythm/safe period	4.1
Withdrawal	2.7

Unmet need for family planning
Percent with unmet need for spacing	8.5
Percent with unmet need for limiting	12.7
Percent with total unmet need	21.5

Maternal care[2]
Percent of women received antenatal check-ups	73.4
Antenatal check-up at home	06.1
Antenatal check-up in first trimester	40.2
Three or more visit for ANC	50.1
Two or more tetanus toxoid injections	71.8

Adequate Iron folic acid tablets/syrup[3]	20.4
Full antenatal check-up[4]	16.4

Delivery characteristics[2]
Delivery at home	59.0
Delivery at government health institutions	18.7
Delivery at private health institutions	21.8
Delivery attendant by skilled persons[5]	47.6

Child health
Percent of children whose mother squeezed out milk from her breast[6]	56.6
Percent of children[7] with diarrhoea[8] who received ORS	29.7
Percent of children[7] with pneumonia[8] who were taken to a health facility or provider	73.7

Percent of children who received vaccinations[9]
BCG	74.7
DPT (3 injections)	59.0
Polio (3 drops)	58.2
Measles	58.0
All vaccinations[10]	47.6
No vaccination at all.	19.8

Percentage of women who had
Pregnancy complication[2]	34.2
Delivery complication[2]	40.8
Post delivery complication[2]	31.4
Symptoms of RTI/STI	32.3
Problems of vaginal discharge	15.8
Menstruation related problem	17.2

Awareness of RTI/STI and HIV/AIDS
Percent of women who have heard of RTI/STI	44.2
Percent of women who have heard of HIV/AIDS	53.6

Utilization of government health services
Antenatal care	32.9
Treatment for pregnancy complication	32.1
Treatment for post-delivery complication	24.4
Treatment for vaginal discharge	27.2
Treatment for children with diarrhoea	19.8
Treatment for children with pneumonia	18.2

Quality of family planning services
Percent non-users ever advised to adopt the family planning method	11.7
Percent users told about side effects of method	28.0
Percent users who received follow-up services	26.2

Characteristics of husband of eligible women
Percent of husband knowing NSV	34.4
Percent of men who have heard of RTI/STI	52.9
Percent of men who have heard of HIV/AIDS	75.8
Percentage who had any symptoms of RTI/STI	7.6
Sought treatment for RTI/STI	40.2

[1] For births in past three years, [2] For live/still births during three years preceding the survey, [3] 100 or more IFA tablets/Syrup, [4] A minimum of three visits for ANC, atleast one TT injections and 100 or more IFA tablets/syrup, [5] Either institutional delivery or home delivery assisted by Doctor/ANM/nurse, [6] Children age below 3 years, [7] Last but one living children below 3 years, [8] Last two weeks preceding the survey, [9] Last but one living children (age 12-35 months) born during three years preceding the survey. [10] BCG, three injections of DPT, three drops of polio and measles.

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KEY INDICATORS, (RURAL) INDIA
DISTRICT LEVEL HOUSEHOLD SURVEY, 2002-04
REPRODUCTIVE AND CHILD HEALTH

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KEY INDICATORS, INDIA
FACILITY SURVEY, 2003
REPRODUCTIVE AND CHILD HEALTH

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Characteristics of currently married women age 15-44 years	
Percent below age 30	53.9
Percent with age at first cohabitation below age 18	63.3
Percent illiterate	59.0
Percent having 10 or more years of schooling	10.4
Percent with illiterate husband	33.0
Percent with husband 10+ years of schooling	26.3
Current use of family planning method	
Any method	48.8
Any modern method	42.0
Pill	3.0
IUD	1.1
Condom	2.8
Female sterilization	34.1
Male sterilization	0.9
Any traditional method	6.8
Rhythm/safe period	4.0
Withdrawal	2.2
Unmet need for family planning	
Percent with unmet need for spacing	9.7
Percent with unmet need for limiting	13.5
Percent with total unmet need	23.2
Maternal care[2]	
Percent of women received antenatal check-ups	67.5
Antenatal check-up at home	7.9
Antenatal check-up in first trimester	33.3
Three or more visit for ANC	41.9
Two or more tetanus toxoid injections	67.6
Adequate iron folic acid tablets/syrup[3]	16.9
Full antenatal check-up[4]	12.8
Delivery characteristics[2]	
Delivery at home	69.8
Delivery at government health institutions	15.0
Delivery at private health institutions	14.8
Delivery attendant by skilled persons[5]	37.2
Percent of children who received vaccinations[9]	
BCG	70.1
DPT (3 injections)	53.2
Polio (3 drops)	52.5
Measles	52.3
All vaccinations[10]	41.7
No vaccination at all	23.5
Quality of family planning services	
Percent non-users ever advised to adopt the family planning method	11.4
Percent users told about side effects of method	27.9
Percent users who received follow-up services	31.9

Sample size	
District Hospitals surveyed	370
First Referral Units surveyed	1,882
Community Health Centres surveyed	1,625
Primary Health Centers surveyed	9,688
Sub Centers surveyed	18,385
ISM&H Hospitals surveyed	2,151
ISM&H Dispensaries surveyed	7,064
District hospital adequately equipped	
Infrastructure	92.7
Staff	79.5
Supply	44.9
Equipment	84.1
Percentage of DH utilized as referral[10]	37.2
First referral units adequately equipped	
Infrastructure	75.8
Staff	37.0
Supply	31.6
Equipment	61.3
Percentage of FRU utilized as referral[11]	39.4
CHCs adequately equipped	
Infrastructure	62.8
Staff	14.2
Supply	24.1
Equipment	46.0
Percentage of CHCs utilized as referral[12]	46.4
PHCs adequately equipped	
Infrastructure	31.8
Staff	48.2
Supply	39.9
Equipment	41.3
Training	19.9
Medical officer (at least one)	78.2
Female medical officer	15.5
Sub Centres	
Female health worker[13]	95.1
Male health worker[13]	67.7
Functioning in govt. building	45.2
Tap water supply[14]	21.1
ANM staying in allotted quarter	22.5
ISM&H hospital	
Own building	16.7
Medical officer (at least one)	76.8
Staff nurse (at least one)	76.0
Pharmacist (at least one)	84.4

[2] For live/still births during three years preceding the survey, [3] 100 or more IFA tablets/Syrup, [4] A minimum of three visits for ANC, at least one TT injections and 100 or more IFA tablets/syrup, [5] Either institutional delivery or home delivery assisted by Doctor/ANM/nurse, [9] Last but one living children (age 12-35 months) born during three years preceding the survey. [10] BCG, three injections of DPT, three drops of polio and measles.

[10]Referred cases are taken from those DHs which have conducted delivery, [11] Referred cases are taken from those FRUs which have conducted delivery, [12]Referred cases are taken from those CHCs which have conducted delivery. [13] Staff in position is for number of health facilities having sanctioned post. [14] For those functioning in government building

State/ Union territory	Census, 2001 Population in millions	Percent female[1] literacy	Percent of households With electricity	With drinking water[2]	With toilet facility	With low SLI	Using iodized salt[3]	Girls marriage below 18 years	Mean age at marriage Boy	Girl	Percent of rural women[4]	Birth order 3+
India	1028.6	53.7	73.1	88.5	39.2	42.3	29.7	28.0	24.5	19.5	68.2	42.0
North												
Delhi	13.9	74.5	98.7	90.6	96.2	2.2	81.8	10.8	23.8	20.6	6.3	42.2
Haryana	21.1	55.7	91.2	48.7	91.7	19.3	55.3	27.8	22.7	19.0	70.8	38.4
Himachal Pradesh	6.1	67.4	97.9	43.7	86.5	25.2	78.0	2.9	26.0	21.7	78.3	24.4
Jammu & Kashmir	10.1	43.0	80.4	78.7	82.3	20.6	45.0	5.1	25.9	22.8	76.2	32.1
Punjab	24.4	63.4	96.2	60.3	98.8	11.8	64.8	10.2	23.8	20.9	68.9	32.4
Rajasthan	56.5	43.9	64.9	34.1	79.0	45.3	33.0	49.4	20.6	17.3	70.8	47.4
Uttaranchal	8.5	59.6	67.1	50.8	77.3	37.5	8.6	9.8	24.6	20.5	72.6	45.9
Central												
Chhatishgarh	20.8	51.9	67.6	21.0	82.2	63.5	33.1	31.1	22.7	19.0	69.8	44.9
Madhya Pradesh	60.3	50.3	76.2	30.2	76.1	55.6	40.8	43.5	21.8	18.2	68.9	49.4
Uttar Pradesh	166.2	42.2	41.5	33.3	90.8	54.2	13.7	41.4	21.5	18.1	70.4	56.9
East												
Bihar	83.0	33.1	24.7	30.1	93.2	66.3	29.6	51.5	21.9	17.4	72.6	54.4
Jharkhand	26.9	38.9	38.7	26.2	54.4	65.8	37.2	43.8	22.8	18.3	68.8	48.9
Orissa	36.8	50.5	47.3	25.6	73.0	62.4	36.6	23.1	25.4	20.5	71.1	42.1
West Bengal	80.2	59.6	51.6	55.5	93.1	51.8	54.8	45.9	24.7	18.5	67.6	31.0
Northeast												
Arunachal Pradesh	1.1	43.5	69.5	75.4	81.7	50.0	67.1	26.6	23.4	19.5	72.8	48.8
Assam	26.7	54.6	43.6	75.4	72.9	56.3	53.4	23.8	27.2	20.7	73.0	40.6
Manipur	2.2	60.5	80.8	92.7	44.2	46.9	79.6	9.6	27.5	24.1	81.0	43.1
Megahalaya	2.3	59.6	57.1	63.5	50.2	64.8	41.2	16.7	22.8	20.8	75.9	59.5
Mizoram	0.9	86.7	83.8	97.9	73.1	39.7	56.8	14.0	25.1	21.6	64.3	41.5
Nagaland	2.0	61.5	78.6	91.8	65.2	48.2	39.9	7.4	27.1	22.5	71.8	57.7
Sikkim	0.5	60.4	88.2	85.3	80.6	34.2	60.9	12.0	24.5	21.9	87.5	30.5
Tripura	3.2	64.9	76.8	98.1	83.8	38.2	44.5	21.6	27.3	20.9	70.6	17.9
West												
Goa	1.3	75.4	96.3	72.8	85.4	12.1	60.5	3.6	29.0	24.4	49.3	20.0
Gujarat	50.7	57.8	86.2	47.5	87.4	34.6	35.1	24.6	22.3	19.4	65.4	38.1
Maharashtra	96.9	67.0	83.6	41.7	82.0	41.1	46.9	21.1	24.6	19.1	63.6	32.4
South												
Andhra Pradesh	76.2	50.4	84.1	42.1	87.3	38.5	24.8	38.6	23.2	18.4	66.3	22.5
Karnataka	52.9	56.9	87.0	39.5	90.9	44.6	22.9	31.4	25.1	19.1	67.7	29.6
Kerala	31.8	87.7	79.0	91.0	65.3	16.1	56.3	6.6	28.0	21.9	67.3	15.5
Tamil Nadu	62.4	64.4	87.0	41.0	92.6	33.0	24.9	15.5	26.4	20.7	56.6	21.6
Union Territory												
A & Nicobar Islands	0.4	75.2	84.8	64.4	86.6	22.8	94.9	4.3	25.8	21.2	82.8	17.1
Chandigarh	0.9	76.5	97.8	87.1	99.9	7.3	73.8	4.4	24.6	22.8	12.6	38.5
Dadra & Nagar Haveli	0.2	40.2	97.7	56.3	94.9	40.4	50.5	25.6	22.9	19.7	70.5	37.6
Daman & Diu	0.2	65.6	96.2	48.4	83.0	13.4	53.3	12.3	26.7	23.0	60.7	32.5
Lakshadweep	0.1	80.5	99.7	98.4	26.3	1.3	54.3	13.7	26.7	20.7	50.1	46.6
Pondichhery	1.0	73.9	94.9	71.1	97.6	15.0	49.1	4.9	27.6	22.4	20.2	13.6

[1] age 7+ years [2] Piped or from hand pump. [3] Cooking salt that has an iodine content of at least 15 parts per million (ppm). [4] Currently married women age 15-44 years.

Annexure B KEY INDICATORS contd.

District Level Household Survey (2002-04) & Facility Survey (2003) - Reproductive & Child Health

State/ Union territory	Contraceptive prevalence rate			Unmet need for family planning		Antenatal care[6]			Delivery characteristics[6]		
	Any method	Any modern method[5]	Condom	Limiting	Spacing	3+ ANC visit	At least one TT injection	Received IFA tablets	Govt. Institute	Home	Assisted by skilled person[7]
India	**53.0**	**45.7**	**4.8**	**12.7**	**8.5**	**50.1**	**80.1**	**20.4**	**18.7**	**59.0**	**47.6**
North											
Delhi	64.1	55.8	19.3	11.4	5.0	67.3	82.5	45.7	29.5	49.3	59.9
Haryana	60.3	54.4	10.0	9.2	5.5	48.6	85.8	17.1	10.6	64.8	43.2
Himachal Pradesh	70.1	65.4	12.9	8.4	3.4	68.0	89.6	42.8	36.9	54.3	51.4
Jammu & Kashmir	54.8	51.9	18.1	10.7	14.1	80.5	80.8	53.7	55.9	28.4	73.1
Punjab	68.2	57.2	15.8	7.6	2.7	64.5	87.2	20.3	9.5	51.1	64.3
Rajasthan	46.9	42.3	6.2	13.7	8.1	33.3	69.0	8.0	19.4	68.0	44.4
Uttaranchal	48.7	44.2	11.1	17.1	9.8	28.0	71.2	20.0	10.7	76.2	32.5
Central											
Chhatishgarh	46.6	41.7	2.6	12.4	9.3	48.7	79.3	16.5	9.6	79.6	29.1
Madhya Pradesh	50.5	47.3	5.2	13.6	7.4	34.6	77.5	8.5	17.6	71.5	35.5
Uttar Pradesh	35.6	26.2	7.3	20.3	13.3	24.7	69.5	8.7	8.5	77.2	28.7
East											
Bihar	31.0	27.3	2.0	21.8	14.9	19.6	75.4	8.1	5.4	76.8	29.5
Jharkhand	37.9	33.3	2.9	19.3	13.6	32.8	71.2	12.6	5.3	77.3	27.8
Orissa	54.7	41.9	2.7	13.1	6.0	47.3	84.8	24.3	25.6	64.4	43.5
West Bengal	74.1	51.0	4.6	6.6	4.4	64.6	92.0	18.1	34.3	51.6	54.1
Northeast											
Arunachal Pradesh	38.8	35.6	1.8	21.9	13.3	40.9	54.2	12.9	27.1	64.9	37.7
Assam	57.5	28.7	2.3	14.3	8.2	42.6	65.9	13.4	13.9	71.9	33.2
Manipur	33.5	21.1	3.5	25.6	15.3	58.2	78.4	12.2	37.2	54.9	57.8
Megahalaya	17.1	14.7	2.4	19.5	36.2	43.8	48.1	14.1	23.7	68.9	34.5
Mizoram	53.8	52.6	2.3	8.9	16.1	56.3	72.1	28.5	47.1	46.8	60.6
Nagaland	39.6	33.0	6.1	14.7	19.2	33.1	61.5	11.8	8.2	81.8	29.6
Sikkim	65.3	55.3	5.9	12.9	5.2	67.9	85.9	30.3	53.4	40.9	61.9
Tripura	54.4	42.7	10.9	18.5	6.6	66.4	71.4	15.9	57.4	37.5	65.1
West											
Goa	33.5	29.8	5.2	28.5	14.6	84.2	88.3	57.7	40.0	8.6	93.3
Gujarat	59.2	52.4	4.8	9.5	6.8	61.4	85.8	30.2	12.7	47.5	62.1
Maharashtra	63.3	60.8	4.9	7.1	5.5	72.0	90.9	28.1	24.1	41.7	62.6
South											
Andhra Pradesh	62.8	62.4	0.4	6.1	5.6	88.1	87.9	48.3	22.1	38.6	69.0
Karnataka	59.3	57.7	1.4	8.5	6.6	80.1	85.6	33.3	29.0	41.9	66.6
Kerala	68.5	54.7	4.3	5.4	9.8	96.9	95.4	73.6	40.5	2.0	98.3
Tamil Nadu	57.7	55.0	2.1	12.7	5.4	96.1	97.4	24.7	44.5	13.4	89.2
Union Territory											
A & Nicobar Islands	59.2	58.5	5.1	15.0	11.3	96.5	94.2	85.6	71.6	25.2	76.9
Chandigarh	60.9	58.0	22.4	13.8	4.0	75.6	86.2	43.6	36.8	52.6	59.1
Dadra & Nagar Haveli	50.4	45.1	6.3	14.2	5.9	79.1	91.7	34.3	15.6	53.3	54.7
Daman & Diu	55.6	52.8	4.8	12.8	10.8	83.7	89.7	36.7	23.6	31.9	71.5
Lakshadweep	30.4	10.6	3.1	6.8	37.9	96.6	96.9	73.6	73.0	19.8	83.8
Pondichhery	63.3	57.6	5.2	12.1	4.5	97.9	97.5	30.2	70.2	2.3	98.5

[5] Include Female sterilization, Male sterilization, IUD, Pills or Condom. [6] Women who were given their last live/still births during three years preceding the survey. [7] Either institutional delivery or home delivery assisted by Doctor/ANM/Nurse.

Annexure B KEY INDICATORS contd.

District Level Household Survey (2002-04) & Facility Survey (2003) - Reproductive & Child Health

| State/ Union territory | Immunization[8] | | | Percent received ORS | Ranking of the state[10] | Percent of PHC adequately equipped | | | | | EO care Kit[13] |
	DPT 3 injections	Measles	Full[9]			Infrastructure[11]	Staff[12]	Supply[11]	Equipment[11]	Training[11]	
India	**59.0**	**58.0**	**47.6**	**29.7**		**31.8**	**43:6**	**39.9**	**41.4**	**19.9**	**32.2**
North											
Delhi	71.1	76.4	61.0	37.6	10	60.0	60.0	80.0	80.0	0.0	20.0
Haryana	75.7	69.2	62.9	32.1	21	54.6	59.3	46.2	41.2	50.4	28.2
Himachal Pradesh	91.2	89.7	79.4	50.9	5	39.7	29.9	44.2	42.7	20.1	25.1
Jammu & Kashmir	48.1	83.0	38.6	69.5	8	31.4	27.8	28.6	40.3	30.3	12.4
Punjab	82.8	79.1	75.3	26.2	7	40.8	57.4	43.7	43.7	19.7	36.6
Rajasthan	36.4	36.8	25.4	29.4	31	33.2	28.0	69.2	53.9	14.8	36.1
Uttaranchal	57.7	56.9	47.2	21.4	24	27.8	40.5	23.6	27.1	7.6	13.2
Central											
Chhatishgarh	70.5	70.2	60.9	42.2	25	2.8	26.7	14.1	8.8	3.8	50.6
Madhya Pradesh	43.9	50.1	32.5	25.7	28	9.9	34.7	32.0	26.2	11.4	32.6
Uttar Pradesh	37.9	37.7	28.1	15.5	33	17.2	47.2	19.5	28.6	12.4	22.1
East											
Bihar	35.0	28.2	24.4	14.2	35	8.9	17.4	11.4	6.2	15.5	28.4
Jharkhand	39.3	34.5	29.3	25.1	32	9.8	26.9	50.5	21.4	42.5	24.9
Orissa	70.0	69.9	55.1	48.4	23	3.2	5.2	3.5	15.1	13.4	10.3
West Bengal	69.8	67.6	54.4	44.0	20	12.0	23.2	23.0	8.6	9.1	10.0
Northeast											
Arunachal Pradesh	36.0	39.3	22.5	51.8	29	70.7	43.8	31.7	26.8	19.5	36.6
Assam	39.5	39.1	19.3	45.1	27	21.0	27.5	50.0	32.4	29.7	38.6
Manipur	48.8	55.6	37.0	63.4	26	12.5	64.0	56.3	28.1	37.5	46.9
Megahalaya	31.2	30.3	14.1	45.5	34	56.0	58.3	60.0	68.0	56.0	44.0
Mizoram	48.7	61.6	35.3	61.6	22	70.4	55.7	44.4	96.3	59.3	59.3
Nagaland	32.5	40.2	14.4	32.8	30	59.5	50.0	59.5	40.5	18.9	48.6
Sikkim	74.0	82.6	50.2	48.0	11	100.0	62.5	45.8	100.0	67.7	12.5
Tripura	47.9	44.7	26.7	53.7	19	100.0	56.6	100.0	81.8	100.0	81.8
West											
Goa	87.7	93.1	81.5	74.6	9	100.0	88.2	58.8	88.2	64.7	58.8
Gujarat	68.9	69.4	57.7	24.4	18	89.0	76.3	83.4	80.6	17.1	71.3
Maharashtra	88.5	88.0	74.3	42.0	12	76.5	78.4	67.4	91.4	31.9	48.7
South											
Andhra Pradesh	78.7	74.4	62.9	58.6	13	59.2	64.8	40.3	84.5	34.5	34.5
Karnataka	84.5	80.4	74.1	32.7	15	58.1	37.3	88.9	61.1	23.1	76.5
Kerala	90.7	90.0	81.2	54.2	1	42.9	49.8	55.7	34.3	18.6	32.9
Tamil Nadu	96.8	95.7	92.1	35.8	4	64.7	72.9	77.8	92.2	27.7	14.4
Union Territory											
A & Nicobar Islands	86.3	90.4	47.7	81.9	3	100.0	52.9	52.9	76.5	47.1	64.7
Chandigarh	78.6	79.0	53.3	46.6	6	50.0	0.0	50.0	0.0	0.0	0.0
Dadra & Nagar Haveli	92.1	87.0	85.2	54.3	16	83.3	100.0	100.0	83.3	16.6	100.0
Daman & Diu	77.7	78.6	57.3	28.4	14	100.0	100.0	66.7	66.7	0.0	100.0
Lakshadweep	86.9	91.8	67.6	72.6	17	100.0	75.0	75.0	100.0	50.0	100.0
Pondichhery	93.8	95.8	89.4	47.7	2	57.9	21.1	63.2	68.4	21.1	73.7

[8] Last but one living children (age 12-35 months) born during three years prior to the survey. [9] BCG+3 DPT injection+ 3 Polio drops+ Measles. [10] Based on 10 RCH indicators. [11] Having at least 60 percent of critical input (based on Phase-2 only) . [12] Having at least 60 percent of staff (base on Phase1 and Phase2). [13] Essential obstetric care kit