Millennium Development Goals

India Country Report 2014

Social Statistics Division
Ministry of Statistics and Programme Implementation
Government of India
www.mospi.nic.in

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FORWORD

This Report, titled "Millennium Development Goals India Country Report -2014' is the latest issue of the Millennium Development Goals India Country Report. Since the last Country Report which was brought out in 2012, some booklets/ brochures have been brought out from time to time with updated data to supplement the earlier Report, the present Report is the latest full fledged issue in the series.

India's MDGs framework is based on the 2003 United Nations Development Goals (UNDGs) guidelines on concepts, definition and methodology of MDGs indicators. This framework recognizes 53 indicators (48 basic and 5 alternatives). But the 2003 UNDG framework for MDGs is not followed in toto. The frame work has been contextualized for India. All the 8 Millennium Development Goals, 12 of the 18 targets, namely target 1 to target 11 and target 18 are relevant for India. These 12 targets and 35 indicators under the 8 Goals constitute the instrument for statistical tracking of the MDGs in India.

Some of the indicators in lieu of those specified under MDGs were found better suited to the Indian context and in some cases, the non-availability of sufficiently reliable data is the reason for dropping them. Important among those indicators are proportion of population below $1 (PPP) per day, proportion of population below minimum level of dilatory energy consumption, ratio of school attendance of orphans to school attendance of none orphans aged 10 to 14 years, proportion of population with access to secure tenure, unemployment rate of young people aged 15 - 24 years and proportion of population with access to affordable essential drugs on a sustainable basis.

It needs to be appreciated that the national statistical system does not have independent statistical machinery exclusively focused on quantitative monitoring of the MDGs. The statistics used in this report as well as in the earlier issues are based on piecing together, from the variety of sources including administrative records, data compiled by Central Ministries/ Departments/ Organizations and information gathered from periodic national surveys and censuses carried out by the Government of India.

I wish to place on record my appreciation for the valuable services rendered by the officers of the Social Statistics Division of the CSO for bringing out this Report.

(T.C.A ANANT)

Chief Statistician of India & Secretary

PREFACE

This Report entitled "Millennium Development Goals (MDG) India Country Report-2014' captures the achievements in India as of today under the eight MDGs which are to be achieved by 2015. The year 2014, being the penultimate year for the MDGs, acquires significance in assessing realistically India's progress in meeting the various targets under the MDGS as well as to take a stock of the areas where the progress is not up to the expected level. Ministry of Statistics and Programme Implementation (MOSPI) is engaged in the task of statistically tracking the MDGs on the basis of a data-sets generated by the line ministries/Departments.

However, statistical tracking of the MDGs is not easy as there exists several data gaps in the system which hamper smooth Statistical tracking of MDGs. While for one indicator data are not available at all (indicator 22, under Target 8), for others data are available over various time points with long gaps, Population Censuses are conducted once in every 10 years. Consumer Expenditure Surveys are usually conducted every 5 years, and National family Health Surveys are usually conducted after 5- 6 years. Consequently information for inter census or inter survey years are not available.

Data available on social indicators from administrative records suffer from incomplete coverage. Some problems relate to methodological issues like the estimation of population below the poverty line. The concept of poverty and the items in the basket of consumption that define the poverty line is revised from time to time making the later estimates not strictly comparable with the earlier ones. Another case is the estimation of Maternal Mortality Ratio (MMR). As maternal deaths are rare event, it requires a large sample size to provide robust estimates of MMR; MMR estimates are not available for smaller States / UTs. More over data for many indicators are not available at sub state (District) level.

In spite of the above problems and constraints, every effort has been taken to make the present Report as comprehensive as possible. The latest available data have been incorporated to reflect India's commendable achievements in respect of several Millennium Development Goals. We expect this Report will be very useful for the data users. Suggestions for further improvement of the Report are always welcome.

Smt. S. Jeyalakshmi
Director General (CSO)

Officers associated with this report

Dr.G.M. Boopathy
Additional Director General

S.Maitra
Deputy Director General

Sunitha Bhaskar
Director

Ram Pratap
Assistant Director

(Late) R.Shanti
Senior Statistical Officer

Hansraj
Statistical Officer

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Chapter 1

INTRODUCTION

The millennium declaration adopted by the general assembly of the United Nations in September 2000 reaffirmed its commitment to the right to development, security and gender equality, eradication of myriad dimensions of poverty, improved health etc. The millennium Declaration adopted eight development goals which are:

Goal 1: Eradicate Extreme Poverty and Hunger

Goal 2: Achieve Universal Primary Education

Goal 3:Promote Gender Equality and Empower Women

Goal 4: Reduce Child Mortality

Goal 5: Improve Maternal Health

Goal 6: Combat HIV/AIDS, Malaria and TB

Goal 7:Ensure Environmental Sustainability

Goal 8:Develop Global Partnership for Development

All the eight goals, 12 out of the 18 Targets and 35 indicators relating to these Targets constitute India's Statistical tracking instrument for the MDGs.

2. India follows the MDGs framework accepted by the Government of India which is on the basis of 2003 UNDG (United Nations Development Group) guidelines. Ministry of Statistics and Programme implementation (MOSPI) tracks the MDGs on the basis of data-sets generated by the line Ministries /Departments. Currently the monitoring is limited to the national and State / UT level. The statistical monitoring of MDGs is presently not done at sub- State/ District level.

3 Although the MDGs framework adopted by India is based on the Global framework suggested by UNDG 2003 guidelines, some of the indicators which were found better suited to the Indian context were used in lieu of the specified indicators under MDGs as per UNDG framework 2003. For example under target -2, indicator 4, prevalence of underweight children under 3 years, (instead of under 5 years) is considered. Under target 4, indicator 9, for ratio of girls to boys in primary, secondary and tertiary education, gender parity index (GPI of Gross Enrolment Ratio) has been

considered, under target 7, indicator 19, condom use to overall contraceptive use among currently married women 15-49 years is considered, the corresponding UNDG indicator is irrespective of age, sex or marital status. Like wise there are a few indicators which have been modified to suit Indian context.

4 In case of some of the indicators non- availability of sufficiently reliable data is the reason for dropping them like Target 1, indicator 1, proportion of population below $1 (PPP) per day, Target 2, indicator 5, proportion of population below minimum level of dietary energy consumption. Targets 12 to 17 appearing in the UNDG framework have been dropped as these are not relevant for India.

5 While the Goals are spelt out in general terms, the targets under these Goals specifically outline the way to achieve the Goals in a specific time frame, and the indicators under each Targets are more focused and tell in concrete terms the expected level of achievements in well defined areas to be achieved in the given time frame. Some of the MDGs targets are relative to the base year (1990) value (Target-1,2,5,6,10) and the levels of achievement by 2015 for most of the indicators under these targets are fairly specific, and are in tune with the global targets. The other targets (Target-3,4,7,8,9,11,12) envisages either full (100%) attainment or reversal of trend, or a general improvement in living standards.

6. MDGs have helped in bringing a much needed focus and pressure on basic development issues, which in turn led the governments at national and sub national levels to do better planning and implement more intensive policies and programmes. In India the various development programmes / schems are formulated and implemented under the Five year Plans (FYP). The 12th FYP (2012-2017) goal is to achieve " Faster, More Inclusive and Sustainable Growth" which is in conformity with the MDGs.

7. The 12th Plan has identified 25 core indicators which reflect the vision of rapid , sustainable and more inclusive growth and some of the indicators of 12th Plan are more stringent than the MDGs. The 12th Plan aims to reduce the Poverty Head Count Ratio (PHCR) by 10 percentage points over the preceding estimates by the end of 12th Plan, that is PHR to be reduced to 11.9% by 2017 , the corresponding MDG indicator is to reduce PHR to 20.74% by 2015.The 12th Plan aims to reduce

under-nutrition among children aged 0-3 years to half of the NFHS -3 level (that is from 40% to 20%) by the end of 12th Plan , which means by 2017. The corresponding MDG indicator is to reduce prevalence of under nutrition among children below 3 years to 26% by 2015. The 12th plan envisages to reduce IMR to 25 per 1,000 live births, and reduce MMR to 100 per 100,000 live births by 2017, the corresponding MDG indicators are to reduce IMR to 27 per 1,000 live births and to reduce MMR to 109 per 100,000 live births by 2015.

8. Coming to India's achievement in respect of the MDGs , it is a mixed bag. For some indicators India is fast, that is, it has already achieved the target level well ahead of the dead line, like halving the percentage of population below the poverty line (indicator 1A). Net Enrolment Ratio in primary education (indicator 6) proportion of people with sustainable access to an improved water sources, urban and rural (indicator 30). Target 7 and Target 8, which are of the trend reversal type have also been realized as India has successfully halted the spread of HIV/ Aids and reversed the spread of HIV/ Aids. India has halted spread of Malaria and TB and has ensured reversal of spread of Malaria and TB.

9. In respect of some indicators, India is expected to reach close to the target level by 2015 if not actually meet the target level like Ratio of girls to boys in primary and secondary education and tertiary education (indicator 9), at primary level this Target has been met already, at the secondary level India will be close to achieving gender parity by 2015, but at the tertiary level it is unlikely to achieve Gender parity by 2015. In case of reducing by two-thirds the Under Five Mortality Rate (indicator 13) the U5MR is estimated at 52 per 000' live births in 2012. To meet the Target India has to reduce it to 42 per 000' live births by 2015. Keeping in mind the sharp decline in U5MR witnessed during the last few years (annual reduction by 3 percentage points during the last 3-4 years) India is expected to reach very close to the target level by 2015. In the extremely crucial field of 'improving maternal health' between 1990 and 2015 India is supposed to reduce by three quarters the Maternal Mortality Ratio (MMR). The latest estimate of MMR brought by the Office of RGI puts the MMR at 178 per 100,000 live births in 2012. This is a substantial improvement

from an estimated MMR level of 437 per 100 000 live births in 1990-91. But India is unlikely to reach the targeted level of 109 per 100000 live births by 2015.

10. The areas of concern are the rest of the Indicators especially those relating to share of women in wage employment in the non – agricultural sector (indicator 11), proportion of seats held by women in National Parliament (indicator 12), proportion of population with access to improved sanitation, urban and rural (indicator 31), in respect of these indicators India is lagging behind by a huge margin.

11. The above three paras briefly give an overview of achievements under various MDGs in India. In subsequent chapters, a more elaborate analysis has been attempted highlighting the strong points of various beneficiary oriented programmes and their expected impact for the benefit of target populations. While providing outlines of the various development plans which inter-alia envisaged attainment of the MDG targets, this Report also takes a close look at the programme components and their performance in producing desired results. However such an assessment is hampered in the absence of disaggregated data at sub state levels and also for different groups of the population. To the extent the disaggregated data for rural-urban and male-female break-ups are available, nature and pattern of changes observed across the states are quite revealing.

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Chapter 2

HIGHLIGHTS

MDG 1: Eradicate extreme poverty and hunger

- The all-India P**overty Head Count Ratio (PHCR -** percentage below the national poverty line**)** has declined by 15 percentage points from 37.2% in 2004-05 to 21.9% in 2011-12. Significant decline in Poverty Head Count Ratio has been observed in both rural and urban areas during this period as the rural poverty head count ratio declined by 16 percentage points from 41.8% to 25.7% and urban poverty declining by 12 percentage points from 25.7% to 13.7%. The **percentage of people below the national poverty line** has already narrowed down to a level less than half of its position in 1990, in 2011-12 itself, at all India level and for rural and urban areas, ahead of the MDG target year of 2015.
- During 2004-05 to 2011-12, the **Poverty Gap Ratio** (estimated from monthly per capita consumption expenditure data based on Mixed Recall Period (MRP)) has shown decline in rural and urban areas. In rural areas, PGR declined from 9.22 in 2004-05 to 5.05 in 2011-12, while in urban areas the decline was from 6.08 to 2.7 during this period.
- The **share of the poorest 20% population in terms of the monthly per capita consumption expenditure in total consumption** (i.e consumption accounted for by the poorest one fifth of the population) in the rural areas has slightly increased from 9.6% in 1993-94 (based on Uniform Reference Period – URP method) to 9.8% in 2009-10. In the urban areas the share of the poorest 20% population, declined from 8% in 1993-94 to 7.1 % in 2009-10.
- From estimated 52% in 1990, **the proportion of underweight children below 3 years** is required to be reduced to 26% by 2015. The proportion of underweight children has declined by 3 percentage points during 1998-99 (NFHS -2) to 2005-06 (NFHS-3), from about 43% to about 40% and at this

historical rate of decline, it is expected to come down to about 33% only by 2015.

MDG 2: Achieve Universal Primary Education

- By the measure of **Net Enrolment Ratio (NER)** the country had crossed in 2007-08 itself, the 95% cut-off line regarded as the marker value for achieving 2015 target of universal primary education for all children aged 6-10 years. The DISE[1] data further shows the country has achieved cent percent primary education for children in the primary schooling age of 6-10 years ahead of 2015 as the 2010-11 results shows NER of 99.89% in 2010-11.
- The results from DISE report 2011-12, shows a steady increasing trend over the years in the estimate of the indicator **'ratio of enrolment of Grade V to Grade I'** from 78.08 in 2009-10 to 86.05 in 2011-12.
- According to the trend exhibited during 1991 -2001, **Youth (15 -24 years old) literacy** increased between 1991 and 2001- from 61.9% to 76.4 % and the trend shows India is likely to achieve 100% youth literacy by 2015. The youth literacy rate among urban persons was 87% in 2001 against 72% for rural persons in 2001. The youth literacy among males was 84% in 2001 against 68% for females. NSS 2007-08 showed male youth literacy as 91% and female youth literacy as 80%. The rural-urban gap in youth literacy also has significantly reduced.

MDG 3: Promote Gender Equality and Empower Women

- In primary education, the **Gender Parity Index** (**GPI of GER)** has gone up from 0.76 in 1990-91 to 1.01 in 2010-11 showing 33% increase, in secondary education the increase is from 0.60 in 1990-91 to 0.88 in 2010-11 thereby showing 47% increase, and in higher education, it is increased from 0.54 in 1990-91 to 0.86 in 2010-11 registering an increase of 59%.

[1] District Information System on Education

- The literacy rate among males (15 -24 years old) was 84 in 2001 against 68 for females (15 -24 years old) and NSS 2007-08 showed the literacy rates as 91 and 80 respectively. The **ratio of Female literacy rate to Male literacy rate** for 15-24 years increased from 0.67 in 1991 to 0.80 in 2001 and stood at 0.88 in 2007-08. The ratio of female literacy rate to male literacy rate in the age group 15-24 years tends to exceed 1 by 2015, implying higher literacy rate among female youths than their male counterparts.
- In 2011-12, the 68th round NSS results had estimated the **percentage share of females in wage employment in the non- agricultural sector** as 19.3% with the share in rural and urban areas as 19.9% and 18.7% respectively. It is projected that at this rate of progress, the share of women in wage employment can at best reach a level of about 22.28% by 2015.
- As on December 2013, India, the world's largest democracy, has only 62 women representatives out of 543 members in Lok Sabha, while there are 28 female MPs in the 242-member Rajya Sabha. Hence the **proportion of seats held by women in national parliament i**s 11.46%.

MDG 4: Reduce child mortality

- In India, **Under Five Mortality Rate** (**U5MR)** has declined from an estimated level of 125 per 1000 live births in 1990 to 52 in 2012. Given to reduce U5MR to 42 per thousand live births by 2015, India tends to reach 49 by 2015 as per the historical trend, missing the target by 7 percentage points. However, considering the continuance of the sharper annual rate of decline witnessed in the recent years, India is likely to achieve the target.
- In India, the **Infant Mortality Rate (IMR)** has reduced by nearly 50% during 1990- 2012 and the present level is at 42. As per the historical trend, the IMR is likely to reach 40 deaths per 1000 live births, missing the MDG target of 27 with a considerable margin. However, as IMR is declining at a sharper rate in the recent years, the gap between the likely achievement and MDG target 2015 is set to reduce.

- The national level **coverage of the proportion of one-year old (12-23 months) children immunised against measles** has registered an increase from 42.2% in 1992-93 to 74.1% in 2009 (UNICEF &GOI- Coverage Evaluation Survey 2009). At the historical rate of increase, India is expected cover about 89% children in the age group 12-23 months for immunisation against measles by 2015. Thus India is likely to fall short of universal immunisation of one-year olds against measles by about 11 percentage points in 2015.

MDG 5: Improve Maternal Health

- From an estimated **Maternal Mortality Ratio (MMR)** level of 437 per 100,000 live births in 1990, India is required to reduce the MMR to 109 per 100,000 live births by 2015. At the historical pace of decrease, India tends to reach MMR of 140 per 100,000 live births by 2015, falling short by 31 points. However, the bright line in the trend is the sharper decline ie. 16% during 2009-12, 17% during 2006-09 and 16% during 2004-06 compared to 8 % decline during 2001-2003.
- As per Coverage Evaluation Survey (CES), 2009, **delivery attended by skilled personnel** is 76.2% which was 47.6% as per District level Household Survey (DLHS-2002-04). With the existing rate of increase in deliveries by skilled personnel, the likely achievement for 2015 is only to 77.29%, which is far short of the targeted universal coverage.

MDG 6: Combat HIV/AIDS, Malaria and other Diseases

- The **prevalence of HIV among Pregnant women aged 15-24 years** is showing a declining trend from 2005 and it has declined from 0.89 % in 2005 to 0.39% in 2010-11.
- According to NFHS –III (National Family Health Survey, 2005-06), **Condom use rate of the contraceptive prevalence rate** (Condom use to overall contraceptive use among currently married women, 15-49 years, percent) was only 5.2 % at all India level.

- As per the 'Condom Promotion Impact Survey 2010', the national estimate for **Condom use at last high-risk sex** is 74%.
- According to Behavioural Surveillance Survey, the national estimate for proportion of population aged 15-24 years with **comprehensive correct Knowledge of HIV/AIDS** (%) in 2006 was 32.9% reporting betterment from 2001 (22.2%).
- The malaria cases were brought down from 2,031,790 cases in 2000 to 1,816,569 cases in 2005 and further brought down to 1,067,824 cases in 2012. The **annual incidence rate** (cases of malaria/1000 population) of Malaria has come down from 2.57 per thousand in 1990 to 1.10 per thousand in 2011, and to 0.88 cases (provisional) per 1000 population in 2012. The **malaria death rate** in the country was 0.09 deaths per lakh population in 2000 which has come down to 0.04 deaths per lakh population in 2012.
- As per the 'WHO Report 2012 Global Tuberculosis Control' the **prevalence**[2] **rate of TB** in India has come down from 465 per 100,000 population in 1990 to 249 in 2011 per 100, 000 population. The **Mortality due to TB** has reduced from 38 per lakh population in 1990 to 24 in 2011.
- The Ministry of Health and Family Welfare has reported that, the latest status of treatment of TB under DOTS (Directly Observed Treatment Short course) reveals that, the **proportion of TB cases detected** is 70% and **cured** is 85% **under DOTS**.

MDG 7: Ensure Environmental Sustainability

- As per 2011 assessment, the Country has a **forest cover** of 692027 km^2 which is 21.05% of the Country's geographical area. The forest cover (revised) estimate for 2009 shows total forest cover of 692394km^2which indicates a decline of 367 km^2 in 2011.
- A network of 689 Protected Areas (PAs) has been established (as on 31/12/13), extending over 1,66,352.63 sq. kms comprising 102 National Parks, 526

[2] Prevalence is a measurement of *all* individuals affected by the disease at a particular time, whereas incidence is a measurement of the number of *new* individuals who contract a disease during a particular period of time.

Wildlife Sanctuaries, 57 Conservation Reserves and 4 Community Reserves (5.06% of total geographical area). There is a positive change in the **network of protected areas** in the Country as in 2011, the network included 668 Protected Areas (PAs), extending over 1,61,221.57 sq. kms (4.90% of total geographical area).

- The **Per-capita Energy Consumption** (PEC) (the ratio of the estimate of total energy consumption during the year to the estimated mid-year population of that year) increased from 2232.5 KWh in 1990-91 to 6,205.25 KWh in 2011-12. The annual increase in PEC from 2010-11 to 2011-12 was 7.19%. The Energy Intensity (amount of energy consumed for generating one unit of Gross Domestic Product, at 1999-2000 prices)has declined from 0.1594 KWh in 1990-91 to 0.145 KWh(at 2004-05 prices) in 2011-12.
- In India, the **per capita CO_2 emission** (MT) increased steadily during 1990 to 2013. As per the Key World Energy Statistics 2013, by International Energy Agency, the per capita CO_2 emission (MT) of India is 1.41(MT).
- The **consumption of CFC (Chloro Fluro Carbons)** is estimated at 998 ODP tones (2007), down from 5614 ODP tones in 2000.
- As per Census 2011, 67.3% **households are using solid fuels** (fire wood / crop residue, cow dung cake/ coke etc) for cooking against 74.3% in 2001.
- During 2012, in rural India, 88.5% households had **improved source of drinking water** while in urban India 95.3% households had improved source of drinking water. The prevailing trend over time, suggests attainability of nearly cent percent coverage by 2015, including both rural and urban sectors. In other words, halving the proportion of households without access to safe drinking water sources from its 1990 level to be reached by 2015, has already achieved in both rural and urban areas.
- The NSS 2012 revealed 59.4 percent households in rural India and 8.8 percent households in urban India respectively had **no latrine facilities**. This has reaffirmed the census 2011 results that, more than 50% of the households of the Country are not having latrine facility, though an improvement of 10 percentage points compared to the corresponding percentage recorded during

the last decade. In 2011, the percentage of households with no latrine reduced to 53.1% from 63.6% in 2001 at all India level.

- As per NSS 2012, at all-India level, only 10.8 percent of urban dwelling units were situated in slum. However, Census 2011 reported that 17.2% of **urban households are located in slums**. Census recorded a 37.14% decadal growth in the number of slum households. Census further reveals that in 2011, 17.36% of the urban population lives in slums.

MDG 8: Develop a global partnership for development

- Overall **tele-density** (number of telephones per 100 population), in the country has reached 73.5% in 2013 from 9.08% in 2005.
- The **internet subscribers per 100 population** accessing internet only through wireline broadband connections is 1.2 and the corresponding figure including those accessing internet through wireless connections is 13.5 in 2013.

MDGs and Targets –Summary of Progress achieved by India
GOAL 1: ERADICATE EXTREME POVERTY AND HUNGER **TARGET 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day** **On -track**
TARGET 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger **Slow or almost off-track**
MDG 2: ACHIEVE UNIVERSAL PRIMARY EDUCATION **TARGET 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling** **On-track**
MDG 3: PROMOTE GENDER EQUALITY AND EMPOWER WOMEN **TARGET 4 : Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015** **On-track**

MDGs and Targets –Summary of Progress achieved by India
MDG 4: REDUCE CHILD MORTALITY ***TARGET 5 :*** **Reduce by two-thirds, between 1990 and 2015, the Under- Five Morality Rate** **Moderately on – track due to the sharp decline in recent years**
MDG5 5: IMPROVE MATERNAL HEALTH **TARGET 6 : Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio** **Slow or off-track**
MDG 6: COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES **TARGET 7 : Have halted by 2015 and begun to reverse the spread of HIV/AIDS** **On-track as trend reversal in HIV prevalence has been achieved**
TARGET 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases **Moderately on-track as trend reversal has been achieved for Annual Parasite Incidence of Malaria and for prevalence of TB**
MDG 7: ENSURE ENVIRONMENTAL SUSTAINABILITY ***TARGET 9:*** **Integrate the principle of sustainable development into country policies and programmes and reverse the loss of environmental resources.** **Moderately on-track**
TARGET 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation **On-track for the indicator of drinking water but slow for the indicator of Sanitation**
TARGET 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers **The pattern not statistically discernible**
MDG 8: DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT **TARGET 18 : In cooperation with the private sector, make available the benefits of new technologies, especially information and communications** **On-track**

Indicator wise detailed data status is at appendix 1.

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Chapter 3
FIGHTING POVERTY AND HUNGER

MDG 1: Eradicate extreme poverty and hunger

Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day

Indicators

- Poverty Headcount Ratio (percentage of population below the national poverty line)
- Poverty Gap ratio
- Share of poorest quintile in national consumption

Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger

Indicator

- Prevalence of underweight children under three years of age.

Faster decline in poverty….

Indicator: Poverty Headcount Ratio (percentage of population below the national poverty line)

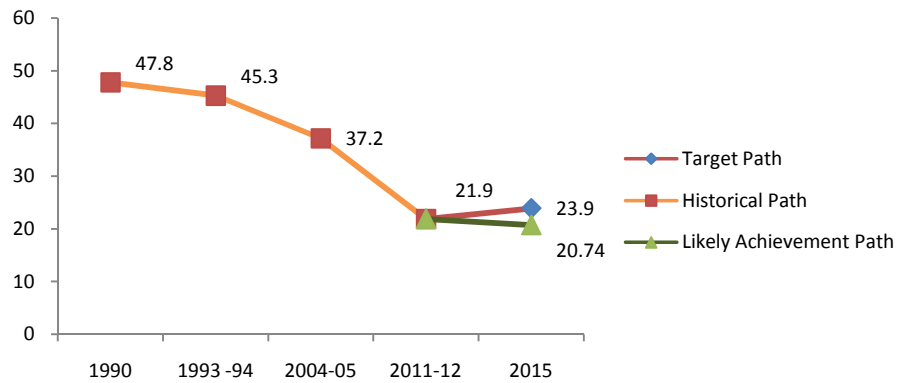
India, the world's second most populous country is home to 1.2 billion people, which is 17% of the world population. In this country of huge diversities, poverty has always been a cause of great concern always.

However, as the Statistics reveals, over the years, India has made significant progress in poverty reduction.

The official poverty estimates released by Planning Commission (Tendulkar methodology) based on NSSO Survey on Household Consumer Expenditure 2011-12 reveals that, the all-India Poverty Head Count Ratio (PHCR) has declined by 15 percentage points from 37.2% in 2004-05 to 21.9% in 2011-12. Significant decline in poverty ratio has been observed in both rural and urban areas during this period as the rural poverty head count ratio declined by 16 percentage points from 41.8% to 25.7% and urban poverty declining by 12 percentage points from 25.7% to 13.7%. Though, the nation shows considerable improvement in poverty reduction, it is alarming that, still, 1 in every 5persons in India is below the national poverty line.

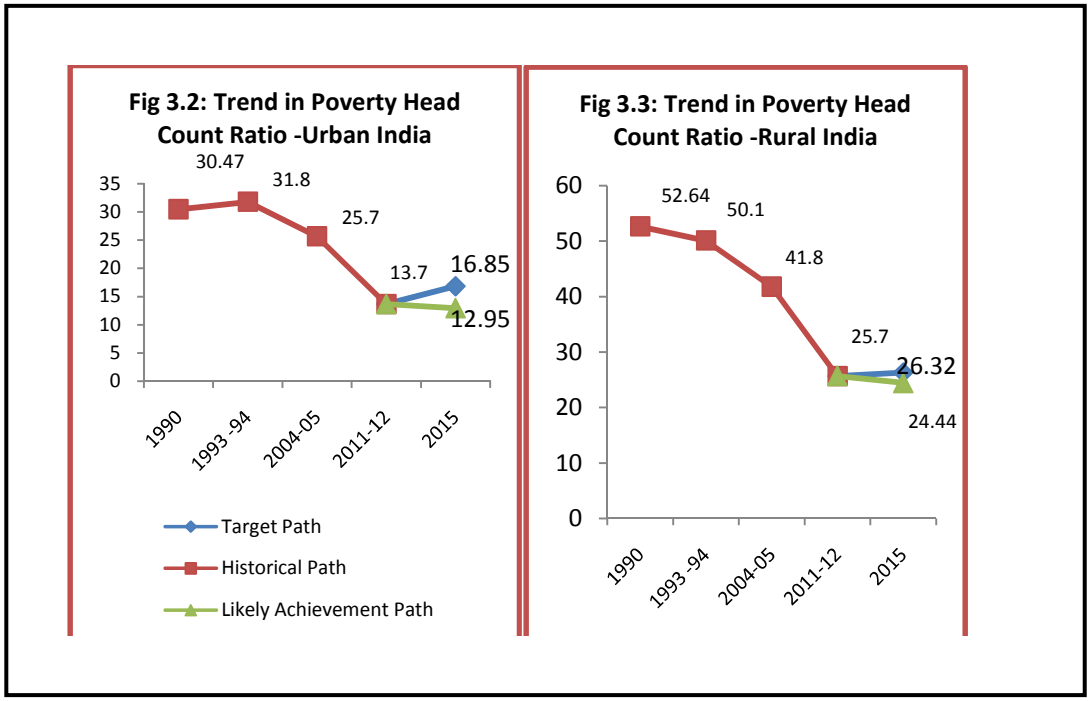
While considering the progress towards MDG target 1, the estimate of PHCR at the national level was at 47.8% for 1990[3] and the Country is required to achieve a PHCR level of 23.9% by 2015 in order to meet the MDG target. With a faster decline in PHCR i.e annual decline of 1.9 percentage points during 2004-12, compared to 0.7 percentage points during 1993-2004, the Country has already achieved the MDG target, which is a notable achievement.

Fig.3.1 Poverty Head Count Ratio



Source: Planning Commission of India

[3]Estimated on the basis of estimates of HCR for the year 1993-94, 2004-05, 2011-12based on Tendulkar methodology



Source: Planning Commission of India

As per Census 2011, in India, 69% of its population is in rural areas, and thus majority of the poor people belongs to rural India. The Census 2011 Population results and the latest poverty head count ratio (2011-12) points out that, out of the 270 million poor people of India, 81% (217 millions) are from rural India. The trend of decline in poverty ratio is evident in both rural and urban areas and the decline was from PHCR from 25.7 in 2004-05 to 13.7 in 2011-12 in urban areas and from 41.8 to 25.7 in rural areas. With the recent sharper decline in PHCR, the MDG target has already been achieved in both rural and urban areas.

The Rural –Urban gap in poverty ratio has come down from 18 percentage points in1993-94 to 12 percentage points, in 2011-12and this persisting wide gap in Rural Urban Poverty Ratio is a cause of concern.In all States, except Punjab (Rural: 7.66, Urban: 9.24), rural poverty ratio was higher and the rural – urban gap in PHCR varied from 1 percentage point (Uttar Pradesh - Rural: 11.62, Urban: 10.48) to 29 percentage points (Mizoram Rural:35.43, Urban: 6.36).

As per the PHCR estimates of 2011-12, the lowest PHCR is for the State of Goa (5.09%) followed by Kerala (7.05%). The highest PHCR is for the State of Chattisgarh

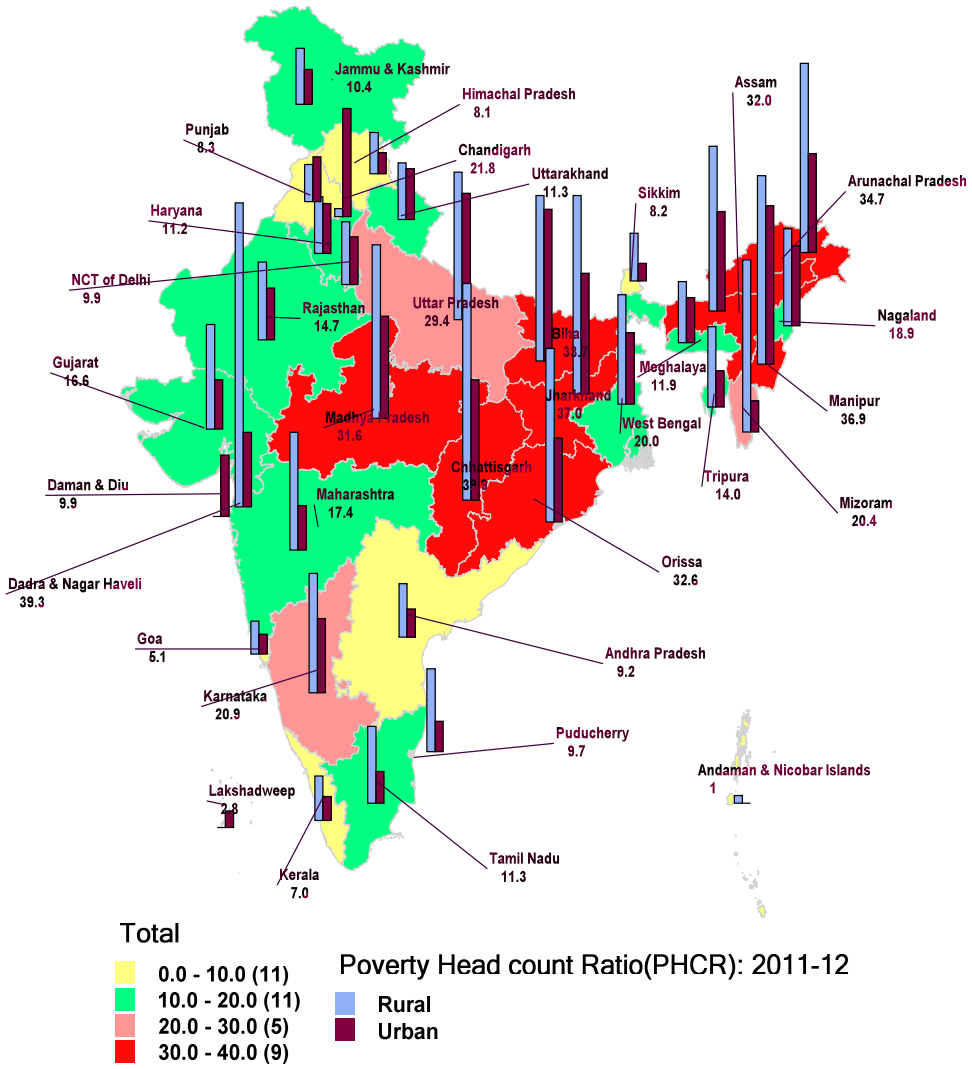
(39.93%) followed by Jharkhand (36.96%) and Manipur (36.89%). The poverty ratios of 2004-05 and 2011-12, in the ascending order of PHCR are presented at Table 3.1.

Table 3.1: Poverty Head Count Ratio (PHCR) – States arranged in the ascending order of PHCR

Rank		PHCR 2011-12	Rank		PHCR 2004-05
1	Goa	5.09	1	Nagaland	9
2	Kerala	7.05	2	Delhi	13.1
3	Himachal Pradesh	8.06	3	Jammu & Kashmir	13.2
4	Sikkim	8.19	4	Pondicherry	14.1
5	Punjab	8.26	5	Mizoram	15.3
6	Andhra Pradesh	9.2	6	Meghalaya	16.1
7	Pondicherry	9.69	7	Kerala	19.7
8	Delhi	9.91	8	Punjab	20.9
9	Jammu & Kashmir	10.35	9	Himachal Pradesh	22.9
10	Haryana	11.16	10	Haryana	24.1
11	Uttarakhand	11.26	11	Goa	25
12	Tamil Nadu	11.28	12	Tamil Nadu	28.9
13	Meghalaya	11.87	13	Andhra Pradesh	29.9
14	Tripura	14.05	14	Arunachal Pradesh	31.1
15	Rajasthan	14.71	15	Sikkim	31.1
16	Gujarat	16.63	16	Gujarat	31.8
17	Maharashtra	17.35	17	Uttarakhand	32.7
18	Nagaland	18.88	18	Karnataka	33.4
19	West Bengal	19.98	19	West Bengal	34.3
20	Mizoram	20.4	20	Assam	34.4
21	Karnataka	20.91	21	Rajasthan	34.4
22	Uttar Pradesh	29.43	22	Manipur	38
23	Madhya Pradesh	31.65	23	Maharashtra	38.1
24	Assam	31.98	24	Tripura	40.6
25	Odisha	32.59	25	Uttar Pradesh	40.9
26	Bihar	33.74	26	Jharkhand	45.3
27	Arunachal Pradesh	34.67	27	Madhya Pradesh	48.6
28	Manipur	36.89	28	Chhattisgarh	49.4
29	Jharkhand	36.96	29	Bihar	54.4
30	Chhattisgarh	39.93	30	Odisha	57.2
	All India	**21.9**		**All India**	**37.2**

Though the States have performed better over the years in reducing poverty, in 2011-12, the States of Uttar Pradesh, Madhya Pradesh, Assam, Odisha, Bihar, Arunachal Pradesh, Manipur, Jharkhand and Chattisgarh have PHCR above the national level estimate of 21.9%.

Fig 3.4 Poverty Head Count Ratio – States & UTs 2011-12



Source: Planning Commission, Figures in bracket indicates the number of States / UTs in each category[4].

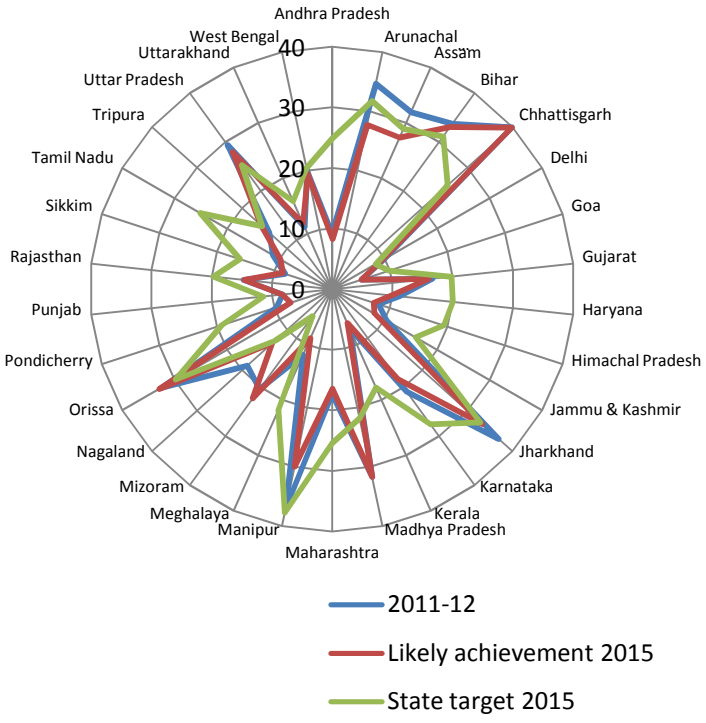
The State/ UT wise results of poverty head count ratio (annexure) reflects the extent of poverty in State/ UTs and the progress over the years in reducing poverty. During 2011-12, the Poverty ratio in Uttarakhand, Tripura, Sikkim, Maharashtra, and Bihar, has declined by about 20 percentage points or more in comparison to 2004-05. In Arunachal Pradesh, Mizoram and Nagaland, PHCR has increased during 2004-12. During this period, the States of Goa, Sikkim, Uttarakhand, Andhra Pradesh, Tripura, Himachal Pradesh, Kerala, Tamil Nadu, Punjab, Rajasthan, Maharashtra and Haryana recorded more than 50% reduction in PHCR.

[4] Map created through DevInfo

Performance of States in achieving MDG target

In 2011-12, the States of Uttar Pradesh, Madhya Pradesh, Assam, Odisha, Bihar, Arunachal Pradesh, Manipur, Jharkhand and Chhattisgarh have PHCR above the national level estimate (21.9%) and the remaining 21 States have PHCR below the national level estimate. All States, except Assam, Arunachal Pradesh, Uttar Pradesh, Manipur, Madhya Pradesh, Odisha, Bihar, Jharkhand and Chhattisgarh are likely to achieve the national level MDG target by 2015. The performance of States vis –a – vis, their respective MDG target is significant to assess the progress with respect to the respective MDG base year ie 1990.

Fig 3.5: Poverty Head Count Ratio -Likely achievement of States vis -a -vis MDG target



As per the historical trend, 23 States are likely to achieve their respective MDG target by 2015. Delhi, Bihar, Uttar Pradesh and Odisha are likely to miss their MDG target narrowly, and the States of Madhya Pradesh, Chattisgarh and Mizoram are likely to miss their MDG targets by huge margin.

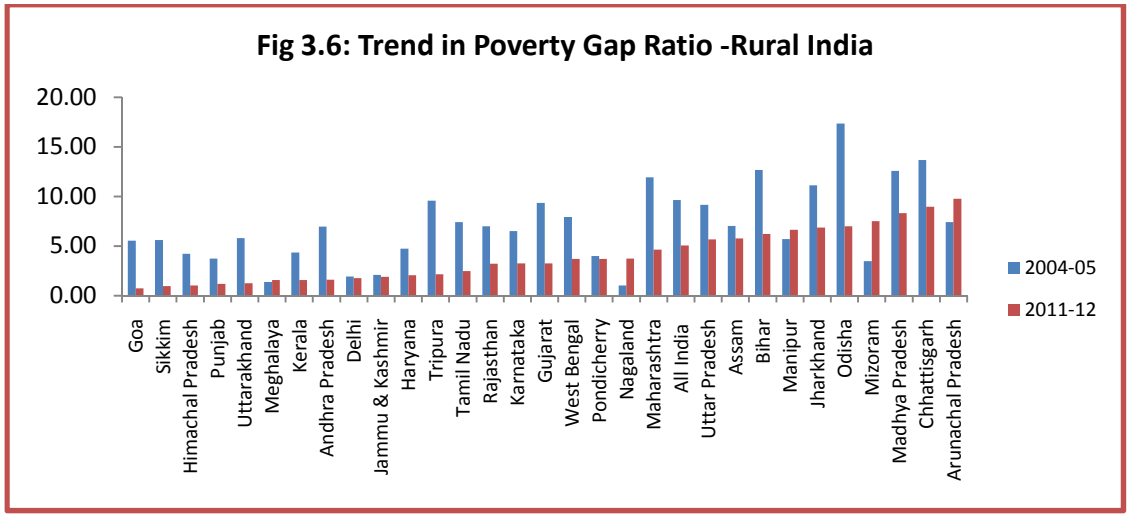
Measuring depth of poverty…

Indicator: Poverty Gap ratio

Improve the lot of the poorest of the poor, is equally important as reducing the quantum of poverty. The indicator of **Poverty Gap Ratio (PGR)** reflects the degree to which mean consumption of the poor falls short of the established poverty line, indicating the depth of poverty. During 2004-05 to 2011-12, the Poverty Gap Ratio (estimated from monthly per capita consumption expenditure data based on Mixed Recall Period (MRP)) has shown decline in rural and urban areas. In rural areas, PGR declined from 9.22 in 2004-05 to 5.05 in 2011-12, while in urban areas the decline was from 6.08 to 2.7 during this period.

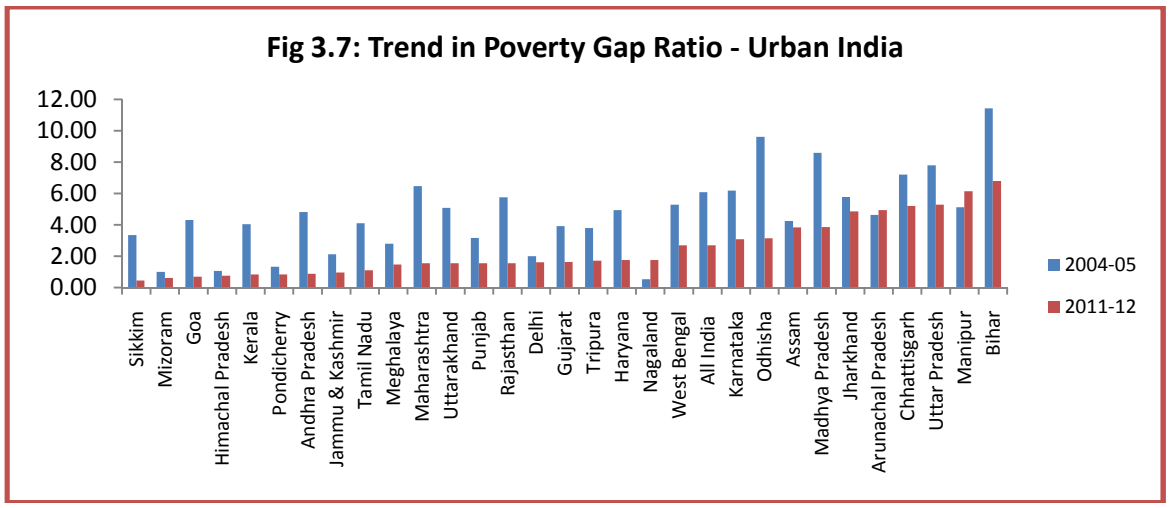
Poverty Gap Ratio helps to provide an overall assessment of a region's progress in poverty alleviation and the evaluation of specific public policies or private initiatives. The State wise trend in PGR in Rural areas (in ascending order of PGR in 2011-12) is depicted in Figure 3.6. In 2011-12, Poverty Gap Ratio in rural areas was above the corresponding all India figure in the States of Uttar Pradesh, Assam, Bihar, Manipur, Jharkhand, Odisha, Mizoram, Madhya Pradesh, Chattisgarh and Arunachal Pradesh. The States of Nagaland, Mizoram, Meghalaya, Manipur, and Arunachal Pradeshhad shown increase in PGR in rural areas during 2004-05 to 2011-12, whereas other States showed decline in PGR during this period, and considerable

decline was observed in the States of Odisha, Tripura, Maharashtra, Bihar and Gujarat.



Source: Planning Commission

The State wise trend in PGR in Urban areas (in ascending order of PGR in 2011-12) is depicted in Fig 3.6. In 2011-12, the States of Karnataka, Odisha, Assam, Madhya Pradesh, Jharkhand, Arunachal Pradesh, Chattisgarh, Uttar Pradesh, Manipur and Bihar have PGR in urban areas above the corresponding national level estimate. During 2004-05 to 2011-12, PGR in urban areas has increased in Nagaland, Arunachal Pradesh and Manipur, whereas the remaining States showed reduction.



Source: Planning Commission

The recent trend of increase in poverty head count ratio as well as poverty gap ratio in some States i.e Arunachal Pradesh, Mizoram and Nagaland is quite worrying,

indicating urgent need for more intensive and effective measures of poverty alleviation.

Indicator: Share of poorest quintile in national consumption

The share of the poorest 20% population in terms of the monthly per capita consumption expenditure in total consumption (i.e consumption accounted for by the poorest one fifth of the population) in the rural areas declined from 9.6% in 1993-94 to 9.5% in 2004-05 based on (Uniform Reference Period – URP method) and NSS 2009-10 (Modified Reference period – MRP method) reported a slightly increased level i.e. 9.8%. In the urban areas the share of the poorest 20% population, declined from 8% in 1993-94 to 7.3% in 2004-05 and to 7.1% in 2009-10. This decrease in the share of consumption expenditure for the poorest quintile is indicative of growing inequities, particularly in the urban areas.

Table 3.2Share of poorest quintile in national consumption

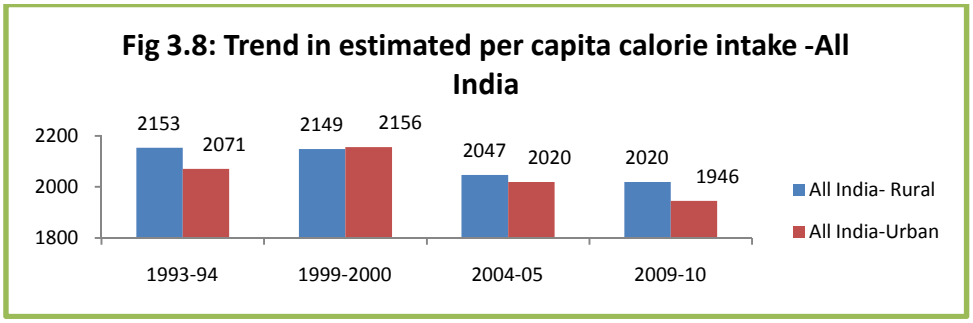
	1993-94 (URP)	2004-2005 (URP)	2009-10 (MRP)
Rural	9.6	9.5	9.8
Urban	8.0	7.3	7.1

Source: NSS report 538: Level and Pattern of Consumer Expenditure

Better Nutrition for all….

The persisting low levels of anthropometric indicators of nutrition in India, for both adults and children even in the midst of intensified initiatives for poverty alleviation, is a cause of great concern. Intake of dietary energy per person continues to be the most widely used indicator of the level of nutrition of a population.

The NSSO surveys held during 1993-2010, to study nutritional intake in India, revealed that, estimated per capita calorie intake was more in rural areas than urban areas in all the rounds, except 1999-2000, in which the estimated per capita calorie intake for urban areas was slightly more than rural areas. In both urban and rural areas, declining trend has been observed in the estimated per capita calorie intake per day during this period and there was nearly 6% decline in 2009-10 in both rural and urban areas compared to 1993-94.



Source: NSS report 540, Nutritional intake in India

Further, the trend of decline in per capita calorie intake per day during 2004-05 to 2009-10, reveals that, though the decline was reported both in rural and urban areas, the extent of decline was more in urban areas.

Among the major States, estimated per capita calorie intake (Kcal) per day in rural areas was highest in Punjab (2223 Kcal) and lowest in Jharkhand (1900 Kcal) in 2009-10 and in urban areas, the highest per capita calorie intake (Kcal) per day was reported in Odisha (2096 Kcal) and lowest in West Bengal (1851 Kcal). During 2004-05 to 2009-10, in rural areas, 8 major States i.e. Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Orissa, Rajasthan, Tamil Nadu and Uttarakhand, reported a rise in estimated per capita calorie intake per day, while, the remaining major States reported a decline. In the Urban areas, only three major States i.e. Karnataka, Maharashtra and Tamil Nadu reported a rise in estimated per capita calorie intake (Kcal) per day during this period, while the rest of the major States reported decline.

Table 3.3 Estimated per capita calorie intake (Kcal) per day in major States

	Rural		Urban	
	2004-05	**2009-10**	**2004-05**	**2009-10**
Andhra Pradesh	1995	2047	2000	1975
Assam	2067	1974	2143	2003
Bihar	2049	1931	2190	2013
Chhattisgarh	1942	1926	2087	1949
Gujarat	1923	1982	1991	1983
Haryana	2226	2180	2033	1940
Jharkhand	1961	1900	2458	2046
Karnataka	1845	1903	1944	1987
Kerala	2014	1964	1996	1941
Madhya Pradesh	1929	1939	1954	1854
Maharashtra	1933	2051	1847	1901
Orissa	2023	2126	2139	2096
Punjab	2240	2223	2150	2062
Rajasthan	2180	2191	2116	2014
Tamil Nadu	1842	1925	1935	1963
Uttar Pradesh	2200	2064	2124	1923
Uttarakhand	2160	2179	2205	1984
West Bengal	2070	1927	2011	1851

Source: NSS report 540, Nutritional intake in India

The decline in per capita calorie intake per day in most of the States in spite of the economic development and ongoing initiatives towards poverty alleviation is a matter of concern.

Malnutrition among children still looms….

Indicator: Prevalence of underweight children under three years of age.

Children are the worst sufferers of poverty and malnourishment among children is a significant indicator of food insecurity. The indicator '**Prevalence of underweight children**' is the percentage of children under three years of age whose weight for age is less than minus two standard deviations from the median for the reference population aged 0-35 months[5]. All-India trend of the **proportion of underweight (severe and moderate) children below 3 years of age**[6]shows India is showing a slow progress in eliminating the effect of malnourishment. From estimated 52% in 1990, the proportion of underweight children below 3 years is required to be reduced to 26% by 2015. The proportion of underweight children has declined by 3 percentage points during 1998-99 (NFHS -2) to 2005-06 (NFHS-3), from about 43% to about 40% and at this historical rate of decline, it is expected to come down to about 33% only by 2015. As per NFHS -3, in India, one in every three children in the age group of 0-3 years is suffering from under weight. Census 2011, reports nearly 89 million children in the age group 0-3 years and with the 40%[7] prevalence of underweight, 35.6 million among them are underweight children.

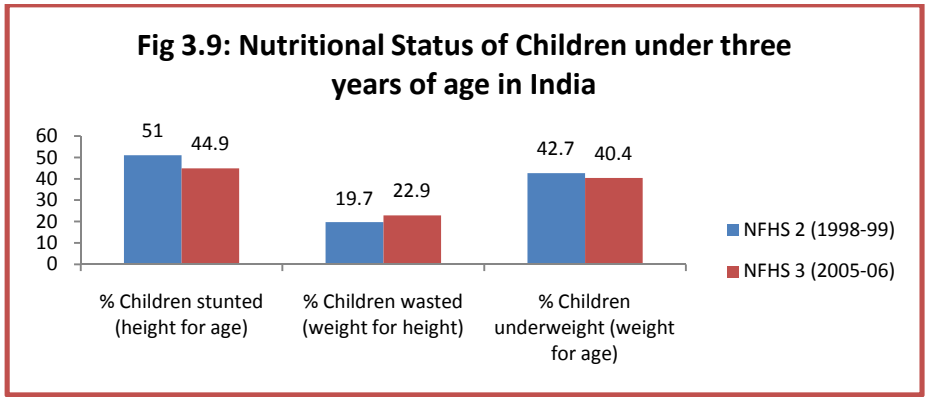
The indicator of underweight (weight-for-age - inadequate weight-for-age indicate underweight), together with the indicator of stunting (height-for-age - inadequate height-for-age indicate stunting) and wasting (weight-for-height -

[5]In Indian context, data on this indicator for the reference age group (0-5 years prescribed in the MDG framework 2003) are not available for all time points. The National Family Health Survey (NFHS) collected data on the underweight children between 0-35 months of age in 1998-99 and between 0-35 months and between 0-59 months of age in 2005-06, while in the survey conducted in 1992-93, children between 0-35 months and between 0-47 months of age were considered. As such, results of the surveys are comparable only with reference to the age group of 0-35 months (or less than 3 years of age).

[6]By the Ministry of Health and Family Welfare following the National Family Health Survey 2005-06 (NFHS-3) made according to standards of the WHO Multicentre Growth Reference Study Group, 2006 accepted by the Government of India in 2006.

[7] The latest official estimate of NFHS 3 (2005-06) has been used.

inadequate weight-for-height indicate wasting) reveals a better picture of nutritional status of children.



Source: National Family Health Survey, Ministry of Health and Family Welfare

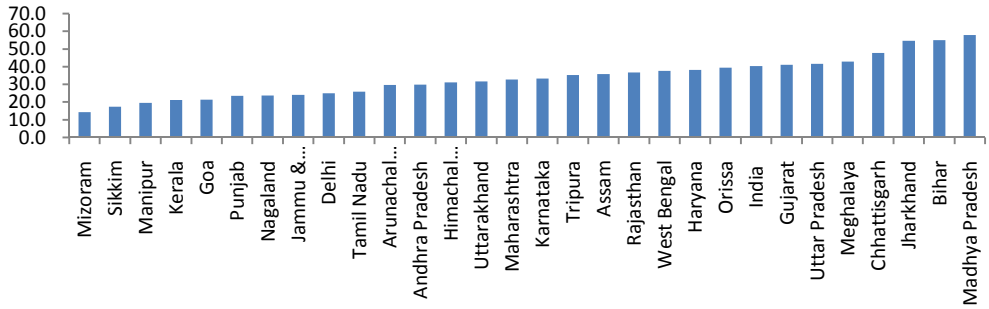
During the period between NFHS 2 (1998-99) & NFHS 3 (2005-06), decline has been observed for prevalence of stunting and underweight among children under 3 years of age, whereas the percentage of children 'wasted' has increased. However, it may be noted that, the degree of decline was very low for both the cases of stunting and underweight children (< 3 years) as the per year decline were less than one percentage point in both cases. Further, the increase in the 'percentage of children wasted' over years indicates a worsening situation, though the per year increase was less than one percentage point.

Underweight children <3 years – Profile of States/ UTs

Nutritional problems are substantial in every State in India. The proportion of children under age five years who are underweight was lowest in Mizoram (14.2%) followed by Sikkim (17.3%). The States which are above the national level estimate

(40%) of children under three years of age underweight are Gujarat (41.1%), Uttar Pradesh (41.6%), Meghalaya (42.9%), Chattisgarh (47.8%), Jharkhand (54.6%), Bihar (54.9%) and Madhya Pradesh (57.9%).

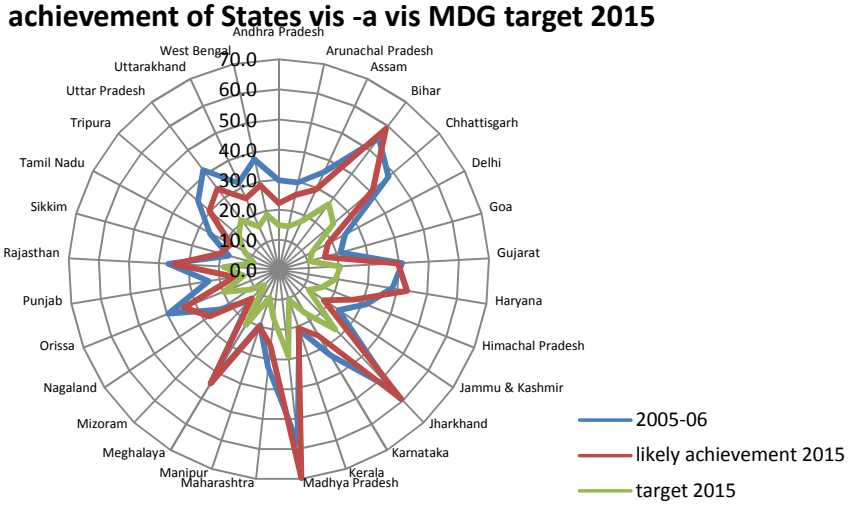
Fig 3.10: Prevalence of underweight among children < 3years (2005-06)



Source: National Family Health Survey 2005-06, Ministry of Health and Family Welfare

As per NFHS -3 results, 10 States namely Mizoram (14.2%), Sikkim (17.3%), Manipur (19.5%), Kerala (21.2%), Goa (21.3%), Punjab (23.6%), Nagaland (23.7%), Jammu & Kashmir (24%), Delhi (24.9%), and Tamil Nadu (25.9%)have already achieved the all India MDG target for prevalence of underweight children under three years of age and four more States i.e. Andhra Pradesh, Karnataka, Maharashtra and Uttarakhand are likely to achieve the target by 2015. However, as per the historical trend, only 6 States, namely, Maharashtra, Andhra Pradesh, Tamil Nadu, Delhi, Jammu & Kashmir and Punjab are likely to achieve their own MDG targets by 2015.

Fig 3.11: Prevalence of under weight children <3 years, likely achievement of States vis -a vis MDG target 2015



The statistics as discussed above, points out that, majority of the States are crippled with the problem of malnutrition and the issue invites special attention in the context of declining trend observed in per capita nutritional intake. The gap existing in the present nutritional status among children (measured by prevalence of underweight children) from the MDG target and the declining trend in the estimate per capita nutritional intake per day in majority of the States indicates the complexity of the issue of malnutrition and hunger.

Committed towards combating poverty and hunger….

Poverty is a complex and multidimensional phenomenon. The institutions addressing the issues of poor therefore need to engage in many sectors and with several service providers. The Government of India has taken a number of initiatives towards eradicating poverty and hunger as poverty remains to be the major hurdle towards sustainable development in the Country.

National Food Security Mission (NFSM)

The National Development Council (NDC)in its 53rd meeting held on 29th May, 2007 adopted a resolution to launch a Food Security Mission comprising rice, wheat

and pulses to increase the production of rice by 10 million tons, wheat by 8 million tons and pulses by 2 million tons by the end of the Eleventh Plan (2011-12). Accordingly, A Centrally Sponsored Scheme, 'National Food Security Mission', has been launched from 2007-08 to operationalize the above mentioned resolution. The National Food Security Mission has 3 components (i) Rice (ii) Wheat & (iii) Pulses.

The NFSM objectives are increasing production of rice, wheat and pulses through area expansion and productivity enhancement in a sustainable manner in the identified districts of the country, restoring soil fertility and productivity at the individual farm level, creation of employment opportunities, and enhancing farm level economy (i.e. farm profits) to restore confidence amongst the farmers. Under NFSM, financial support will be available for research in the following areas:

- Conservation of natural resources (land, water) and their efficient use.
- Integrated nutrient management.
- Integrated disease and pest management.
- Integrated weed management.
- Modification/refinements of farm machines/implements for different types of soil/cropping systems.
- Up scaling of improved crop varieties/hybrids in NFSM adopted states/agro-climatic zones under water/thermal stress conditions.
- Nutrient management in acidic/ alkaline/ sodic soils.
- Crop-husbandry.
- Input use efficiency.
- Rain-water harvesting management in kharif pulses.
- Refinement of relay cropping systems.
- Agronomic practices for intercropping systems involving pulses.
- Quality seed storage studies in the humid and hot climatic conditions -coastal areas.
- Value addition in case of coarse cereals and pulses
- Precision farming-nutrient manager and crop manager

- Any other relevant areas related to crop production

Rashtriya Krishi Vikas Yojana (RKVY)

The RKVY had aimed at achieving 4% annual growth in the agriculture sector during the XI Plan period, and is continuing in the 12th Plan, by ensuring a holistic development of Agriculture and allied sectors. The main objectives of the scheme are:

(i) To incentivise the states so as to increase public investment in Agriculture and allied sectors.

(ii) To provide flexibility and autonomy to states in the process of planning and executing Agriculture and allied sector schemes.

(iii) To ensure the preparation of agriculture plans for the districts and the states based on agro-climatic conditions, availability of technology and natural resources.

(iv) To ensure that the local needs/crops/priorities are better reflected in the agricultural plans of the states.

(v) To achieve the goal of reducing the yield gaps in important crops, through focused interventions.

(vi) To maximize returns to the farmers in agriculture and allied sectors.

(vii) To bring about quantifiable changes in the production and productivity of various components of Agriculture and allied sectors by addressing them in a holistic manner.

Mahatma Gandhi National Rural Employment Scheme (MGNREGA)

The Mahatma Gandhi National Rural Employment Guarantee Act (NREGA) was enacted on 5th September, 2005 and came into force w.e.f. 2nd February, 2006. On 31st December, 2009, the Act was renamed by an Amendment as the Mahatma Gandhi National Rural Employment Guarantee Act, 2005. The mandate of the Act is to provide at least 100 days of guaranteed wage employment in a financial year to

every rural household whose adult members volunteer to do unskilled manual work. It is provided in the Act that, while providing employment, priority shall be given to women in such a way that, at least 1/3rd of the beneficiaries shall be women, who have registered and requested for work under the Scheme.

The Goals of MGNREGA are,

1. Social protection for the most vulnerable people living in rural India by providing employment opportunities
2. Livelihood security for the poor through creation of durable assets, improved water security, soil conservation and higher land productivity
3. Drought-proofing and flood management in rural India
4. Empowerment of the socially disadvantaged, especially women, Scheduled Castes (SCs) and Schedules Tribes (STs), through the processes of a rights-based legislation
5. Strengthening decentralised, participatory planning through convergence of various anti-poverty and livelihoods initiatives
6. Deepening democracy at the grass-roots by strengthening Panchayati Raj Institutions
7. Effecting greater transparency and accountability in governance

Thus, MGNREGA is a powerful instrument for ensuring inclusive growth in rural India through its impact on social protection, livelihood security and democratic empowerment.

Indira Awas Yojana (IAY)

Rural housing development has to be seen in the context of poverty alleviation and overall rural development. Housing lays foundation for living with dignity for the rural poor by dispelling the gloom of being shelter-less. Indira Awaas Yojana (IAY) is a centrally sponsored scheme for rural BPL families who are either houseless or having inadequate housing facilities for constructing a safe and durable shelter. IAY has the following components:

- Assistance for construction of a new house
- Upgradation of kutcha or dilapidated houses
- Provision of house sites

95% of the total budget would be utilized for the components relating to new houses, upgradation of houses and provision of house sites and administrative expenses. The remaining 5% would be reserved for special projects of

- Rehabilitation of BPL families affected by natural calamities
- Rehabilitation of BPL families affected by violence and law and order problems
- Settlement of freed bonded labourers and liberated manual scavengers
- Settlement of particularly vulnerable tribal groups
- New technology demonstration – especially with focus on affordable and green technologies.

National Rural Livelihood Mission (NRLM)

The Ministry of Rural Development has re-designed and re-structured the Swarnjayanti Gram Swarojgar Yojana (SGSY) into National Livelihood Mission (NRLM) as a cornerstone of national poverty reduction strategy. The objective of the Mission is to reduce poverty among rural BPL by promoting diversified and gainful self-employment and wage employment opportunities which would lead to an appreciable increase in income on sustainable basis. In the long run, it will ensure broad based inclusive growth and reduce disparities by spreading out the benefits

from the islands of growth across the regions, sectors and communities. The core belief of National Rural Livelihoods Mission (NRLM) is that the poor have innate capabilities and a strong desire to come out of poverty. They are entrepreneurial, an essential coping mechanism to survive under conditions of poverty. The challenge is to unleash their capabilities to generate meaningful livelihoods and enable them to come out of poverty. The first step in this process is motivating them to form their own institutions. They and their institutions need to be provided sufficient capacities to access finance and to expand their skills and assets and convert them into meaningful livelihoods. This requires continuous handholding support. An external dedicated, sensitive support structure, from the national level to the sub-district level, is required to induce such social mobilization, institution building and livelihoods promotion.

NRLM implementation is in a Mission Mode. This enables: (a) shift from the present allocation based strategy to a demand driven strategy, enabling the States to formulate their own livelihoods-based poverty reduction action plans,(b) focus on targets, outcomes and time bound delivery, (c) continuous capacity building, imparting requisite skills and creating linkages with livelihoods opportunities for the poor, including those emerging in the organized sector, and (d) monitoring against targets of poverty outcomes. As NRLM follows a demand driven strategy, the States have the flexibility to develop their livelihoods-based perspective plans and annual action plans for poverty reduction. The second dimension of demand driven strategy implies that the ultimate objective is that the poor will drive the agenda, through participatory planning at grassroots level, implementation of their own plans, reviewing and generating further plans based on their experiences.

National Urban livelihood Mission (NULM)

The National Urban livelihood Mission (NULM) implemented by the Ministry of Housing and Urban Poverty Alleviation aims to reduce poverty and vulnerability of the urban poor households by enabling them to access gainful self employment and

skilled wage employment opportunities, resulting in an appreciable improvement in their livelihoods on a sustainable basis, through building strong grassroots level institutions of the poor. The mission would aim at providing shelters equipped with essential services to the urban homeless in a phased manner. In addition, the mission would also address livelihood concerns of the urban street vendors by facilitating access to suitable spaces, institutional credit, social security and skills to the urban street vendors for accessing emerging market opportunities. The strategy followed in NULM includes,

- Building capacity of the urban poor, their institutions and the machinery involved in the implementation of livelihoods development and poverty alleviation programmes through handholding support;
- Enhancing and expanding existing livelihoods options of the urban poor;
- Building skills to enable access to growing market-based job opportunities offered by emerging urban economies;
- Training for and support to the establishment of micro-enterprises by the urban poor – self and group;
- Ensure availability and access for the urban homeless population to permanent 24-hour shelters including the basic infrastructural facilities like water supply, sanitation, safety and security;
- Cater to the needs of especially vulnerable segments of the urban homeless like the dependent children, aged, disabled, mentally ill, and recovering patients etc., by creating special sections within homeless shelters and provisioning special service linkages for them;
- To establish strong rights-based linkages with other programmes which cover the right of the urban homeless to food, healthcare, education, etc. and ensure access for homeless populations to various entitlements, including to social security pensions, PDS, ICDS, feeding programmes, drinking water, sanitation, identity, financial inclusion, school admission etc., and to affordable housing;

- To address livelihood concerns of the urban street vendors by facilitating access to suitable spaces, institutional credit, social security and skills to the urban street vendors for accessing emerging market opportunities.

Rajiv Awas Yojana (RAY)

The Rajiv Awas Yojana envisages a "Slum Free India" with inclusive and equitable cities in which every citizen has access to basic civic infrastructure, social amenities and decent shelter.

The objectives of the programme are,

- Improving and provisioning of housing, basic civic infrastructure and social amenities in intervened slums.
- Enabling reforms to address some of the causes leading to creation of slums.
- Facilitating a supportive environment for expanding institutional credit linkages for the urban poor.
- Institutionalizing mechanisms for prevention of slums including creation of affordable housing stock.
- Strengthening institutional and human resource capacities at the Municipal, City and State levels through comprehensive capacity building and strengthening of resource networks.
- Empowering community by ensuring their participation at every stage of decision making through strengthening and nurturing Slum Dwellers' Association/Federation.

Integrated Child Development Services (ICDS) Scheme

The Integrated Child Development Services (ICDS) Scheme, implemented by the Ministry of Women and Child Development is an important programme of the Government and is being strengthened through various five year plans. ICDS targets fighting malnutrition among children below 6 years of age and pregnant women & lactating mothers. ICDS is a centrally sponsored Scheme being implemented by the State Governments/UT Administrations. The scheme aims at holistic development of children below 6 years of age and pregnant women & lactating mothers by providing a package of six services comprising (i) Supplementary nutrition (ii) Pre-school non-

formal education (iii) Nutrition and health Education (iv) Immunization (v) Health check-up and (vi) Referral services through Anganwadi Centres at grassroots level. The Scheme is universal and applicable to all the beneficiaries irrespective of any economic or other criteria.

The key features of Strengthened and Restructured ICDS in 12th five year Plan inter-alia include addressing the gaps and challenges with

- Special focus on children under 3 years and pregnant and lactating mothers
- Strengthening and repackaging of services including, care and nutrition counseling services and care of severely underweight children
- A provision for an additional Anganwadi Worker cum Nutrition Counselor for focus on children under 3 years of age and to improve the family contact, care and nutrition counseling for P&L Mothers in the selected 200 high-burden districts across the country, besides having provision of link worker, 5% crèche cum Anganwadi centre
- Focus on Early Childhood Care and Education (ECCE)
- Forging strong institutional and programmatic convergence particularly, at the district, block and village levels, improving Supplementary Nutrition Programme including cost revision among other components.

The goals and targets of restructured and strengthened ICDS are (i) to prevent and reduce young child under nutrition by 10% points in 0-3 years and enhance early development and learning outcomes in all children below six years of age (ii) improved care and nutrition of girls and women and reduce anaemia prevalence in young children, girls and women by 1/5th and (iii) achieve time bound goals and outcomes with results based monitoring of indicators at different levels.

A number of similar Programmes are being implemented by Central as well as State Governments to tackle the burden of poverty and hunger in this Country. The focused efforts to improve the lives of poor in all fronts need to be continued in a sustainable manner so as to overcome the challenges of future too.

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Chapter 4
ACHIEVING UNIVERSAL EDUCATION

Goal 2: Achieve Universal Primary Education

TARGET 5: Ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary education.

Indicators

- Net Enrolment Ratio in primary education
- Proportion of pupils starting Grade 1 who reach Grade 5
- Literacy rate of 15-24 year olds

Education is one of the first and foremost stepping stones in nation building. India is committed to providing free and compulsory education to all children. With this objective, Indian Parliament has enacted a legislation making free and compulsory education a Right of every child in the age group 6-14 years which has come into force from 1st April, 2010. The 'Right to Education' enacted by the Government of India aims at the ultimate target of ensuring universalisation of education of all children aged 6-14 years by making the provision of free and compulsory education for this age group. The wide ranging benefits of elementary education from contribution to economic growth, overcoming economic and social inequalities, empowerment, reduction of population growth and fertility to

child health via mother's schooling has weighed heavily in the evolution of a consensual view of elementary education as a fundamental right.

Universalisation of Primary Education

Indicator: Net Enrolment Ratio

Net enrolment ratio (NER)[8] in primary education is the major indicator to assess whether the country is tending to achieve 2015 target of universal primary education for all children aged 6-10 years. The estimate of this indicator as revealed by the District Information System on Education (DISE) data shows that the NER in Primary Education has improved from 83% in the year 2000 to over 99.89% in 2010-11.

As per administrative statistics of the Ministry of Human Resource Development (MHRD) of the Government of India, the GER[9](Gross Enrolment Ratio) for Grades I-V in India has already overshot the 100% mark and stands at 116 in 2010-12 with 116.7 for girls and 115.4 for boys. GER for Grades I-V unlike NER tends

[8]Proportion of pupils of official school age of 6-10 years who are enrolled in primary grades I-V.

[9] Gross Enrolment Ratio (GER): The total enrollment in a specific level of education, regardless of age, expressed as a percentage of the population in the official age group corresponding to this level of education

to exceed 100% due to enrolment of children beyond the age group 6-10 years in the primary level education.

Primary enrolment of 6-10 year old children by their NER measure has improved from 83% in the year 2000 to 95.92% in 2007-08 which increased steadily and stood at 98.6%, 98.3% and 99.89% in 2008-09, 2009-10 and 2010-11 respectively. By the measure of NER the country had crossed in 2007-08 itself, the 95% cut-off line regarded as the marker value for achieving 2015 target of universal primary education for all children aged 6-10 years. The DISE[10] data further shows the country has achieved cent percent primary education for children in the primary schooling age of 6-10 years ahead of 2015.

State-wise decomposition of NER is available for 21 States/UTs from DISE based reports for the recent years. The national series of values only have been used for this report.

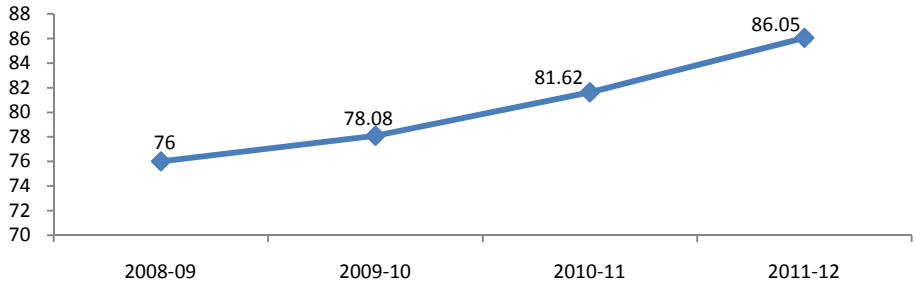
[10] District Information System on Education

Indicator: Proportion of pupils starting Grade 1 who reach Grade 5

Universalisation of primary education addresses two major target groups, the first group is of children who remain out of school during the primary school going age due to social and /or economic impediments. The other group might have got a chance to start schooling in the age-group, but were forced to drop out even before completion of primary grade classes often due to more or less same set of socio-economic hurdles.

Ideally the proportion of children starting Grade I who reach Grade V, the last grade of primary can be obtained accurately from a cohort study, which is at present not available in the official statistics of the country. Strengthening the school information system has been accorded top priority from the very beginning of the Sarva Shiksha Abhiyan (SSA), as a result of which the coverage of DISE was extended to all states and districts of the country, and its scope extended to the entire elementary stage of education. The Flash Statistics: 2011-12 is based on the data received from the States and UTs through annual data collection under SSA (DISE) and as many as 1.41 million schools spread over 644 districts across 35 States & UTs. The results from DISE report 2011-12, shows a steady increasing trend over the years in the estimate of the indicator 'ratio of enrolment of Grade V to Grade I' from 78.08 in 2009-10 to 86.05 in 2011-12.

Fig 4.1: Apprarent Survival Rate: Grade V (Ratio of enrolment of Grade V to I)



Source: District Information System for Education, National University of Educational Planning and Administration (NUEPA), Department of School Education and Literacy, M/o HRD

Indicator: Literacy rate of 15-24 year olds

Literacy is an essential condition for development in various fields. Apart from job market, where the importance of education is paramount, literacy can pave the way for reduction in population growth, child mortality and poverty, and facilitate in attaining gender parity, sustainable and holistic growth. It provides for nurturance of democratic values and peace among people. Literacy is all the more important to those sections of population, who have been historically neglected. Achieving universal adult literacy is a fundamental goal of adult and continuing education programmes that have been envisaged from time to time. After all, the basic literacy programmes are intended not only to enhance reading and writing capabilities, but also to develop comprehensive life skills to access all developmental resources.

According to the trend exhibited during 1991 -2001, Youth literacy increased between 1991 and 2001- from 61.9% to 76.4 % and the trend shows India is likely to achieve 100% youth literacy by 2015. The youth literacy rate among urban persons was 87% in 2001 against 72% for rural persons in 2001. The youth literacy among males was 84% in 2001 against 68% for females. Literacy indicators from intervening survey results with post-2001 reference years also indicate the on-track movement of youth literacy. The rural-urban gap in youth literacy also has significantly reduced. Compared to males', the youth literacy of females tends to move faster.

Table 4.1: Youth Literacy

	literates among youth: Census 2001%					literates among youth: NSSO (2007-08)				
	all	female	male	rural	urban	all	female	male	rural	urban
India	76	68	84	72	87	86	80	91	83	93

Source of Data:- Population Census of India, 2001; NSS Report 532: ' Participation and Expenditure on Education in India 2007-08'

As per Census 2001, the States which reported youth literacy rates less than the national estimate of 76% are Andhra Pradesh (73.6%), Arunachal Pradesh (70.1%), Assam (73.5%), Bihar (56.8%), Jammu & Kashmir (68.2%), Jharkhand

(65.2%), Madhya Pradesh (74.6%), Meghalaya (74%), Nagaland (75.5%), Orissa (75.4%), Rajasthan (72%) and Uttar Pradesh (66.5%). The low levels are due to the prevailing huge gap in male- female literacy and urban –rural literacy in these States. For these States with Youth Literacy less than the national level as per Census 2001, the status as per 2007-08 NSS results is as under:

Table 4.2: Percentage of literates among youth for low performing States

State Name	% literates among youth: Census 2001					% literates among youth: NSSO (2007-08)				
	all	female	male	rural	urban	all	female	male	rural	urban
Jammu & Kashmir	68	57	78	63	83	88	83	93	87	94
Rajasthan	72	55	87	68	84	78	64	90	74	89
Uttar Pradesh	67	53	78	63	77	80	73	87	79	84
Bihar	57	43	69	53	80	67	55	77	64	86
Arunachal Pradesh	70	62	78	65	86	84	77	90	80	97
Nagaland	76	73	78	73	90	99	98	100	100	97
Meghalaya	74	74	74	69	92	97	96	97	96	97
Assam	74	68	79	71	90	92	90	94	92	97
Jharkhand	65	50	79	57	88	75	62	86	70	93
Orissa	75	66	85	73	89	84	78	91	82	95
Madhya Pradesh	75	63	85	69	88	85	77	92	82	93
Dadra & Nagar Haveli	67	48	80	60	89	85	63	99	83	97
Andhra Pradesh	74	65	82	68	86	87	82	92	84	94

Source: Census 2001, NSSO 2007- 08

As per the Census 2011 results, the all India literacy rate has surged forward from 64.83% in 2001 to 73% in 2011. During 2001 - 2011, the literacy rate of males increased from 75.3% to 80.9% and for females, the increase was from53.7% to 64.6%. In this period, the literacy rate in rural areas increased from 58.7% to 67.8% and in urban areas, the progress was from 79.9% to 84.1%. The increase in literacy rates in various fronts during 2001 - 2011 is corroborating the conclusion of on-the - track movement of youth literacy.

Breaking all barriers…Education to all

The role of Universal Elementary Education (UEE) for strengthening the social fabric of democracy through provision of equal opportunities to all has been

accepted since the inception of our Republic. Over the years, India initiated a wide range of programmes for achieving the goal of UEE through several schematic and programme interventions, such as Operation Black Board, Shiksha Karmi Project, Lok Jumbish Programme, Mahila Samakhya, District Primary Education Programme etc. Currently, Sarva Shiksha Abhiyan (SSA) is implemented as India's main programme for universalising elementary education. Its overall goals include universal access and retention, bridging of gender and social category gaps in education and enhancement of learning levels of children. SSA provides for a variety of interventions, including inter alia, opening of new schools and alternate schooling facilities, construction of schools and additional provisioning for teachers, periodic teacher training and academic resource support, textbooks and support for learning achievement. These provisions need to be aligned with the legally mandated norms and standards and free entitlements mandated by the RTE Act. SSA is being implemented in partnership with State Governments to cover the entire country and address the needs of 192 million children in 1.1 million habitations.

The Constitution (Eighty-sixth Amendment) Act, 2002 inserted Article 21-A in the Constitution of India to provide free and compulsory education of all children in the age group of six to fourteen years as a Fundamental Right in such a manner as the State may, by law, determine. The Right of Children to Free and Compulsory Education (RTE) Act, 2009, which represents the consequential legislation envisaged under Article 21-A, means that every child has a right to full time elementary education of satisfactory and equitable quality in a formal school which satisfies certain essential norms and standards. Article 21-A and the RTE Act came into effect on 1 April 2010. The title of the RTE Act incorporates the words 'free and compulsory'. 'Free education' means that no child, other than a child who has been admitted by his or her parents to a school which is not supported by the appropriate Government, shall be liable to pay any kind of fee or charges or expenses which may prevent him or her from pursuing and completing elementary education. 'Compulsory education' casts an obligation on the appropriate Government and local authorities to provide and ensure admission, attendance and completion of

elementary education by all children in the 6-14 age group. With this, India has moved forward to a rights based framework that casts a legal obligation on the Central and State Governments to implement this fundamental child right as enshrined in the Article 21A of the Constitution, in accordance with the provisions of the RTE Act.

The SSA has been operational since 2000-2001 to provide for a variety of interventions for universal access and retention, bridging of gender and social category gaps in elementary education and improving the quality of learning. SSA seeks to provide quality elementary education including life skills. SSA has a special focus on girl's education and children with special needs. SSA also seeks to provide computer education to bridge the digital divide. With the passage of the RTE Act, changes have been incorporated into the SSA approach, strategies and norms. Elementary Education sector is experiencing the drive for Quality improvement under SSA by aligning it with the provisions of RTE Act.

The Sarva Shiksha Abhiyan (SSA) framework of implementation and norms for interventions have been revised to correspond with the provisions of the RTE Act. This includes interventions, inter alia for

i. Opening new primary and upper primary schools as per the neighbourhood norms notified by State Governments in the RTE Rules, and to expand

existing infrastructure(additional classrooms, toilets, drinking water facilities) and provide maintenance grants and school improvement grants

ii. Support for residential schools for children in areas which are sparsely populated, or hilly or densely forested with difficult terrain, and for urban deprived homeless and street children in difficult circumstances,

iii. Special training for admission of out-of-school children in age appropriate classes,

iv. Additional teachers as per norms specified in the RTE Act, and provide extensive training and grants for development for teacher training materials and strengthening the academic support structure

v. Two sets of uniforms for all girls, and children belonging to SC/ST/BPL families,

vi. Strengthening of academic support through block and cluster resource centres, schools, etc.

vii. Provide quality elementary education including life skills with a special focus on the education of girls and children with special needs as well as computer education to bridge vital divide

The focus is no more only on the quantitative expansion of institutions and enrolment but equal emphasis is being laid on the quality improvement. The school system is being revitalized by introducing administrative and management reforms, curriculum renewal, teaching methodologies to evolve the facilitating conditions for learner to remain in the school for eight years and not dropping out.

Mid Day Meal Scheme

With a view to enhancing enrolment, retention and attendance and simultaneously improving nutritional levels among children, the National Programme of Nutritional Support to Primary Education (NP-NSPE) was launched as a Centrally Sponsored Scheme on 15th August 1995.In 2001 MDMS became a cooked Mid Day Meal Scheme under which every child in every Government and Government aided primary school was to be served a prepared Mid Day Meal with a minimum content of 300 calories of energy and 8-12 gram protein per day for a minimum of 200 days.

The Scheme was further extended in 2002 to cover not only children studying in Government, Government aided and local body schools, but also children studying in Education Guarantee Scheme (EGS) and Alternative & Innovative Education (AIE) centres. In September 2004 the Scheme was revised to provide for Central Assistance for Cooking cost @ Re 1 per child per school day to cover cost of pulses, vegetables cooking oil, condiments, fuel and wages and remuneration payable to personnel or amount payable to agency responsible for cooking. Transport subsidy was also raised from the earlier maximum of Rs 50 per quintal to Rs. 100 per quintal for special category states and Rs 75 per quintal for other states. Central assistance was provided for the first time for management, monitoring and evaluation of the scheme @ 2% of the cost of food grains, transport subsidy and cooking assistance. A provision for serving mid day meal during summer vacation in drought affected areas was also made. In July 2006 the Scheme was further revised to enhance the cooking cost to Rs 1.80 per child/school day for States in the North Eastern Region and Rs 1.50 per child / school day for other States and UTs. The nutritional norm was revised to 450 Calories and 12 gram of protein. In order to facilitate construction of kitchen-cum-store and procurement of kitchen devices in schools provision for Central assistance @ Rs. 60,000 per unit and @ Rs. 5,000 per school in phased manner were made. In October 2007, the Scheme was extended to cover children of upper primary classes (i.e. class VI to VIII) studying in 3,479 Educationally Backwards Blocks (EBBs) and the name of the Scheme was changed from 'National Programme of Nutritional Support to Primary Education' to 'National Programme of Mid Day Meal in Schools'. The nutritional norm for upper primary stage was fixed at 700 Calories and 20 grams of protein. The Scheme was extended to all areas across the country from 1.4.2008.The Scheme was further revised in April 2008 to extend the scheme to recognized as well as unrecognized Madarsas / Maqtabs supported under SSA.

The Mid Day Meal is the world's largest school feeding programme reaching out to about 12 crore children in over 12.65 lakh schools/EGS centres across the country. Today, Mid day Meal scheme is serving primary and upper primary school children in entire country.

The present status of MDG indicators under Goal 2, throws light on the remarkable achievement in the field of universalisation of Primary education, the focussed initiatives are to be continued to maintain the momentum gathered so far, addressing the specific issues of the vulnerable groups of children who tends to miss primary education at any point of time due to various socio – economic hurdles.

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Chapter 5
TOWARDS GENDER EQUALITY AND EMPOWERMENT OF WOMEN

Goal 3: Promote Gender Equality and Empower Women

Target 4: Eliminate gender disparity in primary, secondary education, preferably by 2005, and in all levels of education, no later than 2015

Indicators

- Ratio of girls to boys in primary, secondary and tertiary education
- Ratio of literate women to men,15-24 years old
- Share of women in wage employment in the non- agricultural sector
- Proportion of seats held by women in National Parliament.

The MDGs recognise the centrality of gender equality in the development agenda and achievement of the gender equality is dependent on the integration of gender concerns within each of the MDGs – from improving health and fighting disease, to reducing poverty and mitigating hunger, to expanding education and lowering child mortality, to increasing access to safe drinking water and to ensuring environmental sustainability. Education is the single most important factor which paves way to development process in all spheres of life which in turn leads to gender equality and women empowerment. Building upon the existing capacities and recognizing the immense

contribution to nation building that the large network of educational institutions has made in the post independent India, the country has embarked upon a second phase of expansion and establishment of centres of excellence in higher education. It is envisaged that strengthening the two ends of the spectrum, namely, elementary education and higher/technical education would help in meeting the objectives of expansion, promoting enhanced access to education for girls and enabling both boys and girls to pursue their career and contribute their full potential to society. Higher education contributes vastly not only in national development but also in developing critical abilities of people to face challenges. The unprecedented explosion of knowledge warrants higher education to become more dynamic as never before, constantly entering into unchartered domains.

With Universal Elementary Education becoming a reality, near universalization of secondary education is a logical next step. Further, universalisation of quality secondary education implies creating secondary schooling provisions of a defined standard irrespective of the location and management of the institution to accommodate all those eligible grade VIII and grade X graduates who are willing to participate in secondary and higher secondary education. It is expected that initiatives such as Right To Education of eight years of schooling would not only be increasing participation levels in elementary education but also substantially improve the internal efficiency of elementary education and to ensure higher levels of transition to secondary schooling. As evident from DISE report 2011-12, the

transition rate from Primary to Upper Primary level has increased from 85.17 in 2009-10 to 87.09 in 2010-11.

Reducing gender gap in education…

Indicator: Ratio of girls to boys in primary, secondary and tertiary education

In recognizing the importance of education in gender equality and empowerment of women, the very first indicator of MDG 3 is to monitor the status of girls' enrolment in Primary, Secondary and Tertiary levels of education. Gender Parity Index (GPI) in enrolment at primary, secondary and tertiary levels is the ratio of the number of female students enrolled at primary, secondary and tertiary levels in public and private schools to the number of male students. To standardise the effects of the population structure of the appropriate age groups, the GPI of the GER[11] for each level of education is used, i.e. GPI (GER) = GER (Female)/GER (Male). A GPI of 1 indicates parity between the sexes or no gender disparity. A GPI that varies between 0 and 1 typically means a disparity in favour of males whereas a GPI greater than 1 indicates a disparity in favour of females. Target 4 is intended to achieve GPI of 1 by 2005 for primary enrolment and by 2015 for all levels. In general, at the national level, the female-male gap in enrolment in education is steadily improving over the years. The better transition rate from various levels of education is also a bright line. In 2010-11, the transition rate from Primary level to Upper primary level was 87.32 for girls and 86.87 for boys.

In primary education, the GPI of GER has gone up from 0.76 in 1990-91 to 1.01 in 2010-11 showing 33% increase, in secondary education the increase is from 0.60 in 1990-91 to 0.88 in 2010-11 thereby showing 47% increase, and in higher education, it is increased from 0.54 in 1990-91 to 0.86 in 2010-11 registering an increase of 59%.

[11] GER – Gross Enrolment Ratio

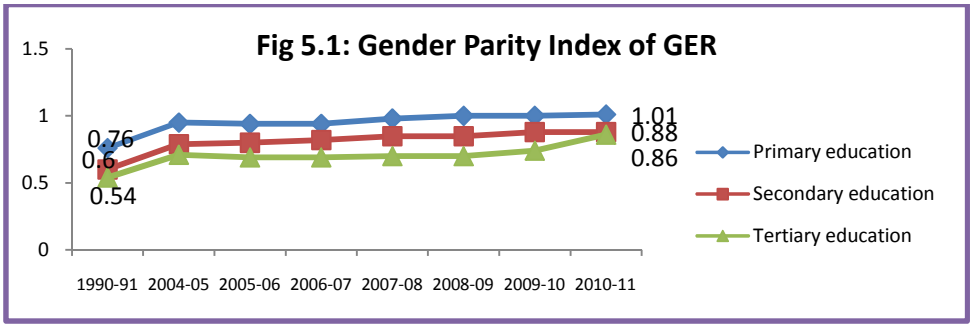


Table 5.1: Gender Parity Index (GER) –All India								
	1990-91	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Primary education	0.76	0.95	0.94	0.94	0.98	1.00	1.00	1.01
Secondary education	0.60	0.79	0.80	0.82	0.85	0.85	0.88	0.88
Tertiary education	0.54	0.71	0.69	0.69	0.70	0.70	0.74	0.86

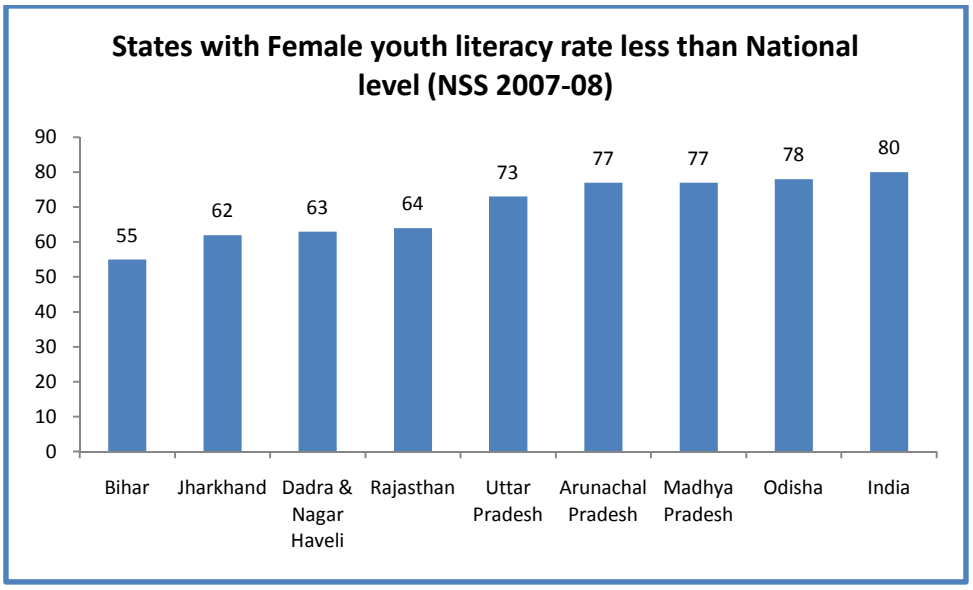
Source: Ministry of Human Resources Development

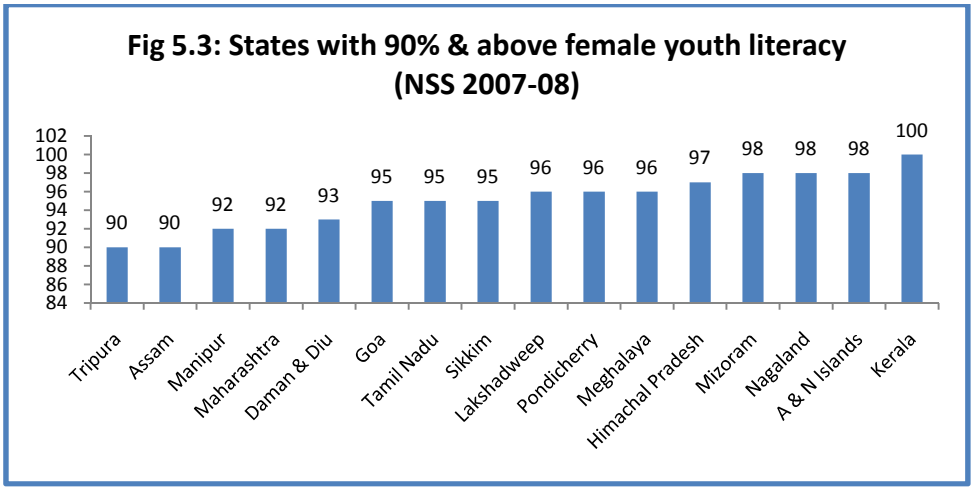
Leading to empowerment of women ….

Indicator: Ratio of literate women to men, 15-24 years old

For the population as a whole, the literacy rate in India as per Census 2011, is 73% compared to 64.8% in 2001. During 2001 - 2011, the literacy rate of males increased from 75.3% to 80.9% and for females, the increase was from 53.7% to 64.6%. In this period, the literacy rate in rural areas increased from 58.7% to 67.8% and in urban areas, the progress was from 79.9% to 84.1%. An extremely positive development in the present decade is that the gap of 21 percentage points recorded between the male and female literacy rates in 2001 Census has reduced to 16 percentage points in 2011, mainly due to higher rate of increase in female literacy.

The literacy rate among males (15 -24 years old) was 84 in 2001 against 68 for females (15 -24 years old) and NSS 2007-08 showed the literacy rates as 91 and 80 respectively. The ratio of Female literacy rate to Male literacy rate for 15-24 years increased from 0.67 in 1991 to 0.80 in 2001 and stood at 0.88 in 2007-08. The ratio of female literacy rate to male literacy rate in the age group 15-24 years tends to exceed 1 by 2015, implying higher literacy rate among female youths than their male counterparts. However, the situation varies across States/ UTs, with States like Bihar, Jharkhand, Rajasthan, Uttar Pradesh, Arunachal Pradesh, Madhya Pradesh and Odisha where female youth literacy is less than the national average.





The likely attainment of higher female literacy rate along with the achievement of gender parity in primary, secondary and tertiary levels of education can be a major

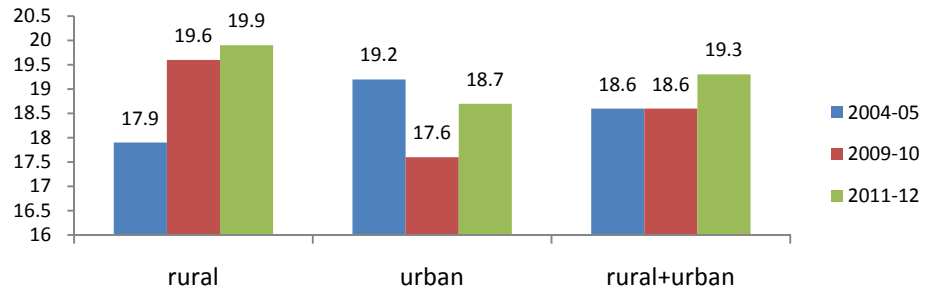
gain for women in acquiring access to wider world of learning and development of skills, economic independence, authority of decision making and self-determination.

Indicator: Share of Women in Wage Employment in the Non-Agricultural Sector

The third important indicator for Target 4 under MDG 3 is **share of Women in Wage Employment in the Non-Agricultural Sector,** which is defined as the share of female workers in the non-agricultural sector expressed as a percentage of total employment in the sector. This measures the degree to which labour markets are open to women in industry and service sectors, which affects not only equal employment opportunity for women but also economic efficiency through flexibility in the labour market and reflect economic factors in social empowerment of women.

It is a matter of lag in time to get the full effect of gender equity in education on women's participation in the labour markets of industry and services. The rate of change over time in India in respect of the share of women in wage employment in the non-agricultural sector is slow. In 2011-12, the 68th round NSS results had estimated the percentage share of females in wage employment in the non-agricultural sector as 19.3% with the share in rural and urban areas as 19.9% and 18.7% respectively.

Fig 5.4: Percentage share of females in wage employment in non agricultural sector



Source: NSS 61st, 66th and 68th rounds, wage employment – regular wage / salaried and causuallabour to usual status (ps+ss)

It is projected that at this rate of progress, the share of women in wage employment can at best reach a level of about 22.28% by 2015. Labour markets in

industry and services sectors in India are heavily male dominated and a 50:50 situation for men and women is too ideal to be true given the market dynamics and existing socio-cultural framework.

In 2011-12, the State of Manipur (41.6%) has reported the highest percentage share of women in wage employment in non-agricultural sector, followed by Tripura (33.8%), Tamil Nadu (32.5%), Kerala (30.8%) and Meghalaya (30%). The lowest percentage share of women in wage employment in non-agricultural sector was reported in Bihar (6.1%), Damn & Diu (6.6%), Jharkhand (9.1%), Uttarakhand (9.1%) and Uttar Pradesh (10%). The trend over the years has not stabilized in most of the State/ UTs and in rural / urban areas.

Indicator: Proportion of seats held by women in National Parliament

India has witnessed 15 General elections to the Lok Sabha of Nation's Parliament so far. As on December 2013, India, the world's largest democracy, has only 62women representatives out of 543 members in Lok Sabha, while there are 28 female MPs in the 242-member Rajya Sabha.

Table 5.2: Proportion of seats held by Women in National Parliament

Reference year	Number of Women members			%
	Lok Sabha	Rajya Sabha	Total	
1991			77 of 789	9.7
2004	45 of 544	28 of 250	73 of 794	9.2
2007	47 of 544	25 of 250	72 of 794	9.1
2009	59 of 545	21 of 234	80 of 779	10.3
2011	60 of 544	26 of 241	86 of 785	10.96
2013	62 of 543	28 of 242	90 of 785	11.46

According to data released by Inter parliamentary union (IPU), India ranks 108 in the World for proportion of National Parliament seats held by Women.

Aiming at eradication of gender disparity in Education….

Education of girls has been a high priority with the Government of India. The National commitment to provide free and compulsory education to all children in the

6-14 years age group is now a Fundamental Right of every child in India after the passing of the Constitution (86th Amendment) Act in December, 2002.

Reaching out to the girl child is central to the efforts to universalize elementary education. Sarva Shiksha Abhiyan, or 'Education for All' programme recognizes that ensuring girl's education requires changes not only in the education system but also in societal norms and attitudes. A two-pronged gender strategy has therefore been adopted, to make the education system responsive to the needs of the girls through targeted interventions which serve as a pull factor to enhance access and retention of girls in schools and on the other hand, to generate a community demand for girls' education through training and mobilisation.

The targeted provision for girls under Sarva Shiksha Abhiyan include :

- *Free textbooks to all girls upto class VIII*
- *Separate toilets for girls*
- *Back to school camps for out-of-school girls*
- *Bridge courses for older girls*
- *Recruitment of 50% women teachers*
- *Early childhood care and Education centers in/near schools/convergence with ICDS programme etc.*
- *Teachers' sensitation programmes to promote equitable learning opportunities*
- *Gender-sensitive teaching-learning materials including textbooks*
- *Intensive community mobilisation efforts*
- *'Innovation fund' per district for need based interventions for ensuring girls' attendance and retention.*

Efforts are being made to generate a community demand for girls' education and enabling conditions for people's and women's participation, to create the push factors necessary to guarantee girls education. Motivation and mobilisation of parents and the community at large, enhancing the role of women and mothers in school related activities and participation in school committees, and strengthening

the linkages between the school, teachers and communities are some of the ways in which the enabling conditions are being created.

Early Childhood Care and Education (ECCE) is a critical and essential input in freeing girls from sibling care responsibilities, leading to their regular attendance in school and in providing school readiness skills to pre-school children. The SSA works in a convergent mode with the Integrated Child Development Services (ICDS) programme to promote pre-school education by providing for training of Anganwadi workers, primary school teachers, and health workers for a convergent understanding of pre-school and ECCE. The SSA, like other programme in the past, provides funds under Innovative head (Rs. 15 Lakh per district) and under the **National Programme for Education of Girls at Elementary Level (**NPEGEL) component (for 3000 educationally backward blocks) to support pre-school component of ICDS or an interim pre-school centre where ICDS does not exist but is needed.

The **National Programme for Education of Girls at Elementary Level (NPEGEL**), is a focused intervention of Government of India, to reach the "Hardest to Reach" girls, especially those not in school. Launched in July 2003, it is an important component of SSA, which provides additional support for enhancing girl's education over and above the investments for girl's education through normal SSA interventions. The programme provides for development of a "model school" in every cluster with more intense community mobilization and supervision of girls enrolment in schools. Gender sensitisation of teachers, development of gender-sensitive learning materials, and provision of need-based incentives like escorts, stationery, workbooks and uniforms are some of the endeavours under the programme. All Educationally Backward Blocks have been included under NPEGEL.

With better transition rate from Primary level to Upper Primary level, as a result of the all out efforts in universalisation of elementary education, better infrastructure and quality in upper level education is in demand. Anticipating this, the scheme of **Rashtriya Madhyamik Shiksha Abhiyan (RMSA)** and the **Scheme of**

Model schools were launched to improve enrollment and quality in secondary education. As of now a wide range of centrally sponsored schemes are being run by different secondary school institutions and bodies so as to ensure greater geographical coverage, social and gender inclusion and use of ICT for quality enhancement. Secondary Education received fresh impetus with the launch of Rashtriya Madhyamika Shiksha Abhiyan (RMSA) in 2009. It was launched to enhance access and improve quality in education with definite time targets i.e., reaching universal access by 2017 and universal retention by 2020. It also aimed at removing socio-economic, gender and disability barriers in the course of attaining the set targets. Under the RMSA, it is visualized to improve not only physical facilities, but also quality aspects related to schools and equity aspects to facilitate the participation of SC/ST and minority groups etc.

The **Kishori Shakti Yojana (KSY)** implemented by the Ministry of Women and Child development seeks to empower adolescent girls, so as to enable them to take charge of their lives. It is viewed as a holistic initiative for the development of adolescent girls. The programme through its interventions aims at bringing about a difference in the lives of the adolescent girls. It seeks to provide them with an opportunity to realize their full potential. The broad objectives of the Scheme are to improve the nutritional, health and development status of adolescent girls, promote awareness of health, hygiene, nutrition and family care, link them to opportunities for learning life skills, going back to school, help them gain a better understanding of their social environment and take initiatives to become productive members of the society.

The Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (RGSEAG) – Sabla by the Ministry of Women and Child Development is new comprehensive scheme merging KSY and Nutrition Programme for Adolescent Girls to address the multidimensional problems of Adolescent girls (AGs). SABLA is targeting Adolescent girls in the age group of 11-18 years under all ICDs projects in selected districts across India. In these districts RGSEAG has replaced KSY and NPAG and in the remaining districts KSY is continuing.

The objectives of the scheme are to:

- Enable self-development and empowerment of AGs;
- Improve their nutrition and health status;
- Spread awareness among them about health, hygiene, nutrition;
- Reproductive and Sexual Health (ARSH), and family and child care;
- Upgrade their home-based skills, life skills and vocational skills;
- Mainstream out-of-school AGs into formal/non formal-education; and
- Inform and guide them about existing public services, such as PHC, CHC,
- Post Office, Bank, Police Station, etc.

SABLA scheme aims at empowering the target group of Adolescent girls in many ways with special emphasis on the education of this group.

The **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)** which is a landmark initiative of the Government of India, to address mainly the issue of job guarantee in the rural areas has kept provision for women empowerment also. The MGNREGA guarantees at least 100 days of wage-employment to the adult members of willing rural household in India. It is provided in the Act that while providing employment, priority shall be given to women in such a way that at least 1/3rd of the beneficiaries shall be women who have registered and requested for work under the Scheme.

Education being one of the most vital transforming factors in the nation building, sustained and focused initiatives to overcome various hurdles are of utmost importance for bringing infrastructure and quality improvements and thereby eliminating all kinds of disparity in education, including gender disparity. The power of education is in its potency to break mental, social and economical barriers in due course of time, thereby bringing societal changes and empowerment of women in various realms of life. Initiatives promoting women participation in wage employment and decision making are addressing the issues of gender equality and women empowerment along with better economic and social development.

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Chapter 6

REDUCING CHILD MORTALITY

Goal 4: Reduce Child Mortality

TARGET 5: Reduce by two-thirds, between 1990 and 2015, the Under Five Mortality Rate

Indicators

- Under- Five Mortality Rate
- Infant Mortality Rate
- Proportion of one year old children immunised against measles

Infancy and childhood periods of human life are often threatened by major potential risks to survival due to a number of reasons. In India, a number of interlinked elements like poverty, malnutrition, mother's health, medical care etc in addition to the child's health conditions, lead to the persisting significant rates of Under-five mortality, infant mortality and its component viz., neo-natal mortality and post neo-natal, peri-natal mortality. Over the years, India has attained impressive achievements in the fields of child survival and a faster declining trend has been observed in the recent past in Infant Mortality and child mortality rates. However, the gravity of the problem varies significantly among the States.

The Government of India's newly adopted 'National Policy for Children, 2013', reaffirms the Government's commitment to the realization of the rights of all children in the country. The Policy

lays down the guiding principles that must be respected by the national, state and local Governments in their actions and initiatives affecting children. The Policy has identified survival, health, nutrition, education, development, protection and participation as the undeniable rights of every child, and has also declared these as key priority areas.

A quick glance at the causes of child mortality and the factors contributing to them are important in addressing the various related issues. As per WHO 2012 estimates, the causes of Child Mortality in the age group 0-5 years in India are Neonatal causes (52%), Pneumonia (15%), Diarrhoeal disease (11%), Measles (3%), Injuries (4%),and Others (15%). The prominent causes of death among infants are perinatal conditions (46%), respiratory infections (22%), diarrhoeal disease (10%), other infectious and parasitic diseases (8%), and congenital anomalies (3.1%).The major causes of neonatal deaths are Infections (30.7%) such as Pneumonia, Septicemia and Umbilical Cord infection; Prematurity (34.6%) i.e birth of newborn before 37 weeks of gestation and Asphyxia (19%) i.e. inability to breathe immediately after birth and leads to lack of oxygen. The Factors contributing to these causes are (a) Home delivery by unskilled persons (b) Lack of essential new born care for asphyxia and hypothermia (c) Poor child care practices (d) Lack of early detection of sick newborn (e) Inadequate/Delayed referral mechanisms and (f) Inadequate infrastructure at health care facilities for specialized care of sick newborn.

The early days of life is very critical to a new born baby and in India the neo-natal (newborns up to 28 days old) deaths are major counts in infancy (0 -1 year) deaths. The latest Sample Registration System Report (SRS 2012) presents the details of death rates of various age groups of Children. At national level, neo – natal mortality rate is 29 and ranges from 16 in urban areas to 33 in rural areas. Among the bigger States, neo- natal mortality ranges from 39 in Madhya Pradesh and Odisha to 7 in Kerala. The percentage of neo-natal deaths to total infant deaths is 68.5 per cent at the National level and varies from 56.8 percent in urban areas to 70.4 per cent in rural areas. Among the bigger States, Jammu & Kashmir (77.2%) registered

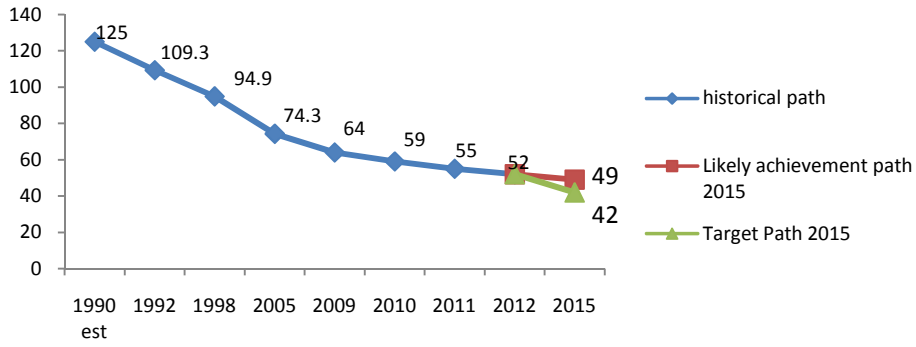
the highest percentage of neo-natal deaths to infant deaths and the lowest in Assam (52.1%). At the National level, IMR is reported to be 42 and varies from 46 in rural areas to 28 in urban areas. Among the bigger States, it varies from 12 in Kerala to 56 in Madhya Pradesh. Female infants experienced a higher mortality than male infants in all States. At the National level, under-five mortality rate is estimated at 52 and it varies from 58 in rural areas to 32 in urban areas. Among the bigger States, it varies from 13 in Kerala to 75 in Assam. All the bigger States have higher Under-five mortality rates of female than that of male. At the National level, the death rate in age group (5 -14 years) is estimated to be 0.8. Rural-urban differentials exist with the urban areas registering significantly lower death rates as compared to that in rural areas in majority of the States. Among the bigger States, the lowest death rate in this age group is registered in Kerala (0.2) and the highest in Jharkhand (1.9).

Mortality of children below five years of age is declining…

Indicator: Under Five Mortality Rate

The Under-Five Mortality Rate (U5MR) is the probability (expressed as a rate per 1000 live births) of a child born in a specified year dying before reaching the age of five if subjected to current age specific mortality rates. In India, U5MR has declined from an estimated level of 125 in 1990 to 52 in 2012.

Fig. 6.1: Trend in Under Five Mortality Rate



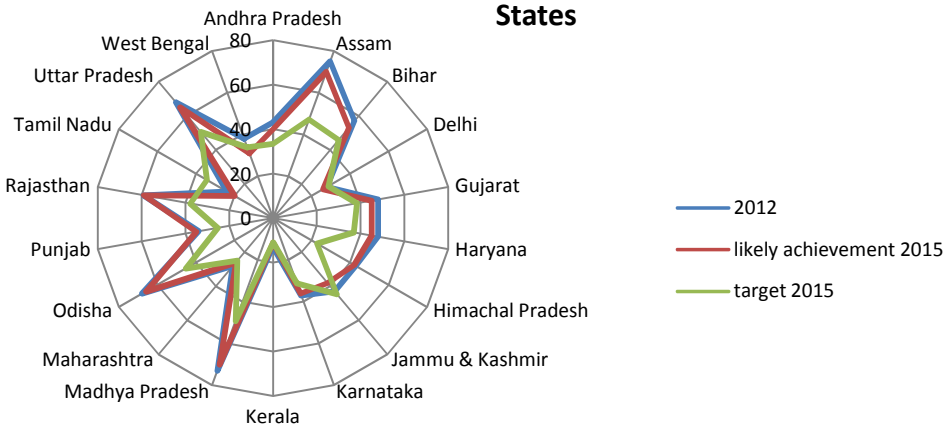
Source:1990 – estimated, 1992, 1998, 2005-NFHS; 2009 onwards –SRS, O/o Registrar General of India

Given to reduce U5MR to 42 per thousand live births by 2015, India tends to reach 49 by 2015 as per the historical trend, missing the target by 7 percentage points.

However, considering the continuance of the sharper annual rate of decline witnessed in the recent years, India is likely to achieve the target.

The MDG indicator 'Under Five mortality rate' is an important indicator especially in the Indian context, as it reflects the complex scenario in addressing the issues related to reducing child mortality due to the variability in the status of achievement by different categories. While examining the progress of States in achieving the MDG target of U5MR, the States of Kerala (13), Tamil Nadu (24), Maharashtra (28), Delhi (28), Punjab (34), Karnataka (37) and West Bengal (38) have already achieved the national level MDG target of U5MR. In addition to these States, Jammu & Kashmir, Himachal Pradesh, and Andhra Pradesh are likely to achieve the national target by 2015. However, more meaningful comparison of the progress of States is with the respective State MDG targets.

Fig. 6.2: U5MR - likely achievement vis -a -vis target 2015, Bigger States



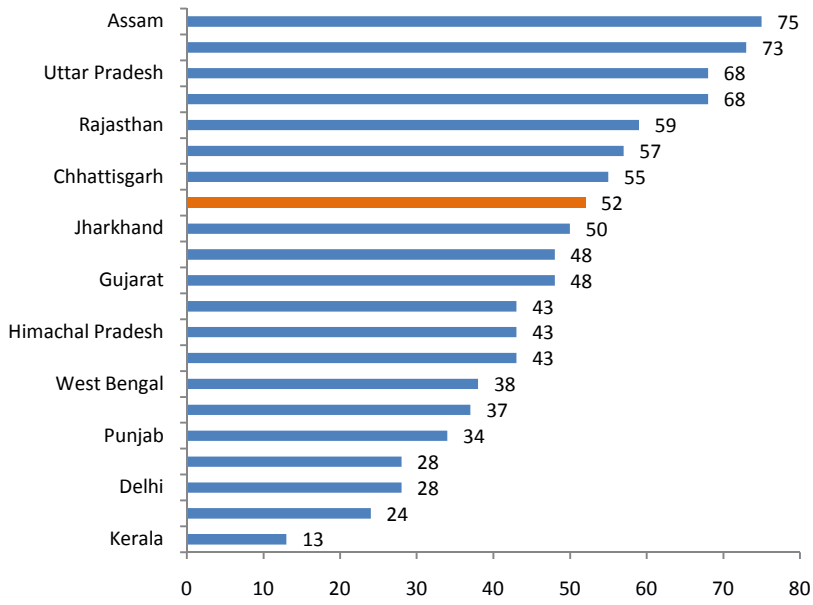
As per the historical trend, Delhi, Jammu & Kashmir, Kerala, Tamil Nadu & West Bengal are likely to achieve their respective MDG targets. The States of Uttar Pradesh, Rajasthan, Odisha, Madhya Pradesh, Himachal Pradesh, and Assam are likely to miss their respective MDG target with a considerable (gap more than 10 points) gap.

The SRS based U5MR in India for the year 2012, stands at 52 and there is considerable inter-state variation. In 2012, among the bigger States, the U5MR was lowest in Kerala (13) and highest in Assam (75). The States which have U5MR above

the national level estimate (52) in 2012 are Chattisgarh (55), Bihar (57), Rajasthan (59), Odisha (68), Uttar Pradesh (68), Madhya Pradesh (73) and Assam (75).

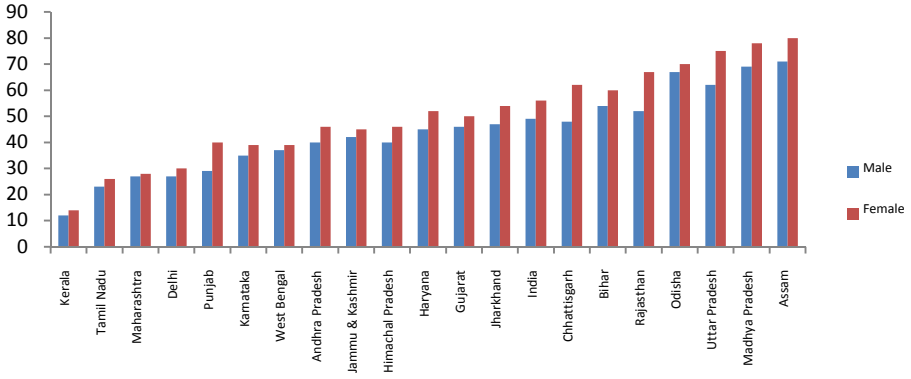
The Inter- State/ by sex/ by place of residence variations in U5MR are depicted below.

Fig. 6.3: Under Five Mortality Rate 2012

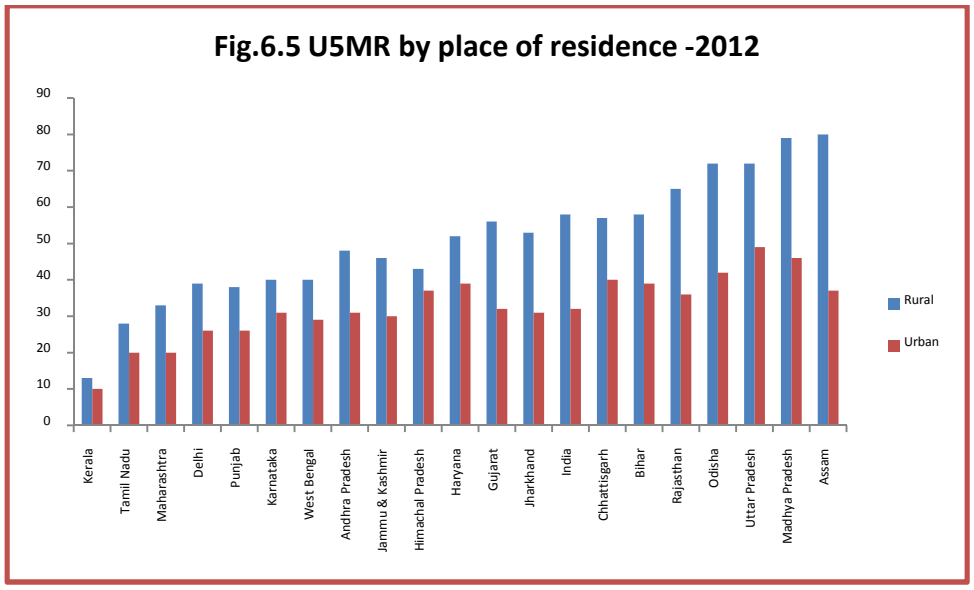


At national level, the U5MR for females is 56 and for males is 49. U5MR among females is higher in all States compared to males. The female – male gap in U5MR is higher in Rural areas (female: 62, male: 54) compared to urban areas (female: 34, male: 31).

Fig.6.4: U5MR -by Sex 2012



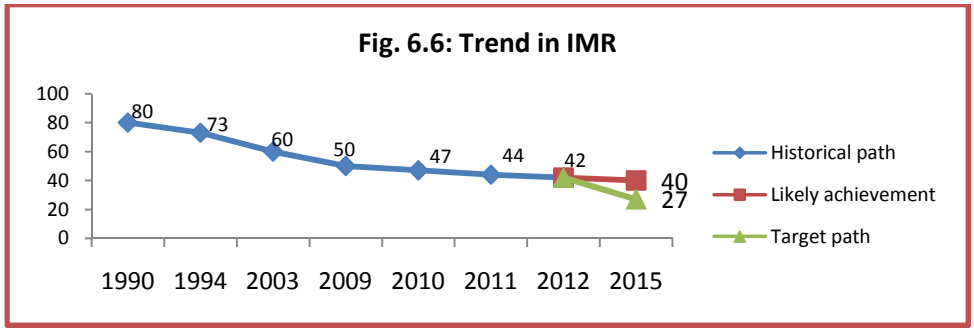
U5MR is higher in rural areas than urban areas at national level and in various States. At national level, it varies from 56 in rural areas to 32 in urban areas. As mentioned above, the rural - urban gap in U5MR at national level is 24 points and the gap varies among the bigger States, which is between 43 in Assam to 3 in Kerala.



Source: SRS, O/o Registrar General of India

Indicator: Infant Mortality Rate

Infant Mortality Rate (IMR) is defined as the number of deaths of infants of age less than one year per thousand live births. In India, the Infant Mortality has reduced by nearly 50% during 1990- 2012 and the present status is at 42 per 1000 live births.

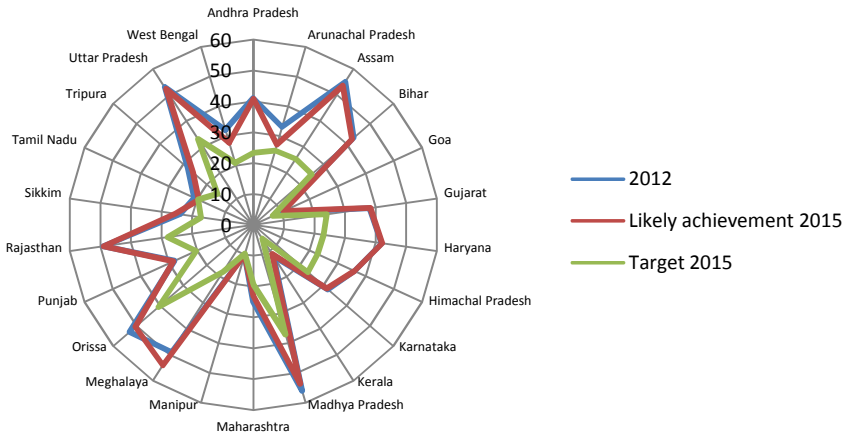


Source: SRS, O/o Registrar General of India

As per the historical trend, the IMR is likely to reach 40 deaths per 1000 live births, missing the MDG target of 27 with a considerable margin. However, as IMR is declining at a sharper rate in the recent years, the gap between the likely achievement and MDG target 2015 is set to reduce.

While examining the progress of States in achieving the MDG target of IMR, the States of Goa (10), Manipur (10), Kerala (12), Nagaland (18), Tamil Nadu (21), Sikkim (24), Delhi (25) and Maharashtra (25), have already achieved the national level MDG target of IMR (27). In addition to these States, Arunachal Pradesh are likely to achieve the national target by 2015. However, more meaningful comparison of the progress of States is with the respective State MDG targets.

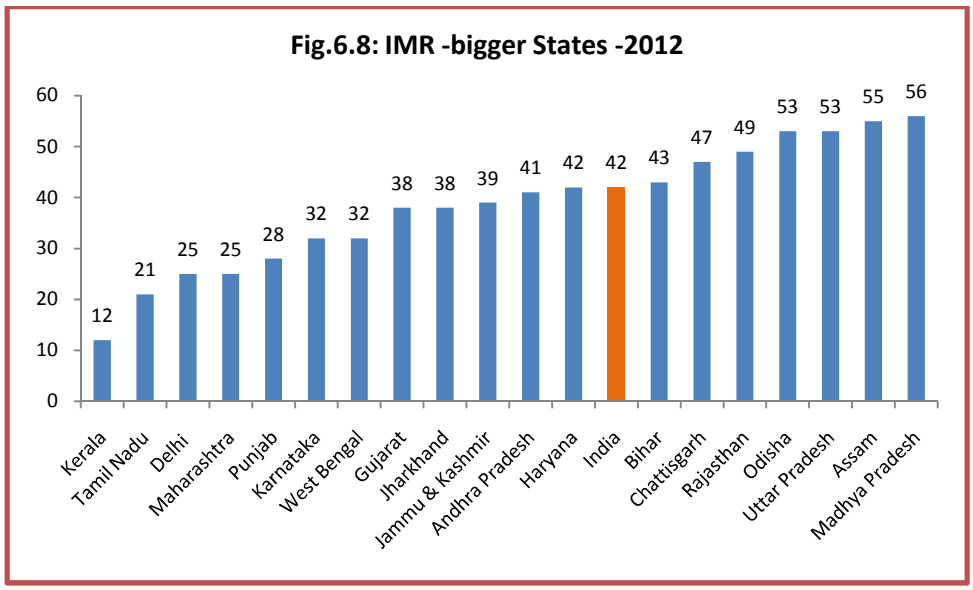
Fig.6.7: IMR -Likely achievement vis -a vis target 2015



Source: Office of Registrar General of India

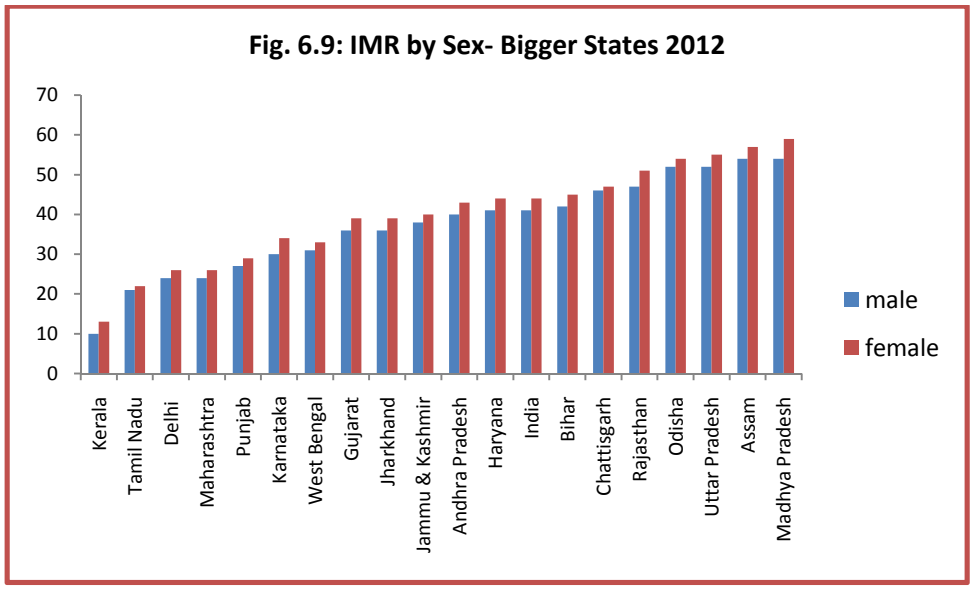
As per the historical trend, Tamil Nadu and Manipur are likely to achieve the respective State level MDG targets. The States of Tripura, Himachal Pradesh, Gujarat, Madhya Pradesh, Bihar, Andhra Pradesh, Haryana, Uttar Pradesh, Rajasthan, Assam and Meghalaya are likely to miss their respective State level targets by a considerable (more than 10 points) gap.

As in the case of U5MR, the indicator IMR also shows huge diversity in its status in various parts of the Country. Among the bigger States IMR ranged between 12 in Kerala to 56 in Madhya Pradesh. In 2012, IMR is higher than the national estimates in 8 State/ UTs namely Bihar, Chattisgarh, Rajasthan, Meghalaya, Odisha, Uttar Pradesh, Assam and Madhya Pradesh.



Source: SRS, O/o Registrar General of India

The trend of higher IMR for females is observed at national level and all the State /UTs. In 2012, at all India level, female –male gap in IMR is 3 points (female - 44, male - 41) and among the bigger States, the gap is highest in Madhya Pradesh (female - 59, male – 54) which has reported the highest IMR also. In Kerala, which has reported the lowest IMR, showed female –male gap in IMR of 3 points (female - 13, male – 10).

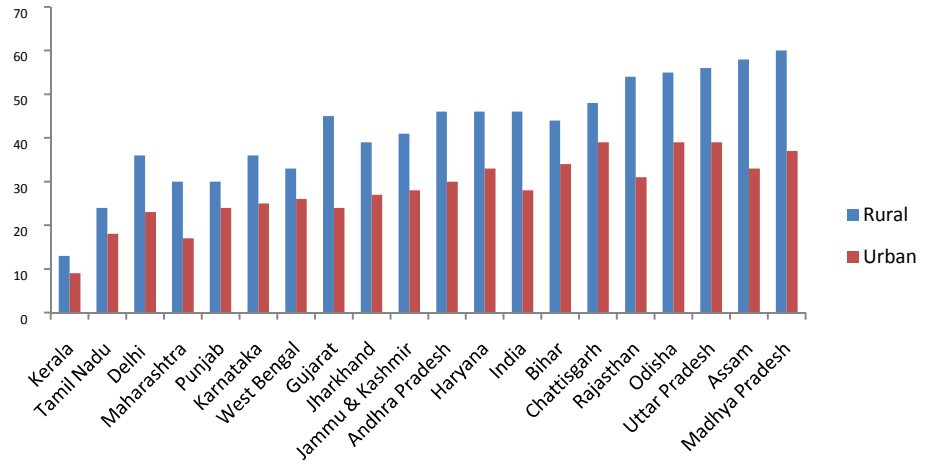


Source: SRS, O/o Registrar General of India

During 1990 to 2012, IMR of females has declined from 81 to 44 whereas the decline in IMR males was from 78 to 41. There is a decline of 45.68% in female IMR and of 47.44% in male IMR is during this period.

In 2012, at all India level, the Rural –Urban gap in IMR is 18 points (Rural - 46, Urban - 28). All the bigger States reported higher IMR in rural areas and the rural –urban gap in IMR varied between 4 points in Kerala to 25 points in Assam.

Fig. 6.10: IMR by place of residence- 2012 -Bigger States



Source: SRS, O/o Registrar General of India

During 1990 to 2012, IMR of Rural areas has declined from 86 to 46 whereas the decline in Urban IMR was from 50 to 28. There is a decline of 46.51% in Rural IMR and of 44% in Urban IMR is during this period.

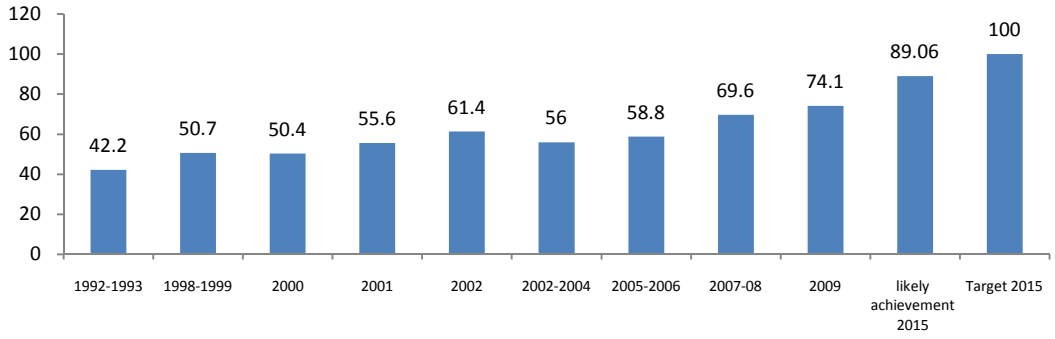
Immunisation - gap persists ….

Indicator: Proportion of one year old children immunised against measles

The national level coverage of the proportion of one-year old (12-23 months) children immunised against measles has registered an increase from 42.2% in 1992-93 to 74.1% in 2009 (UNICEF &GOI- Coverage Evaluation Survey 2009). At the historical rate of increase, India is expected cover about 89% children in the age group 12-23 months for immunisation against measles by 2015. Thus India is likely to fall short of universal immunisation of one-year olds against measles by about 11 percentage points in 2015. According to DLHS-3 for 2007-08, national coverage of immunisation of 1- year-olds has reached 69.6% with 77.6% in urban and 66.6% in rural areas and the Coverage Evaluation Survey- 2009 reported the national level estimate as 74.1%. The Coverage Evaluation Survey 2009 also reveals a rural –urban gap in the coverage of measles immunization with 72.4% children of age 12-23

months were immunized against measles in rural areas and a slightly higher coverage of 78.3% is reported for the urban areas.

Fig. 6.11: Trend in Proportion of one year old children immunised against measeles - India



Also, there exists, a slight sex wise variation in the coverage of measles immunization as the coverage being 74.8% for male children and 73.2% for female children. Further, coverage gap in measles immunization depend upon the birth order of the child also as 79.8% of the first birth order children were immunized against only 53.6% of the 4th birth order children. Only 61.2% of the children in lowest wealth quintile were immunized against measles compared to 83.5% of children from the households with the highest wealth quintile. The Coverage Evaluation Survey 2009 also analyses at what stage the children dropped out and did not get all vaccines. The BCG –measles drop-out rate (Percentage of children, who received BCG vaccination, but did not receive measles vaccination) was found to be 14.7 percent. Further analysis shows that State differentials existed in the drop-out rates at all stages. Higher BCG –measles drop-out rate was observed in States such as Uttar Pradesh (30.9%), Bihar (29.3%), Arunachal Pradesh (27.0), Madhya Pradesh (24.0%), Jharkhand (22.8%) and Rajasthan (20.6%). The drop-out rates were low in Goa (1.4%), Himachal Pradesh (2.2%), Maharashtra (3.7%), Sikkim (0.1%), and Tamil Nadu (0.6%). DPT1 –Measles dropout rate is 10.3%.

Going by their historical rate of increase in coverage, 16 States/UTs are expected to achieve universal coverage in measles immunization of one year olds by 2015 and 8 more States are likely to perform better than the national coverage level

in immunisation of one-year olds against measles by 2015. Among the major States, Uttar Pradesh, Mizoram, Chattisgarh and Haryana are likely to miss the target by a large margin.

Addressing issues of child mortality….

The Government has adopted a new **National Policy for Children, 2013** on 26th April, 2013. The Policy reaffirms the Government's commitment to the realization of the rights of all children in the country. The Policy lays down the guiding principles that must be respected by the national, state and local Governments in their actions and initiatives affecting children. The Policy has identified survival, health, nutrition, education, development, protection and participation as the undeniable rights of every child, and has also declared these as key priority areas. Under the priority area of health, the Policy states that the State shall take necessary measures to (a) improve maternal healthcare, including antenatal care, safe delivery by skilled health personnel, post natal care and nutritional support (b) address key causes and determinants of child morality through interventions based on continuum of care, with emphasis on nutrition, safe drinking water sanitation and health education (c) provide universal and affordable access to services for prevention, treatment, care and management of neo-natal and childhood illnesses and protect children from all water borne, vector borne, communicable and other childhood diseases.

The Health of the mother has an important bearing on the health of the child. Thus interventions for improvement of maternal health are critical for improving survival of newborn and are deemed to be intervention for both maternal and child health. Under **National Rural Health Mission (NRHM),** higher resources are being provided to the states and districts with week health indicators. Further, the following interventions are implemented through Reproductive Child Health (RCH) programme under NRHM umbrella to reduce Child mortality rate in the country.

a) **Promotion of Institutional Delivery through Janani Suraksha Yojana (JSY) and Janani Shishu Suraksha Karyakram (JSSK)**: Promoting Institutional

delivery to ensure skilled birth attendance is a key to reducing both maternal and neo-natal mortality. JSY encourages pregnant women to opt for institutional delivery and provides for cash assistance. JSSK entitles all pregnant women to absolutely zero expense delivery including caesarean section operation in Government health facilities and provides for free to and fro transport, food, drugs and diagnostics. Similar entitlements have also been put in place for sick neonates.

b) Strengthening Facility based newborn care

Neonatal mortality is one of the major contributors to the Infant Mortality. To address the issues of higher neonatal and early neonatal mortality, facility based newborn care services at health facilities have been established. Infrastructure strengthening, logistics and capacity building of Health workers have been ensured in these facilities.

i. **Special New Born Care Units (SNCUs)** are being setup at district hospitals and medical colleges
   - These are specialized new born and sick child care units at district hospitals with specialised equipments, which include phototherapy unit, oxygen hoods, infusion pumps, radiant warmer, Laryngoscope and ET tubes, nasal cannulas Bag and mask, and weighing scale.
   - SNCU is 12-20 bedded unit and requires 4 trained doctors and 10-12 nurses for round the clock services.
   - 399 SNCUs are now functional in the Country.

ii. **Newborn Stabilization Units (NBSUs)** are being established at community health centres /FRUs.
   - These units provide services, which include resuscitation, provision of warmth, early initiation of breast feeding, prevention of infection and cord care, supporting care including oxygen, IV fluids, provision for monitoring of vital signs including blood pressure and referral services

- These are 4 bedded units with trained doctors and nurses for stabilization of sick newborns.
- There are at present 1542NBSUs in the country.

iii. **Newborn Baby Care Corners (NBCCs)** are being setup in all facilities where deliveries are taking place.

- These are 1 bedded facility attached to the labour room and Operation Theatre (OT) for provision of essential newborn care. The services include resuscitation, provision of warmth, and prevention of infection and cord care and early initiation of breast-feeding. The equipments at newborn care corners include Weighing scale, radiant warmer, suction machine and mucus sucker.
- There are 11508 functional NBCCs in the country.

c) Home Based New Born Care (HBNC): Home based newborn care through ASHA (Accredited Social Health Activist) has recently been initiated to improve new born care practices at the community level and for early detection and referral of sick new born babies. ASHA will make visits to all newborns according to specified schedule up to 42 days of life. The proposed incentive is Rs. 50 per home visit of around one hour duration, amounting to a total of Rs. 250 for five visits. This would be paid at one time after 45 days of delivery, subject to the following:

a. recording of weight of the newborn in MCP card

b. ensuring BCG , 1st dose of OPV and DPT vaccination

c. both the mother and the newborn are safe till 42 days of the delivery, and

d. registration of birth has been done

At present, 15 States namely - Bihar, Chattisgarh, Jharkhand, Madhya Pradesh, Rajasthan, Uttarakhand, Arunachal Pradesh, Assam, Nagaland, Sikkim, Gujarat, Dadra & Nagar Haveli, Delhi, Puducherry have already implemented HBNC and remaining states are in process of implementing the same.

d) Capacity building of health care providers

Various trainings are being conducted under NRHM to train doctors, nurses and ANM for early diagnosis and case management of common ailments of children. These trainings are

- **Integrated Management of Neonatal and child illness (IMNCI)**: The strategy encompasses a range of interventions to prevent and manage the commonest major childhood illnesses which cause death i.e. neonatal illnesses, Acute Respiratory Infections, Diarrhoea, Measles, Malaria and Malnutrition. It focuses on preventive, promotive and curative aspects, i.e. it gives a holistic outlook to the programme. The objectives is to implement IMNCI package at the level of household and Sub-centres (through ANMs), Primary health centres (through medical officers, nurse and LHVs), to provide a comprehensive newborn and child health services to address major neonatal and child hood illnesses.
    - A total of 505 districts and 5.8lakh health care providers have been trained in IMNCI.
    - 11199health care providers have been trained in facility based IMNCI training.

- **Navjat Shishu Suraksha Karyakram (NSSK):** Basic Newborn Care and Resuscitation, has been launched to address care at birth issues i.e. Prevention of Hypothermia, Prevention of Infection, Early initiation of Breast feeding and Basic Newborn Resuscitation. Newborn care and resuscitation is an important starting-point for any neonatal program and is required to ensure the best possible start in life. The objective of this new initiative is to have one person trained in Basic newborn care and resuscitation at every delivery.
    - Master trainers at Central and State level are pediatricians from tertiary hospital and medical college and at district level pediatricians and gynecologists from the district hospital. This training is being imparted to Medical officers, Staff nurses and ANMs at CHC/FRUs and 24x7 PHCs where deliveries are taking place.
    - The training package is based on the latest available scientific evidence and will be immensely useful in decreasing neonatal mortality. The training is for 2 days and is expected to reduce neonatal mortality significantly in the country
    - About 89962 health care providers have been trained in NSSK.

e) Management of Malnutrition

- As malnutrition reduces resistance of children to infections thus increasing mortality and morbidity among children, emphasis is being laid under NRHM for management of malnutrition.
- 594 Nutritional Rehabilitation Centres have been established for management of severe acute malnutrition.
- As breastfeeding reduces neo-natal mortality, exclusive breastfeeding for first six months and appropriate infant and young child feeding practices are being promoted in convergence with Ministry of Woman and Child Development.

- Iron and Folic Acid is also provided to children for prevention of anaemia. Recently, weekly Iron and Folic Acid is proposed to be initiated for adolescent population.
- Village Health and Nutrition Days (VHNDs) are also being organized for imparting nutritional counselling to mothers and to improve child care practices.

f) Reduction in morbidity and mortality due to Acute Respiratory Infections (ARI) and Diarrhoeal Diseases: Promotion of zinc and ORS supplies is ensured.

1. Childhood Diarrhoea

In order to control Diarrrhoeal diseases Government of India has adopted the WHO guidelines on Diarrhoea management.

- India introduced the low osmolarity Oral Rehydration Solution (ORS), as recommended by WHO for the management of diarrhea.
- Zinc has been approved as an adjunct to ORS for the management of diarrhea. Addition of Zinc would result in reduction of the number and severity of episodes and the duration of diarrhoea.
- New guidelines on management of diarrhoea have been modified based on the latest available scientific evidence.

2. Acute Respiratory Infections

- Acute Respiratory Infections and along with Diarrhoea are two major killers of under five children.
- Early diagnosis and appropriate case management by rational use of antibiotics remains one of the most effective interventions to prevent deaths due to pneumonia. The ARI guidelines are being revised with the inclusion of the latest available global evidence.

g) Supplementation with micronutrients through supplies of Vitamin A & iron supplements.

1. Vitamin – A

- The policy has been revised with the objective of decreasing the prevalence of Vitamin A deficiency to levels below 0.5%, the strategy being implemented is:

- 1,00,000 IU dose of Vitamin A is being given at nine months.
- Vitamin A dose of 2,00,000 IU (after 9 months) at six monthly intervals up to five years of age.
- All cases of severe malnutrition to be given one additional dose of Vitamin A.

2. Iron and Folic Acid supplementation

- To manage the widespread prevalence of anaemia in the country, the policy has been revised.
- Infants from the age of 6 months onwards up to the age of five years shall receive iron supplements in liquid formulation in doses of 20mg elemental iron and 100mcg folic acid per day per child for 100 days in a year.
- Children 6-10 years of age shall receive iron in the dosage of 30 mg elemental iron and 250mcg folic acid for 100 days in a year.
- Children above this age group would receive iron supplements in the adult dose.

h) Universal Immunization Programme

- Immunization Programme is one of the key interventions for protection of children from life threatening conditions, which are preventable. It is one of the largest immunization programme in the world.
- Under the Universal Immunization Programme, Government of India is providing vaccination to prevent seven vaccine preventable diseases i.e.
    - Diphtheria, Pertussis, Tetanus, Polio, Measles, severe form of Childhood Tuberculosis and Hepatitis B
- The vaccination schedule under the UIP is:
    - ✓ ***BCG*** (Bacillus Calmette Guerin) 1 dose at Birth (upto 1 year if not given earlier)
    - ✓ ***DPT*** (Diphtheria, Pertussis and Tetanus Toxoid) 5 doses; Three primary doses at 6,10,14 weeks and two booster doses at 16-24 months & 5 Years of age

- ✓ ***OPV*** (Oral Polio Vaccine) 5 doses; 0 dose at birth, three primary doses at 6,10 and 14 weeks and one booster dose at 16-24 months of age
- ✓ ***Hepatitis B*** vaccine 4 doses; 0 dose within 24 hours of birth and three doses at 6, 10 and 14 weeks of age.
- ✓ ***Measles*** 2 doses; first dose at 9-12 months and second dose at 16-24months of age
- ✓ ***TT***(Tetanus Toxoid) 2 doses at 10 years and 16 years of age
- ✓ ***TT*** – for pregnant woman two doses or one dose if previously vaccinated within 3 Year

- In addition, Japanese Encephalitis (JE vaccine) vaccine was introduced in 113 endemic districts in campaign mode in phased manner from 2006-10 and has now been incorporated under the Routine Immunization Programme. 62 new districts have been planned for introduction of JE campaign over next 3 years. Earlier 15 states have been covered under JE campaign; now 4 more states have been included for JE campaign i.e. Delhi, Punjab, Jharkhand and Meghalaya.
- 2.6 crore new born are targeted for vaccination each year through 90 lakh immunization session held annually
- There are 25,000 cold chain points in the country to store vaccine under required temperature.

- Government of India has introduced second dose of measles across the country. In addition, in States having less than 80% coverage, supplementary immunization activity has been taken up in a phased manner.
- Hep-B vaccine which was earlier introduced in 10 States has now been expanded to the entire country.
- Pentavalent, a combination vaccine, which includes DPT + Hep-B + Hib has been introduced in 2 States (Kerala and Tamil Nadu) and 2.94 million children has been immunized till September,2012. There has been a remarkable decline in polio cases since 2010. Only 1 polio case was detected in 2011 compared to 42 cases of polio in 2010. On 12th January, 2012 India completes one full year without any polio case which is a remarkable achievement, particularly

considering the fact that in 2009 India accounted for half of the total number of polio cases globally and there were an estimated 2 lakh cases of polio every year in the country in the year 1978. WHO has also removed India from the list of polio endemic countries.

- To strengthen routine immunization, some newer initiatives have been introduced like provision of Auto Disable (AD) Syringe to ensure injection safety, Support for alternate vaccine delivery from PHC to Sub-Centres and Outreach Sessions, and Support for mobilization of children to immunization session sites by Accredited Social Health Activist (ASHA).

I) Mother and Child Tracking System: A name based Mother and Child Tracking System has been put in place which is web based to enable tracking of all pregnant women and newborns so as to monitor and ensure that complete services are provided to them. States are encouraged to send SMS alerts to beneficiaries reminding them of the dates on which services are due and generate beneficiary-wise due list of services with due dates for ANMs on a weekly basis.

Integrated Child Development Services (ICDS) Scheme

ICDS is a centrally sponsored Scheme being implemented by the State Governments/UT Administrations. The scheme aims at holistic development of children below 6 years of age and pregnant women & lactating mothers by providing a package of six services comprising (i) Supplementary nutrition (ii) Pre-school non-formal education (iii) Nutrition and health Education (iv) Immunization (v) Health check-up and (vi) Referral services through Anganwadi Centres at grassroots level. Three of the six services viz. immunization, health check-up and referral services are related to health and are provided by Ministry of Health and Family Welfare through NRHM and Public Health Infrastructure.

There are 14 lakh approved AWCs and 7076 ICDS Projects in the country. The Scheme is universal and applicable to all the beneficiaries irrespective of any

economic or other criteria. The services are provided at the AWCs through the AWW/AWH. There are 956.12 lakh beneficiaries (420.9 lakh 0-3 years children, 353.13 lakh 3-6 years children and 182.07 lakh P&L Mothers) who availed the services as on 31.3.2013.

In order to address various programmatic, management and institutional gaps and to meet administrative and operational challenges Government has approved the proposal for Strengthening and Restructuring of ICDS Scheme on 24.9.2012. The key features of Strengthened and Restructured ICDS inter-alia include addressing the gaps and challenges with (a) special focus on children under 3 years and pregnant and lactating mothers (b) strengthening and repackaging of services including , care and nutrition counseling services and care of severely underweight children (c) a provision for an additional Anganwadi Worker cum Nutrition Counselor for focus on children under 3 years of age and to improve the family contact, care and nutrition counseling for P&L Mothers in the selected 200 high-burden districts across the country, besides having provision of link worker, 5% crèche cum Anganwadi centre (d) focus on Early Childhood Care and Education (ECCE) (e) forging strong institutional and programmatic convergence particularly, at the district, block and village levels (f) models providing flexibility at local levels for community participation (g) introduction of APIP (h) improving Supplementary Nutrition Programme including cost revision, (i) provision for construction and improvement of buildings of Anganwadi centres (j) allocating adequate financial resources for other components

including Monitoring and Management and Information System(MIS), Training and use of Information and communication technology (ICT), (k) to put ICDS in a mission mode etc. and (l) revision of financial norms etc.

The goals and targets of restructured and strengthened ICDS are (i) to prevent and reduce young child under nutrition by 10% points in 0-3 years and enhance early development and learning outcomes in all children below six years of age (ii) improved care and nutrition of girls and women and reduce anaemia prevalence in young children, girls and women by $1/5^{th}$ and (iii) achieve time bound goals and outcomes with results based monitoring of indicators at different levels.

In addition to concentrating on health care facilities, the related socio –economic and environmental determinants are also to be addressed in order to prevent the child mortality to the maximum extent possible.

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Chapter 7
IMPROVING MATERNAL HEALTH

Goal 5: Improve Maternal Health

Target 6: Reduce by three quarters between 1990 and 2015, the Maternal Morality Ratio

Indicators:

- Maternal Mortality Ratio
- Proportion of births attended by skilled health personnel

Deaths due to pregnancy and child birth are potential threats to women in the reproductive age groups. The toll that unsafe motherhood takes on the lives and health of women, and hence, on their families and communities, becomes really tragic as it is mostly preventable. Reduction of mortality of women has thus been an area of major concern and governments across the globe have set time bound targets to achieve it. Maternal death is an important indicator of the reach of effective clinical health services to the poor, and is in turn act as one of the composite measure to assess the country's progress. The MDG Goal 5: Improve Maternal Health gets enhanced significance in this context.

Maternal Mortality Ratio is declining faster….

Indicator: Maternal Mortality Ratio

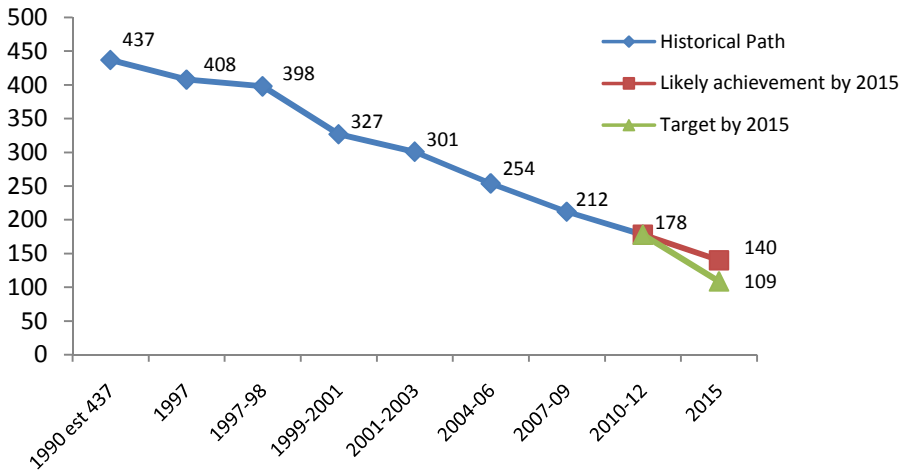
The Maternal Mortality Ratio (**MMR)** is the number of women who die from any cause related to or aggravated by pregnancy or its management

(excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births.

The problem in estimating MMR is due to the comparative rarity of the event, necessitating a large sample size. However, even with this constraint, Sample Registration System (SRS) data indicates India has recorded a deep decline of 45.6% in MMR from 327 in 1999-2001 to 178 in 2010-12 and a fall of about 30% happened during 2006-12. The decline in MMR from 1990 to 2012 is 59%. This can be attributed to the increase in awareness and the intensive efforts being taken throughout the country in improving healthcare especially that of pregnant women and mothers.

From an estimated MMR level of 437 per 100,000 live births in 1990, India is required to reduce the MMR to 109 per 100,000 live births by 2015. At the historical pace of decrease, India tends to reach MMR of 140 per 100,000 live births by 2015, falling short by 31 points. However, the bright line in the trend is the sharper decline ie. 16% during 2009-12, 17% during 2006-09 and 16% during 2004-06 compared to 8 % decline during 2001-2003.

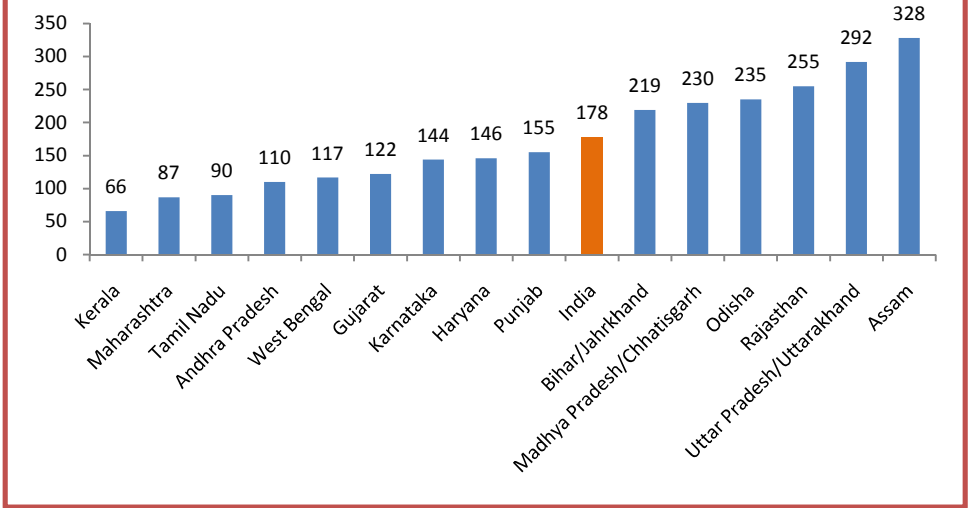
Fig. 7.1: Trend in Maternal Mortality Ratio



Source: Sample Registration System, Office of Registrar General of India

As per SRS 2010-12, among the major States, Maternal Mortality Ratio is lowest in Kerala (66) and highest in Assam (328). During 2010-12, the Maternal Mortality Ratio is higher than the national level estimate in the States of Bihar/ Jharkhand, Madhya Pradesh/ Chattisgarh, Odisha, Rajasthan, Uttar Pradesh/ Uttarakhand and Assam.

Fig.7.2: Maternal Mortality Ratio 2010-12



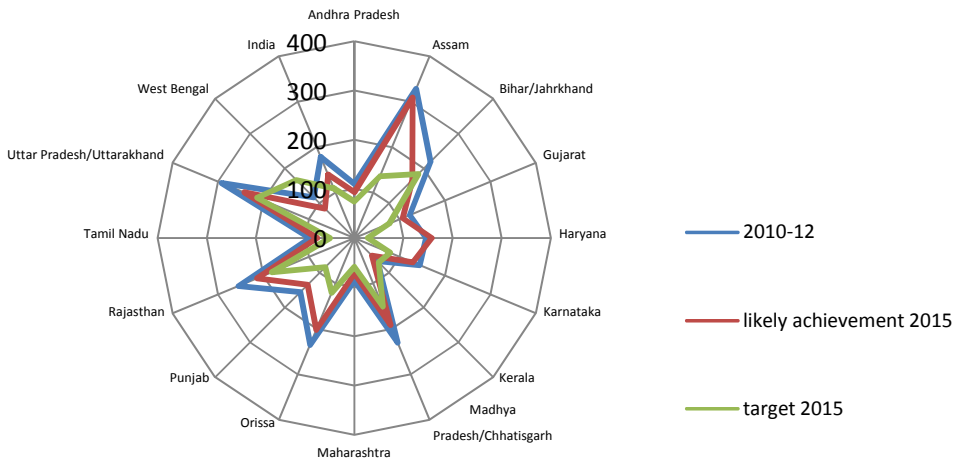
Source: Sample Registration System (2010-12)

The present status of MMR along with the extent of progress achieved in the last one decade, give a better picture of the performance of the States in reducing maternal mortality ratio. The States which showed highest points of decline during 1999-2012 are Uttar Pradesh/ Uttarakhand (declined by 247 points), Rajasthan (declined by 246 points), Odisha (declined by 189 points), Bihar/Jharkhand (declined by 181 points), Madhya Pradesh/ Chhattisgarh (declined by 177 points) where as at all India level, the decline was 149 points. Thus, most of the States with highest level of MMR in 2010 - 12, have shown maximum points of decline, which offers a ray of hope in the progress of States towards achieving MDG 5.

As per the present status (2010-12), the States of Andhra Pradesh, Gujarat, Kerala, Maharashtra, Tamil Nadu and West Bengal have the distinction of achieving all India MDG target for MMR. A better picture of the progress achieved by the

States is obtained by comparing the State wise MDG targets and the likely achievement by 2015.

Fig. 7.3:MMR current status, likely achievement vis -a -vis target 2015



As per the historical trend, the States of Kerala, West Bengal and Bihar / Jharkhand are likely to achieve their State level MMR targets by 2015. However, as per the historical trend, the States of Assam, Haryana and Odisha, are likely to fall short of their State level targets by huge margins. The remaining States are likely to miss the targets by 18 to 52 points.

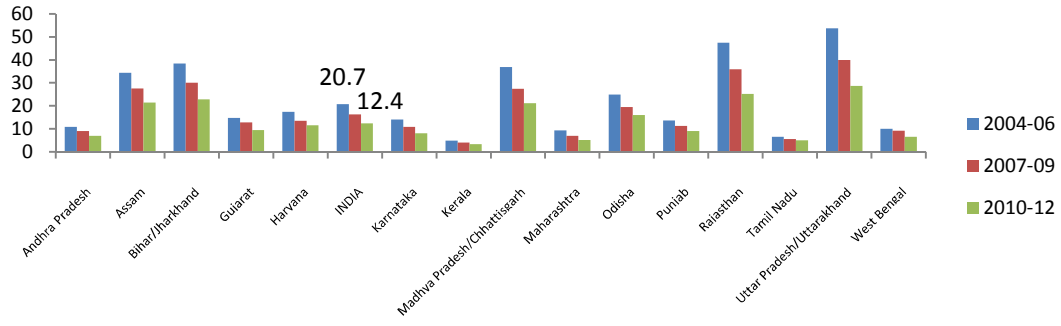
It is worrying that more young mothers in the age group 20-29 years die due to maternal causes and the proportion increased in 2010-12 from that of 2007-09. The proportion of maternal deaths in the age group 20-29 years stood at 67% in 2010-12, whereas the corresponding figure in 2007-09 is 63%. Further, the age group, 20-24 yrs are more susceptible to maternal death as deaths due to maternity causes are highest in this group. During 2010-12, the maternal deaths are highest in the age group 20-24 years (39%) followed by 25-29 years (28%), whereas the corresponding figures for 2007-09 were 36% and 27% respectively.

Table 7.1: Age Distribution of Maternal and Non-Maternal deaths, India, 2007-09 & 2010-12				
Age Groups	Maternal Deaths (%)		Non-maternal Deaths (%)	
	2007-09	2010-12	2007-09	2010-12
15-19	9	7	12	12
20-24	36	39	16	16
25-29	27	28	13	13
30-34	14	17	13	12
35-39	9	7	14	12
40-44	5	2	16	15
45-49	1	0	16	19
15-49	**100**	**100**	**100**	**100**

Source: O/o Registrar General of India

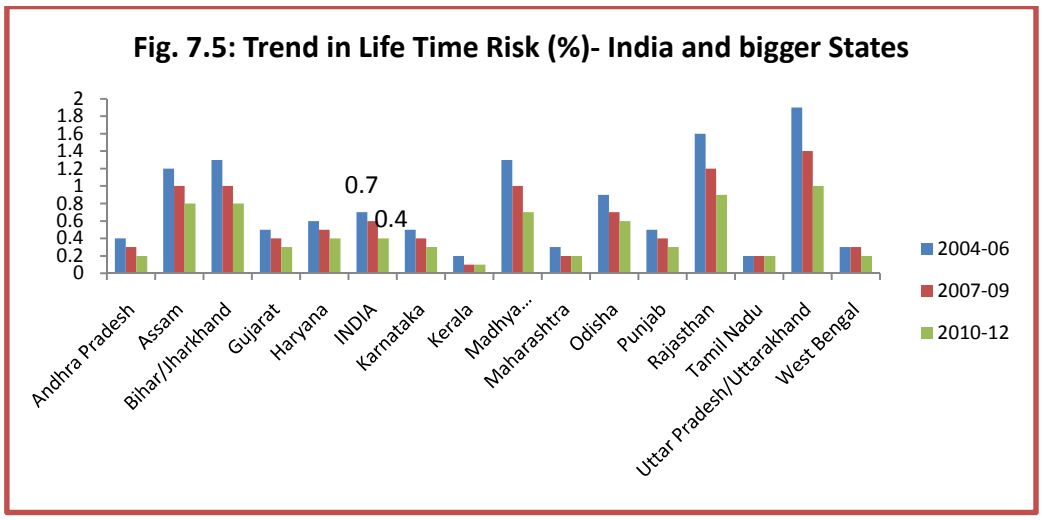
In addition to Maternal Mortality Ratio (MMR), the Maternal Mortality Rate (MMRate - Number of maternal deaths in a given period per 100000 women of reproductive age during the same time period) and Adult lifetime risk of maternal death (The probability that a 15-year-old women will die eventually from a maternal cause) are important statistical measures of maternal mortality.

Fig. 7.4: Trend in Maternal Mortality Rate - India & biggers States



Source: O/o Registrar General of India

The maternal mortality rate at all India level has come down from 20.7 in 2004-05 to 12.4 in 2010 -12. All the major States have also shown a decline in MMR during this period. The MMRate is lowest in Kerala (3.3) and highest in Uttarpradesh/ Uttarakhand (28.7) in 2010-12.



Source: O/o Registrar General of India

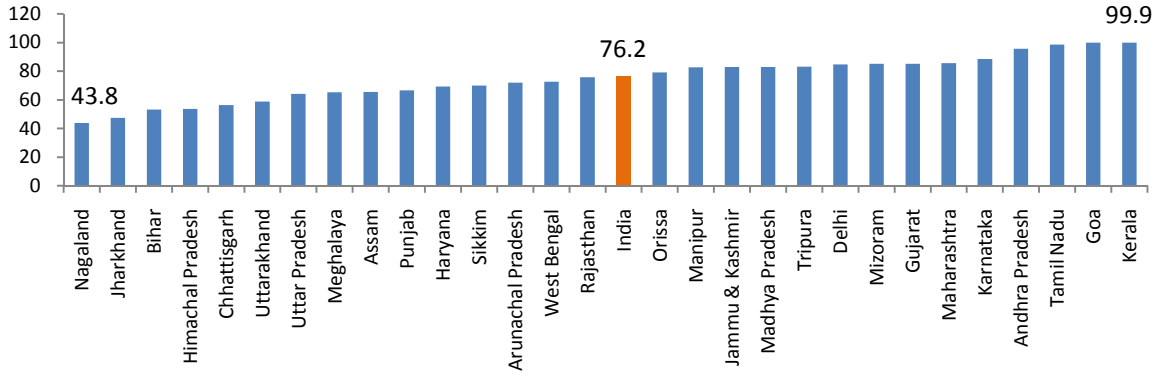
At all India level, lifetime risk declined from 0.7% in 2004-06 to 0.4% 2010-12 and all the major States have shown decline during this period. In 2010-12, lifetime risk was lowest in Kerala 0.1% and highest in Uttar Pradesh/ Uttarakhand (1%).

Gaps still persisting in ensuring safe delivery….

Indicator: Proportion of births attended by skilled health personnel

Safe motherhood depends mainly on delivery by trained /professional personnel, particularly through institutional facilities. Among other things, ensuring ante-natal care of prospective mothers at health centres and recommended doses of IFT are important factors that help improve maternal health and reduce life risk during pregnancy. The National Family Health Survey (NFHS-2005-06) and District Household Survey (DLHS- 2007-08) revealed the trend in institutional deliveries and safe deliveries and pointed towards the need for more focused and accelerated initiatives to improve the situation. The institutional deliveries in India increased from 40.9% in 2002-04(District level Household Survey) to 72.9% in 2009 (Coverage Evaluation Survey). As per Coverage Evaluation Survey (CES), 2009, delivery attended by skilled personnel is 76.2% which was 47.6% as per District level Household Survey (DLHS-2002-04). With the existing rate of increase in deliveries by skilled personnel, the likely achievement for 2015 is only to 77.29%, which is far short of the targeted universal coverage. As per CES 2009, the percentage of deliveries attended by skilled health personnel ranges from 43.8% (Nagaland) to 100% (Kerala).

Fig. 7.6: Deliveries attended by skilled health personnel (%)-2009



Going by the historic rate of coverage increase in deliveries assisted by trained/ professional persons, 7 States namely, Andhra Pradesh, Goa, Jammu &Kashmir, Kerala, Madhya Pradesh, Orissa, Rajasthan, Sikkim and Tamil Nadu are likely to reach universal coverage or close to it (achievement of 90%& above) by the year 2015.For the other States, shortfall from universal coverage tends to vary from 11 to 61 percentage points.

The maternal health care services for antenatal care includes at least three antenatal care visits, iron prophylaxis for pregnant and lactating women, at least one dose of tetanus toxoid vaccine, detection and treatment of anemia in mothers, and

management and referral of high-risk pregnancies and natal care. The Status of some major indicators related to maternal health are,

Table 7.2: Status of some major indicators related to maternal health

Indicators	DLHS-2 (2002-04)	DLHS-3 (2007-08)	CES (2009)
Mothers who had received any ANC (%)	73.6	75.2	89.6
Mothers who had 3 or more ANC (%)	50.4	49.8	68.7
Mothers who had full ANC check up (%)	16.5	18.8	26.5
Institutional Delivery (%)	40.9	47.0	72.9
Safe Delivery (%)	48	52.7	76.2
IFA tablets consumed for 100 days	20.5	46.6	
Mothers who received PNC within 2 weeks of delivery (%)	NA	49.7	60.1*

*-PNC within 10 days

Addressing issues related to maternal health …..

Interventions & Strategies under NRHM:

The National Rural Health Mission (NRHM) was launched on 12th April, 2005 throughout the country with special focus on 18 states, including eight Empowered Action Group (EAG) States, the North-Eastern States, Jammu & Kashmir and Himachal Pradesh. The NRHM seeks to provide accessible, affordable and quality health care to the rural population, especially the vulnerable sections. During the 12th Plan, one of the goals of NRHM is to reduce MMR to less than 100 per 1,00,000 live births. Under National Rural Health Mission (NRHM) and within its umbrella, the Reproductive and Child Health Programme Phase II, the Government of India has taken a number of steps to accelerate the pace of reduction in maternal mortality. These strategies and interventions are:

1) Janani Suraksha Yojana (JSY):

- Janani SurakshaYojana, a demand promotion scheme for reduction of MMR and IMR has led to steep increase in Institutional Delivery in government health facilities. Cash benefits are provided under the scheme to SC/ST /BPL women to promote institutional delivery.

2) Quality Antenatal, Intranatal and Postnatal care:

- Quality ANC includes minimum of at least 4 ANCs including early registration and 1st ANC in first trimester along with physical and abdominal examination, Hb estimation and urine investigation, 2 doses of T.T Immunization and consumption of IFA tablets for 100 days.
- Iron and Folic Acid supplementation to pregnant & lactating women for prevention and treatment of anaemia.
- Health and nutrition education to promote dietary diversification, inclusion of iron and folate rich food as well as food items that promote iron absorption.
- The Mother and Child Protection Card (MCP Card) has been introduced through a collaborative effort of the Ministry of Women and Child Development and the Ministry of Health & Family Welfare, Government of India to monitor service delivery for mothers and children. The card also captures some of key services delivered to the mother & baby during Antenatal, Intra natal& Post natal care for ensuring that the minimum package of services are delivered to the beneficiary.
- Postnatal care by ensuring 48 hrs stay in hospital during childbirth and through subsequent home visits on 3rd, 7thand 42nd day, are important components for identification and management of emergencies occurring during post natal period in order to provide skilled attendance at every birth.
- Staff Nurses (SNs), LHVs and ANMs are being made technically competent to handle common obstetric emergencies by providing them a 3 week training on SBA (Skilled Birth Attendance).
- Line listing of severely anaemic pregnant women is being done at the Sub Centres and PHCs for tracking of severely anaemic women for appropriate management.

3) Operationalisation of the health facilities for provision of Basic Emergency Obstetric Care (BeMOC) and Comprehensive Emergency Obstetric Care (CEmOC) services:

- Sub-Centres, Primary Health Centres, Community Health Centres and District Hospitals are being operationalized for providing 24x7 basic and comprehensive obstetric and new born care services.

4) Delivery Points:

- Govt. of India is facilitating the States in identifying the "delivery points" for providing comprehensive and quality Reproductive Maternal Newborn and Child Health (RMNCH) Services at these health facilities which are performing deliveries/ C- sections above a certain benchmark. About 17000 delivery points have been identified all over the country and States have been provided funds for strengthening and up gradation of these centers and operationalizing them through rational deployment of existing manpower, training of doctors and specialists for these health facilities and also providing them with other resources like drugs/equipments etc.

5) Capacity building of health care providers:

- To Operationalise PHCs, CHCs, DH and other health facilities, the health providers working at these facilities are being trained and oriented for improving their knowledge and skills in providing quality obstetric care services. Some of the key trainings being imparted are:

  - **SBA**: a 3 weeks training of SNs/ANMs/LHVs in **Skilled Attendance at Birth,** for which curriculum and technical guidelines have been revised and disseminated to states/UTs.
  - **Training of MBBS Doctors in Life Saving Anaesthetic Skills (LSAS) for Emergency Obstetric Care:** For effective and better management of Emergency Obstetric needs at the grass root level, GOI has been implementing 18 week training programmefor MBBS doctors in LSAS for Emergency Obstetric Care (EmOC) at FRU. The training programme is presently being implemented in nearly 100 medical colleges across all the major States including NE Region**.**

- **Training of MBBS Doctors in Emergency Obstetric Care (EmOC)**: Government of India has also introduced a training programme for MBBS doctors in Emergency Obstetric Management & Skills including Caesarean Section in collaboration with Federation of Obstetric and Gynecological Society of India (FOGSI). This 6 week training programme is being implemented at the level of Medical Colleges and District Hospitals in nearly 25 medical colleges of the States.
- **Training of MBBS Doctors in Basic Emergency Obstetric Care (BEmOC)**: A 10 day training for Medical Officers in Basic Emergency Obstetric Care is being conducted at identified training centers of the States and UTs.

6) Referral Services at both Community and Institutional level:

- Under NRHM, states are provided financial assistance for establishing the emergency response services and patient transport ambulances. Government of India has a thrust on establishing a network of Basic patient care transportation ambulances with the aim to reach the beneficiaries in rural areas within 30 minutes of the call for quick service delivery.
- The states have been given flexibility to use different models of emergency referral transport for establishing the necessary linkages between home and health facility and between different levels of health facilities and for drop back home for pregnant women and post delivered women and sick neonates for whom it is to be provided free of cost.

- Key features for assured referral services are:

  - Linking with a centralized 24x7 call centre having an universal toll free number either district-wise or state-wise as per the situation
  - Vehicles are being GPS fitted for equitable geographical distribution and effective network and utilization.

- A prudent mix of basic level ambulances and emergency response vehicles are being established with focus on adequate coverage by Basic level ambulances
- Response time for the ambulance should be reaching the beneficiary within 30 minutes and the woman reaches the health facility within the next 30 minutes
- Universal access to referral transport throughout the State, including transport to difficult and hard to reach areas, to be ensured.

7) Comprehensive Abortion Care services:

- To reduce maternal mortality and morbidity due to unsafe abortion, consistent efforts have been made to expand safe abortion services in peripheral health care facilities in rural areas. These include provision of drugs and equipment for Manual Vacuum Aspiration (EVA), Manual Vacuum Aspiration (MVA), Medical Methods of Abortion (MMA) at PHCs, CHCs, DHs with focus on the delivery points, encouraging private and NGO sectors to provide quality MTP services, certification and regulation of private sector facilities through District Level Committees (DLCs) within the framework of the MTP Act 1971 and development of appropriate IEC /BCC messages to create awareness in the community on MTP
- Funds for implementing safe abortion services are being allocated to states through State Programme Implementation Plans (State PIP) under NRHM.
- Approximately 7000 providers across the country have been trained in MTP techniques so far.

8) Services for Reproductive & Tract Infections (RTI /STI) :

- Services for RTI /STI are provided at all health facilities from PHC upwards including CHCs, other sub district hospitals and district hospitals with a focus on Delivery Point in convergence with the NACP. These include Syndromic

management of RTIs/STIs, provision of colour coded kits, RPR testing kits and Whole Blood Finger Prick Testing at the delivery points.

- Prevention of Parent to Child Transmission (PPTCT) Services to enhance coverage of PPTCT services, HIV screening of all pregnant women is being offered during routine Ante natal care visits on a voluntary basis. NACO has launched new Guidelines for PPTCT under the NACP.

9) Outreach activities:

- **Village Health and Nutrition Day (VHNDs)** at Anganwadi centre at least once every month and to provide ante natal/ post partum care for pregnant women, promote institutional delivery, immunization, Family Planning & nutrition are the part of various services being provided during VHNDs.

10) Engagement of Accredited Social Health Activists (ASHAs) to generate demand and facilitate accessing of health care services by the community.

- The ASHAs have been engaged to perform various key activities e.g. regular visit to pregnant women, prepare micro-birth plans, counsel for institutional delivery, escort the pregnant woman to the nearest public health facility at the time of delivery, facilitate arrangement for referral transport, assist ANM in providing care to the mother during the postnatal period through home visits and to facilitate the pregnant women in getting the benefits under the JSY scheme etc.
- Performance Based Incentives: States are incentivizing the ASHA for her key activities as per GOI & State Guidelines.

<u>New initiatives :</u>

11) Mother Child Tracking System (MCTS): Name Based web enabled tracking of pregnant women and children:

- An online Mother Child Tracking System (MCTS) has been made operational for all the States and UTs. After entering the data, work plan is being generated for the ANMs and ASHAs to deliver the health services during any

point of time. MCTS call centre has been setup to call the beneficiaries and validate their data.

12) Janani Shishu Suraksha Karyakaram (JSSK)

- Government of India has launched Janani Shishu Suraksha Karyakaram (JSSK) on 1st June, 2011. The initiative entitles all pregnant women delivering in public health institutions to absolutely free and no expense delivery, including caesarean section. The entitlements include free drugs and consumables, free diet up to 3 days during normal delivery and up to 7 days for C-section, free diagnostics, and free blood wherever required. This initiative also provides for free transport from home to institution, between facilities in case of a referral and drop back home. Similar entitlements have been put in place for all sick newborns accessing public health institutions for treatment till 30 days after birth. All the States and UTs have initiated this programme.

13) Maternal Death Review (MDR):

- Maternal Death Review (MDR) is one of the important interventions under the RCH Programme to accelerate the pace of decline of MMR in the country.
- The MDR process has been institutionalised across the country to serve as a tool for improving the quality of obstetric care and reducing maternal mortality and morbidity. Under the process, reporting and analysis of the maternal deaths provides an opportunity to identify the delays that contribute to maternal deaths at various levels and use the information to take corrective actions to overcome the systemic and programmatic gaps in service provision.
- The MDR Guidelines and monitoring tools have been disseminated to the states and UTs for guiding states in rolling out and monitoring the MDR Process. All the States & UTs are currently reporting on the MDR process through monthly reports to MOHFW. Tamil Nadu and Kerala have well established processes to conduct MDR for a number of years. Other States

like Maharashtra, Odisha, Punjab, Madhya Pradesh and Assam have shown considerable progress in reporting and analysis of maternal deaths.

14) Maternal and Child Health Wings:

- JSY has led to steep increase in Institutional Delivery in government health facilities. ASHAs are also generating demand and facilitating access of women and children to public health institutions. As a result, these hospitals are overstretched in order to ensure quality of care.
- 100 bedded state- of -the art Maternal and Child Health Wings have been introduced at 156 District Hospitals & Medical Colleges. Besides this, 70/50/30 bedded maternity wards have been sanctioned at other DHs/SDHs/CHCs with high volume delivery load at 122 health facilities.
- More than 20,000 additional beds have been sanctioned across 11 states to be completed in next 2 to 3 years.

Indira Gandhi Matritva Sahyog Yojana (IGMSY)

A Conditional Cash Transfer Schemes for pregnant and lactating women was introduced in October, 2010 to contribute to better enabling environment by providing cash incentives for improved health and nutrition to pregnant and nursing mothers by the Ministry of Women and Child Development. The scheme envisages providing cash to Pregnant & Lactating (P&L) women during pregnancy and lactation in response to individual fulfilling specific conditions. It addresses short term income support objectives with long term objective of behavioural and attitudinal changes. The scheme attempts to partly compensate for wage loss to Pregnant & Lactating women both prior to and after delivery of child. Being implemented on pilot basis in 53 selected districts using the platform of ICDS, 12.5 lakh P&L women are expected to be covered every year under IGMSY. The beneficiaries are paid Rs. 4000/- in three instalments per P&L women between the second trimester and till the child attains the age of 6 months on fulfilling specific conditions related to maternal and child health. Pregnant women of 19 years of age and above for first two live births are eligible under the scheme. All Government / Public Sector Undertakings (Central and

State) employees are excluded from the Scheme as they are entitled for paid maternity leave. The wives of such employees are also excluded from the scheme. The scheme is now covered under Direct Benefit Transfer (DBT) programme and under which nine districts have been included under first phase of the implementation. For phase-II, which starts from 01/07/2013, seven districts namely Palakad (Kerala), Yanam (Puducherry), West Delhi (Delhi), Nalgonda (Andhra Pradesh), Hamirpur (Himachal Pradesh), Lakshadweep (Lakshadweep) &Dhamtari (Chhatisgarh) have been identified.

Under the "The National Food Security Act", every pregnant women and lactating mother will become entitled to maternity benefit of Rs. 6000/-. The Ministry will have to revise the guideline of the IGMSY to bring it in conformity with the provisions of the Act. The significant changes will include universalisation of IGMSY from 53 districts to whole of the country, increasing the number of beneficiaries many fold and increase in amount to be transferred per beneficiary from present Rs. 4000/- to Rs. 6000/- in 53 districts across the country is being issued.

In addition to the above mentioned major initiatives by Central ministries, the State Governments also implement similar programmes to improve maternal health, and to reduce maternal mortality. The programmes are to focuss on all concerned fronts including awareness generation, better accessible heath care facilities, financial benefits etc which in turn ensure safe motherhood.

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Chapter 8
FIGHT AGAINST DEADLY DISEASES

Goal 6: Combat HIV/AIDS, Malaria and other Diseases

TARGET 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS

- HIV prevalence among pregnant women aged 15-24 years
- Condom use rate of the contraceptive prevalence rate
- Condom use at last high risk sex
- Percentage of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS

TARGET 8: Have halted by 2015 and begun to reverse the incidence of Malaria and other major diseases.

- Prevalence and death rates associated with Malaria
- Proportion of population in Malaria risk areas using effective Malaria prevention and treatment measures
  (Percentage of population covered under use of residuary spray in high risk areas)
- Prevalence and death rates associated with Tuberculosis
- Proportion of Tuberculosis cases detected and cured under DOTS

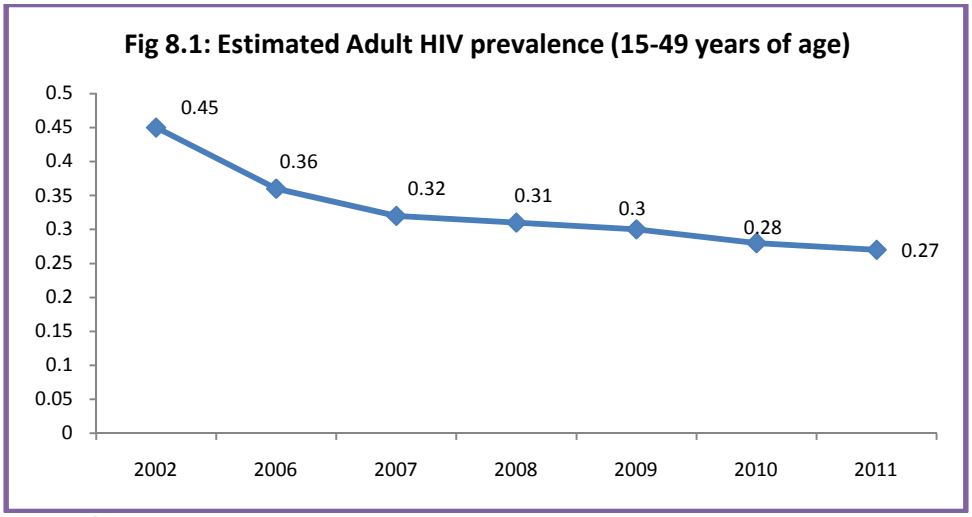
The existence and rapid spread of HIV and AIDS poses a serious challenge to every nation across the globe. HIV and AIDS have the potential to undermine the massive improvements that have been made in global health over the years. Apart from being a serious health problem, the multi layered effects of the epidemic on the socio-economic fabric of

whole nations, makes HIV and AIDS a potential development threat worldwide.

Sustaining the declining trend in prevalence of HIV/ AIDs …

The HIV epidemic in India continues to decline at the national level with an overall reduction in adult HIV prevalence, HIV incidence (new infections) and AIDS-related mortality in the country. The latest HIV estimates provide sound evidence on the current trend of the epidemic. The adult (15–49 years) HIV prevalence has decreased from 0.45% in 2002 to 0.27% in 2011. India has demonstrated an overall reduction of 57% in estimated annual new HIV infections among adult population from 2.74 lakhs in 2000 to 1.16 lakhs in 2011. The trend of annual AIDS deaths is also showing a steady decline since the roll out of free Anti Retroviral Treatment (ART) programme in India in 2004. Declines in adult HIV prevalence and new HIV infections are sustained in most of the states including all the high prevalence states of South India and North East. The HIV estimates, however, highlight the diversity of trends at the state level. Also, rising trends in HIV prevalence, number of People Living with HIV (PLHIV) and new HIV infections have been noted in some low prevalence states over the last few years.

The adult (15–49 years) HIV prevalence is a significant indicator for determining the level and spread of HIV epidemic amongst the total population of the country. It is calculated as the aggregate of the number of adults (15–49 years) living with HIV in all states, divided by the total adult (15–49 years) population within a particular time period, expressed as percentage. National adult (15–49 years) HIV prevalence is estimated at 0.28% (0.24%–0.34%) in 2010 and 0.27% (0.22%–0.33%) in 2011. Adult HIV prevalence was estimated to have peaked in country in 2002 at a level of 0.41% (within bounds 0.35%–0.47%) following which there has been progressive decline in estimated prevalence in the subsequent years. Adult HIV prevalence among males and females is estimated at 0.34% and 0.23% in 2010 and 0.32% and 0.22% in 2011 respectively.



Source: D/o AIDS control

The adult HIV prevalence at national level has continued its steady decline from estimated level of 0.41% in 2001 through 0.33% in 2007 to 0.27% in 2011. Similar consistent declines are noted among both men and women at national level.

In 2011, among the states, Manipur has shown the highest estimated adult HIV prevalence of 1.22%, followed by Andhra Pradesh (0.75%), Mizoram (0.74%), Nagaland (0.73%), Karnataka (0.52%), Goa (0.43%) and Maharashtra (0.42%). Besides these states, Odisha, Gujarat, Tamil Nadu and Chandigarh have shown estimated adult HIV prevalence greater than the national prevalence (0.27%), while Chhattisgarh, Jharkhand, Tripura, West Bengal, Uttarakhand, Delhi and Bihar have shown estimated adult HIV prevalence in the range of 0.20–0.27%. All other states/UTs have levels of Adult HIV prevalence below 0.20%. Declining trends in adult HIV prevalence are sustained in all the high prevalence states (Andhra Pradesh, Karnataka, Maharashtra, Manipur, Nagaland and Tamil Nadu) and other states such as Mizoram and Goa.

HIV prevalence among the young population (15–24 years) at national level has declined from 0.15% in 2007 to 0.11% in 2011. Unlike adult (15–49 years) HIV prevalence where HIV prevalence among males is around 1.5 times that among females, in young (15–24 years) population, HIV prevalence is equal among men and women at 0.11%. HIV prevalence among the young male population (15–24 years)

has declined slowly from an estimated 0.15% in 2007 to reach an estimated 0.11% in 2011. Similar to the trend and level estimated among the young male population, HIV prevalence among the young female population (15–24 years) has also slowly declined from an estimated 0.15% in 2007 to an estimated 0.11% in 2011.

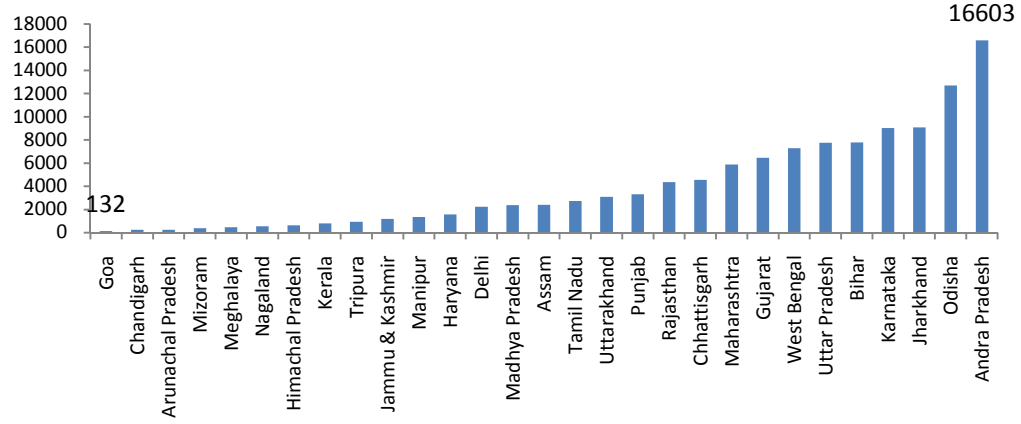
Estimation of the total number of People Living with HIV (PLHIV) is a useful indicator for assessing the severity of the epidemic at a particular point in time or its trend over duration of time. The estimated number of PLHIV (adults and children) in India in 2011 was 20.88 lakhs, compared to the estimated 22.52 lakhs (PLHIV in the country in 2007. A comparison between 2007 and 2011 estimates reflects an approximate 8% decline in total number of PLHIV in the past five years. Out of the 20.9 lakh total number of People Living with HIV in 2011, children (<15 years) account for 7% (1.45 lakh) of all infections. Of all HIV infections, 39% (8.16 lakh) are among women. The four high prevalence states of India (Andhra Pradesh–4.19 lakh, Maharashtra-3.16 lakh, Karnataka-2.09 lakh and Tamil Nadu-1.33 lakh) account for 53% of all HIV infected population in the country. West Bengal, Gujarat, Bihar, Uttar Pradesh and Odisha are estimated to have more than 1 lakh PLHIV each and together account for another 29% of HIV infections in India. The states of Rajasthan, Jharkhand, Chhattisgarh, Madhya Pradesh, Punjab, Manipur, Delhi and Kerala have estimated HIV infections between 25,000 and 75,000 each and together account for another 15% of HIV infections in the country.

HIV estimates for the number of annual new HIV infections is a key indicator providing information on the level and spread of new infections. India has demonstrated an overall reduction in the estimated annual new HIV infections (in all age-groups) from 2.96 lakhs in 2000 to 1.30 lakhs in 2011. The estimated annual new HIV infections among adult (15+ years) population has declined steadily over the past decade by about 57% from 2.74 lakhs in 2000 to 1.16 lakhs in 2011. Males account for approximately 61% of total new annual HV infections in 2011 whilst women account for an estimated 39% of total new HIV infections. The disaggregation of total

new HIV infections by sex is retained at similar levels of 61% male contribution and 39% female contribution during 2000 to 2011 with slight inter-year variations.

Among states, Andhra Pradesh is estimated to have the highest number (16,603) of new adult HIV infections in 2011 followed by Odisha (12,703), Jharkhand (9,085), Karnataka (9,024), Bihar (7,797), Uttar Pradesh (7,745) and West Bengal (7,289). While the states of Gujarat, Maharashtra, Chhattisgarh, Rajasthan, Punjab and Uttarakhand have new adult HIV infections between 3,000 and 7,000, rest of the states have less than 3,000 new adult HIV infections in 2011.

Fig 8.2: Estimated new HIV infections (in 15+ years Population)



Of the 1.16 lakh estimated new infections in 2011 among adults, the six high prevalence states account for only 31%, while the ten low prevalence states of Odisha, Jharkhand, Bihar, Uttar Pradesh, West Bengal, Gujarat, Chhattisgarh, Rajasthan, Punjab &Uttarakhand together account for 57% of new infections. While stable to declining trends are evident in the six high prevalence states of Andhra Pradesh, Karnataka, Maharashtra, Manipur, Nagaland and Tamil Nadu (the new HIV infections among adults have decreased by 28% in high prevalence states between 2007 & 2011), some low prevalence and vulnerable states like Odisha, Jharkhand, Punjab, Assam and Uttarakhand have shown rising trends in the estimated number of annual new infections in the recent years.

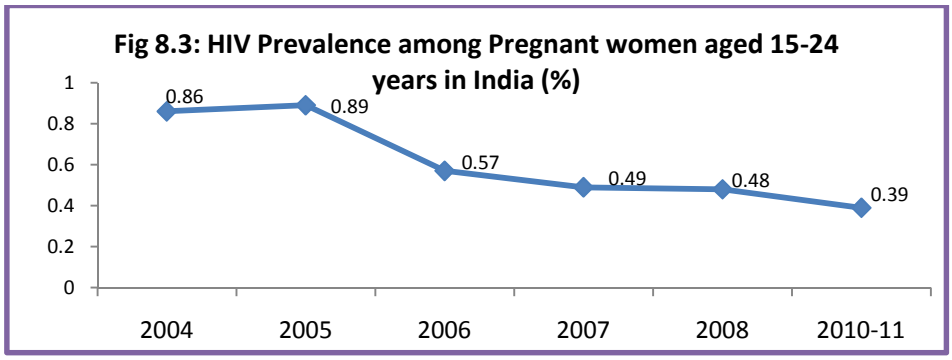
Total number of annual AIDS related deaths in India is declining over the past years. It is estimated that about 1.48 lakh (1.14 lakhs-1.78 lakhs) people died of AIDS

related causes in 2011 in India. In comparison with the 2.06 lakhs (1.67 lakhs-2.45 lakhs) AIDS related deaths estimated in 2007, this marks a near 29% reduction in estimated number of AIDS related deaths during 2007–11. Deaths among HIV infected children account for 7% of all AIDS-related deaths. Males accounted for nearly 65% of total estimated AIDS related deaths in 2007 and this proportion decreased gradually to 63% in 2011. Females on the other hand accounted for an increasing proportion of the total estimated AIDS related deaths from 34% in 2004 to 37% in 2011. In high prevalence states, estimated AIDS-related deaths have decreased by around 42% during 2007 to 2011. It is estimated that the scale up of free ART since 2004 has saved cumulatively over 1.5 lakh lives in the country till 2011 by averting deaths due to AIDS-related causes. With the current scale up of ART services, it is estimated to avert around 50,000–60,000 deaths annually in the next five years.

The statistics presented above, reveals the present status of the epidemic HIV/AIDs in India. The progress of the specific MDG indicators is presented below.

Indicator: HIV prevalence among pregnant women aged 15-24 years (%)

The prevalence of HIV among Pregnant women aged 15-24 years is showing a declining trend from 2005 and it has declined from 0.89 % in 2005 to 0.39% in 2010-11.



Source: HIV Sentinel Surveillance

However, in the States of Chattisgarh, Delhi, Jharkhand, Madhya Pradesh, Manipur, Meghalaya, Mizoram, Odisha, Punjab, Rajasthan, Sikkim, Uttar Pradesh, Uttarakhand showed increasing trend in prevalence of HIV among Pregnant women aged 15-24 years during 2008 to 2011.

Indicator: Condom use rate of the contraceptive prevalence rate (Condom use to overall contraceptive use among currently married women, 15-49 years, percent)

According to NFHS –III, Condom use rate of the contraceptive prevalence rate (Condom use to overall contraceptive use among currently married women, 15-49 years, percent) was only 5.2 % at all India level. Delhi (22.9%), Uttarakhand (15.7%), Punjab (15.5%), Haryana (11.8%), Himachal Pradesh (11.5%), Uttar Pradesh (8.6%), Jammu & Kashmir (8%), Goa (7.5%), Maharashtra (6.2%), Gujarat (5.8%), Rajasthan (5.7%) and Kerala (5.5%), were the States which reported Condom use rate of the contraceptive prevalence rate above the national figure.

Indicator: Condom use at last high-risk sex

The Behavioural Surveillance Survey (BSS) conducted to monitor the changes in knowledge and behavior indicators in different risk groups with respect to HIV/AIDS indicates that Condom use among non-regular sex partners is quite prevalent. According to BSS conducted in 2001 & 2006, the national estimates for Condom use at last high-risk sex (%) - Proportion of population aged 15-24 years who used condom during last sex with non-regular partner registered a 19% increase from 51.9% in 2001 to 61.7% in 2006. In 2009, BSS was conducted in six States (Uttar Pradesh, Andhra Pradesh, Karnataka, Tamil Nadu, Maharashtra and Manipur) as part of Mid-Term Review of NACP-III. The estimates for Condom Use at high risk sex (%) for these States for 2006 & 2009 are as follows:

Table 8.1: Condom use at last high-risk sex (%) - Proportion of population aged 15-24 years who used condom during last sex with non-regular partner:

States	2006	2009
Uttar Pradesh	48.8	46
Andhra Pradesh	63.6	89
Karnataka	81.1	87
Tamil Nadu [12]	46.4	
Maharashtra	77.8	92
Manipur	76.6	

Source :Behavioural Surveillance Survey

[12] For 2001, the figure reported is for Tamil Nadu & Pondicherry.

As per the 'Condom Promotion Impact Survey 2010', the national estimate for Condom use at last high-risk sex is 74%.

Indicator: Proportion of population aged 15-24 years with comprehensive correct Knowledge of HIV/AIDS (%)

According to BSS, the national estimate for proportion of population aged 15-24 years with comprehensive correct Knowledge of HIV/AIDS[13] (%) in 2006 was 32.9% reporting betterment from 2001 (22.2%). The estimates of the indicator for the States in which BSS was conducted in 2009 are as follows:

Table 8.2: Comprehensive Correct Knowledge about HIV Transmission and Prevention

States	2006	2009
Uttar Pradesh	29	21
Andhra Pradesh	28	19
Karnataka	23	10
Tamil Nadu	30	56
Maharashtra	49	24
Manipur	43	

Source :Behavioural Surveillance Survey

National AIDS Control Programme is playing a significant role in reversing the trend….

In order to control the spread of HIV/AIDS, the Government of India is implementing the National AIDS Control Programme (NACP) by D/o AIDS Control (NACO) as a 100% centrally sponsored scheme. The first National AIDS Control Programme was launched in 1992, followed by NACP-II in 1999. Phase III of NACP, launched in July 2007, had the goal to halt and reverse the epidemic in the country over the five-year period (2007-2012) by scaling up prevention efforts among High Risk Groups (HRG) and general population, and integrating them with Care, Support

[13] *Comprehensive Correct knowledge about HIV transmission and Prevention is constructed as 'Percentage of Population aged 15-24 years who could correctly identify the two major ways of preventing the sexual transmission of HIV (Consistent condom use and having one faithful uninfected sex partner), reject the two most common local misconceptions about HIV transmission (transmission of HIV/AIDS through mosquito bites and sharing of meals with HIV/AIDS patients), and who know that a healthy-looking person can transmit HIV.*

& Treatment services. Prevention and Care, Support & Treatment (CST) form the two key pillars of all HIV/AIDS control efforts in India.

Analysis of epidemic projections revealed that India had approximately 1.16 lakh new HIV infections in 2011 as against 2.74 lakh new infections in 2000. There has been reduction of new HIV infections by 57% over the last decade (2000-2011). This is one of the most important evidence on the impact of the various interventions under National AIDS Control Programme and scaled-up prevention strategies. A clear decline is also evident in HIV prevalence among the young population (15-24 years) at national level, both among men and women. Stable to declining trends in HIV prevalence among the young population (15-24 years) are also noted in most states.

Considerable declines in HIV prevalence have been recorded among Female Sex Workers at national level (5.06% in 2007 to 2.67%) and in most of the states, where long-standing targeted interventions have focused on behaviour change and increasing condom use. Declines have been achieved among Men who have sex with Men (7.41% in 2007 to 4.43% in 2011). Stable trends have been recorded among Injecting Drug Users at national level (7.23% in 2007 to 7.14% in 2011).

Wider access to Antiretroviral Therapy (ART) has led to 29% reduction in estimated annual AIDS-related deaths during NACP-III period (2007-2011). Greater declines in estimated annual deaths are noted in states where significant scale up of ART services has been achieved. It is estimated that the scale up of free ART since 2004 has saved over 1.5 lakh lives in the country till 2011 by averting deaths due to AIDS-related causes.

Consolidating the gains made till now, National AIDS Control Programme Phase-IV aims to accelerate the process of reversal and further strengthen the epidemic response in India through a cautious and well defined integration process over the next five years. The proposed objective is to reduce new infection by 50% (2007 baseline of NACP-III) and comprehensive care, support and treatment to all persons living with HIV/AIDS. The said objective will be achieved through proposed key strategies of intensifying and consolidating prevention services with a focus on High Risk Group (HRG) and vulnerable population, increasing access and promoting

comprehensive care, support and treatment, expanding Information, Education & Communication (IEC) services for general population and high risk groups with a focus on behavior change and demand generation, building capacities at national, state and district levels and strengthening the Strategic Information Management System.

The package of services provided under NACP-IV include

Prevention Services

I. Targeted Interventions for High Risk Groups and Bridge Population (Female Sex Workers (FSW), Men who have Sex with Men (MSM), Transgender/Hijras, Injecting Drug Users (IDU), Truckers & Migrants)

II. Needle-Syringe Exchange Programme (NSEP) and Opioid Substitution Therapy (OST) for IDUs

III. Prevention Interventions for Migrant population at source, transit and destinations

IV. Link Worker Scheme (LWS) for HRGs and vulnerable population in rural areas

V. Prevention & Control of Sexually Transmitted Infections/Reproductive Tract Infections (STI/RTI)

VI. Blood safety

VII. HIV Counseling & Testing Services

VIII. Prevention of Parent to Child Transmission

IX. Condom promotion

X. Information, Education & Communication (IEC) and Behaviour Change Communication (BCC) – Mass Media Campaigns through Radio & TV, Mid-media campaigns through Folk Media, display panels, banners, wall writings etc., Special campaigns through music and sports, Flagship programmes such as Red Ribbon Express etc.

XI. Social Mobilization, Youth Interventions and Adolescence Education Programme

XII. Mainstreaming HIV/AIDS response

XIII. Work Place Interventions

Care, Support & Treatment Services

I. Laboratory services for CD4 (The **cluster of differentiation** (**cluster of designation**) (often abbreviated as **CD**) is a protocol used for the identification and investigation of cell of surface molecules providing targets for immunophenotypingof cells) Testing and other investigations

II. Free First line & second line Anti-Retroviral Treatment (ART) through ART centres and Link ART Centres (LACs), Centres of Excellence (COE) & ART plus centers.

III. Pediatric ART for children

IV. Early Infant Diagnosis for HIV exposed infants and children below 18 months

V. Nutritional and Psycho-social support through Community Care Centres

VI. HIV-TB Coordination (Cross-referral, detection and treatment of co-infections)

VII. Treatment of Opportunistic Infections

VIII. Drop-in Centres for People Living with HIV (PLHIV) networks

Status of Implementation of Key Interventions

I. **Targeted Intervention (TI):** Targeted Intervention programme is one of the important prevention strategies under National AIDS Control Programme. Targeted Interventions (TIs) comprise of preventive interventions working with focused client populations in a defined geographic area where there is a concentration of one or more High Risk Groups (HRGs). 80% of HRGs are planned to be covered via TIs with primary prevention services like treatment for STI, condoms, needles/syringes, Opioid Substitution Therapy (OST), Behaviour Change communication (BCC), enabling environment, with community involvement and linkages with care and support service. The key risk groups covered through Targeted Intervention (TI) programme include: Core High Risk Groups (HRGs)-Female Sex Workers (FSW), Men who have Sex with Men (MSM) including Transgenders (TGs), Injecting Drug Users (IDU) and Bridge Populations- Migrants and Truckers. Various components of Targeted Intervention programme includes: Behaviour

Change communication, Condom promotion, Treatment for sexually transmitted Infection, Needle Syringe program, abscess management, general medical services and Opioid Substitution Therapy (for IDUs), Linkage with HIV testing and treatment services, Community mobilization and Enabling Environment. During 2012-13, 218 TIs established against the target of 180. During 2013-14 (till August, 2013), 246 TIs established against the target of 300.

II. **Link Worker Scheme**: This community-based intervention address HIV prevention and care needs of the high risk and vulnerable groups in rural areas by providing information on HIV, condom promotion and distribution and referrals to counseling, testing and STI services through Link workers. In partnership with various development partners, the Link worker scheme is operational in 156 districts as of March 2013, and reaches out to rural HRGs and their partners and vulnerable groups. The Scheme covered about 1,56,399 HRG, 30,01,493 Vulnerable Population till March, 2013. Nearly 82% HRGs have been tested at ICTC under this intervention. This has been done by establishing linkages with existing services. In order to create a sense of ownership in the community and involve the youth in fighting against HIV, 12,721 Red Ribbon Clubs and 15,438 Information Centres had been established at the village level by March, 2013. By the end of June, 2013, 163 districts covered under Link Worker Scheme, against the target of 163 districts.

III. **Management of Sexually Transmitted infections (STI)/Reproductive Tract Infection (RTI) prevention and control Programme:** Provision of management of Sexually Transmitted Infections (STI) /Reproductive Tract Infections (RTI) services is aimed at preventing HIV transmission under the NACP III and Reproductive and Child Health (RCH II) programme of the National Rural Health Mission (NRHM). Enhanced Syndromic Case Management, with minimal laboratory tests, is the

cornerstone of STI/RTI management under NACP III. Presently, NACO is supporting 1,114 designated STI/RTI clinics which are providing STI/RTI services based on the enhanced syndromic case management. During 2012-13, 60.33 lakh STI/RTI patients managed against the target of 64.2 lakh as per national protocol. Convergence strategy with National Rural Health Mission (NRHM) through standardized treatment protocols and common operational guidelines has also been developed. NACO has strengthened seven regional STI training, reference and research centres to provide etiologic diagnosis to the STI/RTI cases, validate syndromic diagnosis, monitor drug résistance to gonococci and implement quality control for Syphilis testing. During 2013-14 (till June, 2013), 18.2 lakh patient managed as per the national protocol against the target of 68 lakh.

IV. **Condom Promotion:** NACO has successfully implemented four phases of the Condom Social Marketing Programme in 15 States. Around 39.29 crores pieces of condom have been distributed through social marketing up to March, 2013 by NACO contracted social marketing organizations against the target of 35 crores pieces for 2012-13. During 2012-13, NACO has distributed 46.1 crores free condoms by March, 2013, against the target of 44.47 crore. During 2013-14 (up to July, 2013), 18.07 crores pieces condom distributed against the target of 35 crores under NACO contracted social marketing organizations and 10.22 crore against the target of 36 crore under fee distribution condom.

V. **Blood Safety Programme:** Access to safe blood has been ensured through a network of around 1,118 blood banks across the country, which includes 34 Model blood Banks, 175 Blood Separation Units, 167 Major Blood Banks and 742 District Level Blood Banks. During 2012-13, NACO supported blood banks collected 54.86 lakh units of blood, of which 84% was from voluntary blood donation. During 2013-14 (till July,

2013), 15.98 lakh units blood collected through NACO supported blood bank, of which 83% was from voluntary blood donation.

VI. **HIV Counseling and Testing Services:** This programme offers counseling and testing services for HIV infection, which includes three main components – Integrated Counseling and Testing Centres (ICTC), Prevention of Parent to Child Transmission (PPTCT) and HIV-TB collaborative activities. HIV Counseling and testing Services were rapidly scaled up through 4,508 standalone Integrated Counseling and Testing Centres and 8,389 Facility Integrated Counseling and Testing Centres including those under Public and Private Partnership model. A total of 104.55 lakh general clients and 82.94 lakh pregnant women were tested during 2012-13 (till March 2013). 94% of HIV positive pregnant women and babies were provided Nevirapine prophylaxis for Prevention of Parent to Child Transmission of HIV. Under the HIV-TB coordination programme, around 13.28 lakh cross-referrals were made between NACP and Revised National Tuberculosis Control Programme during 2012-13(up to March 2012-13) During 2013-14, total of 38.66 lakh general clients and 30.22 lakh pregnant women were tested, 96% of HIV positive pregnant women and babies were provided Nevirapine prophylaxis for Prevention of Parent to Child Transmission of HIV, the HIV-TB coordination programme, around 4.43 lakh cross-referrals were made during 2013-14 (till July 2013).

VII. **Care, Support & Treatment Programme:** The Care, support and treatment programme under NACP includes comprehensive management of PLHIV with respect to treatment and prevention of Opportunistic infections, Anti-retroviral therapy (ART), psycho-social support, home based care, positive prevention and impact mitigation.

The ART is offered free of cost to all PLHIV who are eligible clinically. Any person who has a confirmed HIV infection is subjected to further evaluation for determining whether he requires ART or not by undergoing CD4 count and other baseline investigations. All those PLHIV eligible as per technical guidelines are initiated on first line ART. Some of these PLHIV who develop resistance to first line ART are started on second line ART.

In the late nineties & early 2000, the ART was beyond the reach of most of positive patients due to high cost (Rs. 20-30,000 per month), which came down significantly due to production of generic ARV dugs by Indian Pharmaceutical companies. Considering the need of patients, the Govt. of India started free ART programme launched on 1st April, 2004 in eight government hospitals in six high prevalence states. This has since then been scaled up to 407 ART centres against the target to set up 420 such centres by June 2013. 809 link ART centres (LAC) were also set up to facilitate the delivery of ART nearer to residence of PLHIV. As of July 2013, 6.76 lakh clinically eligible patients are receiving free ART in Government health facilities.

VIII. **Laboratory Services-** Laboratory Services provide universal availability and routine access to quality assured HIV related laboratory services. The assurance of quality in kit evaluation, assessment of HIV testing services through implementation of External Quality Assessment Scheme (EQAS), CD4 testing, Viral load testing and Early Infant Diagnosis is being addressed on a continuous basis. Thirteen National Reference

Laboratories and 117 State-Reference Laboratories provide quality assurance for HIV testing at all ICTCs under the programme. At present, 10 National Reference Laboratories and 11 State Reference Laboratories are accredited.

IX. **Early Infant Diagnosis of HIV**: Earlier, diagnosis of HIV in new born child was possible only after 18 months of age leading to late start of required treatment and care. To address this issue and promote early treatment, Early Infant Diagnosis of HIV for the children below 18 months has been rolled out from 1st March 2010 at 767 ICTC's and 181 ART centres. This has been expanded countrywide in a phased manner to 1,088 ICTC's and 217 ART centres. As of December 2012, a total of 30,088 HIV exposed babies of less than 18 months of age have been tested under this programme.

X. **Information Education & Communication:** NACO's communication strategy has moved from creating general awareness to Behaviour Change Communication. It aims to motivate behavioural change among most at risk populations, raise awareness and risk perception among general population, particularly youth and women, generate demand for HIV/AIDS related health services like condoms, ICTC/PPTCT facilities; and create an enabling environment that encourages HIV related prevention, care and support activities and to reduce stigma and discrimination at individual, community and institutional levels. NACO implements integrated and comprehensive campaigns using 360° communication approach. Regular campaigns are conducted at national and state level using mass media, mid-media, outdoor, interpersonal communication, and innovative media vehicles like digital cinema, panels in metro trains, digital screens, internet, and mobile phones among others.

Red Ribbon Express (RRE) is the world's largest mass mobilization campaign on HIV/AIDS. It is a special exhibition train which travels across the country disseminating the messages on HIV/AIDS and general health in rural and remote areas of the country. Along with the train special outreach programmes are organized in the villages through IEC exhibition vans and folk troupes.

Table 8.3: Coverage during three phases of Red Ribbon Express

Activity	RRE –I	RRE-II	RRE III
States reached	24	22	23
Halt stations	180	52	162
People reached directly	62 lakh	80 lakh	1 crore 14 lakh
District Resource Persons trained	68,000	81,000	Over one lakh
People tested for HIV	Service not provided	36,000	Over seventy thousand
General Health Check-ups	Service not provided	28,000	About eighty thousand

XI. Strategic Information Management: India has a robust system of annual HIV Sentinel Surveillance for monitoring the HIV epidemic in the country among general population as well as High Risk Groups. Besides epidemic trend analysis, data from surveillance is also used for strategic planning and prioritisation under the programme as well as estimation of adult HIV prevalence, HIV incidence and mortality. Globally accepted models are used to estimate and project the HIV burden in the country. NACO is currently implementing National Integrated Biological & Behavioural Surveillance among high risk groups and bridge population. Programme generates rich data on service delivery through over 15,000 reporting

units across the country. Strategic Information Management System (SIMS), a web-based system for data management and analysis of all programme data was launched in August 2010 and is rolled out across the country. Research in HIV/AIDS is promoted and coordinated by NACO in collaboration with the Indian Council of Medical Research. An elaborate Analysis & Research Plan is being rolled out to fill the critical evidence gaps in the programme. The 'Network of Indian Institutions for HIV/AIDS Research' was constituted to facilitate and undertake HIV/AIDS research; 42 reputed institutions are currently members of this Consortium.

Target 8: Have halted by 2015 and begun to reverse the incidence of Malaria and other major diseases.

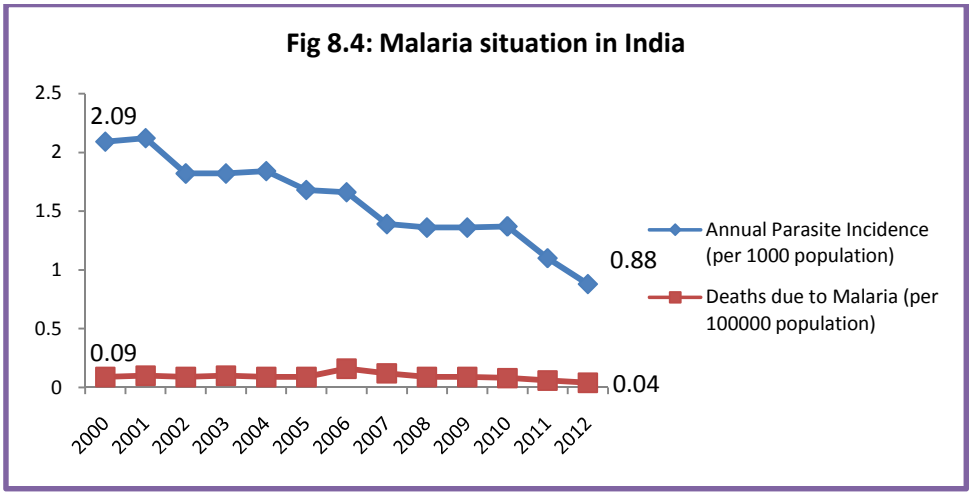
Reducing malaria cases….

Malaria was a major scourge in India contributing 75 million cases with about 0.8 million deaths annually, prior to the launching of the National Malaria Control Programme (NMCP) in 1953. The widespread DDT indoor residual spray (IRS) in the country under the NMCP resulted in a sharp decline in malaria cases in all areas under spray and as a result the GOI converted the NMCP into the National Malaria Eradication Programme (NMEP) in 1958. The NMEP was initially a great success with the malaria incidence dropping to a 0.1 million cases and no deaths due to malaria reported in 1965. The resurgence of malaria in the country resulted in escalation of incidence to 6.4 million cases in 1976. The resurgence was attributed to various operational, administrative and technical reasons, including emergence of drug resistance in the parasites and insecticide resistance in the vectors. In 1977, the Modified Plan of Operation (MPO) was implemented with the immediate objectives of preventing deaths due to malaria and reducing morbidity due to malaria. The national programme was also integrated with the primary health care delivery system. Under the MPO, IRS was recommended in areas with Annual Parasite Incidence (API) ≥ 2 in addition to early diagnosis and prompt treatment. The malaria incidence declined to 1.66 million cases in 1987. The scarce resources in many states,

however, allowed spray coverage in areas with API > 5 only. By 1996, there was another malaria upsurge with 3.03 million cases and 2,803 deaths reported.

Since the focus shifted from eradication to control, the programme was renamed as National Anti-Malaria Programme (NAMP) during year 1999. It is important to note that the Directorate responsible for prevention and control of malaria at central level was also made responsible for prevention and control of filariasis, Kala-azar, Japanese Encephalitis, Dengue and Chikungunya. With the convergence of prevention and control of other vector borne diseases, the Directorate of NAMP was renamed as Directorate of National Vector Borne Disease Control Programme (NVBDCP) in 2003. The NVBDCP is presently one of the most comprehensive and multi-faceted public health programmes in the country. The NVBDCP became an integral part of the NRHM launched in 2005. The special focus of the NVBDCP is on resource challenged settings and vulnerable groups. The incidence of malaria in the country started halting and sustaining reversal of cases for last one decade. The malaria cases were brought down from 2,031,790 cases in 2000 to 1,816,569 cases in 2005 and further brought down to 1,067,824 cases in 2012. The Country is heading towards achieving target of 50% reduction in incidence of malaria cases against the baseline. The annual incidence rate (cases of malaria/1000 population) of Malaria has come down from 2.57 per thousand in 1990 to 1.10 per thousand in 2011, and to 0.88 cases (provisional) per 1000 population in 2012. The malaria death rate in the country was 0.09 deaths per lakh population in 2000 which has come down to 0.04 deaths per lakh population in 2012.

The total positive cases of Malaria and deaths due to Malaria have shown declining trend from 2011 and 2010 respectively. The indicators Annual Parasite Incidence (API) per 1000 population and Deaths due to Malaria are showing declining trend in the recent past and the challenge is to sustain that trend.



Source: M/o Health and Family Welfare

As may be seen the annual incidence has been constantly declining, which reveals that the increasing trend of malaria incidence has already been halted and being reversed.

Table 8.4: Malaria Status in the country 2000-2012

Year	Total Positive Cases of Malaria	Annual Parasite Incidence (per 1000 population)	Deaths due to malaria	Deaths due to Malaria (per 100000 population)
2000	2031790	2.09	932	0.09
2001	2085484	2.12	1005	0.1
2002	1841229	1.82	973	0.09
2003	1869403	1.82	1006	0.1
2004	1915363	1.84	949	0.09
2005	1816569	1.68	963	0.09
2006	1785129	1.66	1707	0.16
2007	1508927	1.39	1311	0.12
2008	1526210	1.36	1055	0.09
2009	1563574	1.36	1144	0.09
2010	1599986	1.37	1018	0.08
2011	1310656	1.1	754	0.06
2012	1067824	0.88	519	0.04

Source: M/o Health and Family Welfare

MALARIA CONTROL STRATEGIES

1. Early case Detection and Prompt Treatment (EDPT)

- EDPT is the main strategy of malaria control - radical treatment is necessary for all the cases of malaria to prevent transmission of malaria.
- Chloroquine is the main anti-malaria drug for uncomplicated malaria.
- Drug Distribution Centres (DDCs) and Fever Treatment Depots (FTDs) have been established in the rural areas for providing easy access to anti-malarial drugs to the community.
- Alternative drugs for chloroquine resistant malaria are recommended as per the drug policy of malaria.

2. Vector Control

(i) Chemical Control

Use of Indoor Residual Spray (IRS) with insecticides recommended under the programnme

- Use of chemical larvicides like Abate in potable water
- Aerosol space spray during day time
- Malathion fogging during outbreaks

(ii) Biological Control

- Use of larvivorous fish in ornamental tanks, fountains etc.
- Use of biocides.

(iii) Personal Prophylatic Measures that individuals/communities can take up

- Use of mosquito repellent creams, liquids, coils, mats etc.
- Screening of the houses with wire mesh
- Use of bednets treated with insecticide
- Wearing clothes that cover maximum surface area of the body

4. Community Participation

- Sensitizing and involving the community for detection of Anopheles breeding places and their elimination
- NGO schemes involving them in programme strategies
- Collaboration with CII/ASSOCHAM/FICCI

5. Environmental Management & Source Reduction Methods

- Source reduction i.e. filling of the breeding places
- Proper covering of stored water
- Channelization of breeding source

6. Monitoring and Evaluation of the Programme

- Monthly Computerized Management Information System(CMIS)
- Field visits by state by State National Programme Officers
- Field visits by Malaria Research Centres and other ICMR Institutes
- Feedback to states on field observations for correction actions.

CONTROL OF MALARIA IN URBAN SITUATION

Malaria in urban areas was considered to be a marginal problem restricted to mega towns only and was considered that local bodies are capable of handling it. Therefore, while launching the National Malaria Eradication Programme in 1958, Urban Malaria was not included. By 1970s, incidence of rural malaria came down drastically i.e. 0.1 to 0.15 million cases per year but the urban town reported rising trend. Madhok Committee in 1970, investigated the problem and assessed that 10 to 12% of total cases were contributed by urban areas. The committee recommended anti larval measures for containment of urban malaria, because it was feared that proliferation from urban to rural may spread and nullify the gains already made. The control of malaria in the urban areas was thought of an important strategy as a programme complimentary to the NVBDCP for rural areas. Modified Plan of Operation (MPO) was designed and submitted to the Cabinet to tackle the malaria situation in both urban and rural areas in the country simultaneously. Under MPO, it was decided to initiate anti-larval and anti-parasitic measures to abate the malaria transmission in urban areas. The proposal to control malaria in towns named as **Urban Malaria Scheme** was approved during 1971 and it was envisaged that 131 towns would be covered under the scheme in a phased manner. This scheme was sanctioned during November, 1971 and the expenditure on this scheme is treated as

plan expenditure in centrally sponsored sector. The central assistance under this scheme was treated 100 per cent grant to the State Governments in kind.

At present, Urban Malaria Scheme is protecting 130.3 million population from malaria as well as from other mosquito borne diseases in 131 towns in 19 States and Union Territory.

URBAN MALARIA SITUATION

About 10% of the total cases of malaria are reported from urban areas. Maximum numbers of malaria cases are reported from Chennai, Vishakapatnam, Vadodara, Kolkata, New Mumbai, Vijayawada etc. The comparative epidemiological profile of malaria during 2005-2010 in all urban towns of the country is as follows:

Table 8.5: Comparative Epidemiological profile of malaria in 19 States under UMS during 2005-12

Year	Population	Total cases	P.f	P.F %	SPR	SFR	Deaths
2005	102423064	135249	14905	11.02	2.33	0.26	96
2006	105782505	129531	17278	13.34	2.07	0.28	145
2007	112448027	102829	18038	16.82	1.92	0.32	125
2008	113334073	113810	18963	13.42	1.66	0.22	102
2009	114699850	166065	31134	18.75	2.98	0.56	213
2010	115159555	74908	7587	18.75	2.98	0.56	31
2011	130316971	142502	13910	9.76	2.07	0.20	147
2012	130329138	82400	8217	9.97	1.34	0.13	61
2013*	130330838	9941	615	6.19	0.57	0.04	5

*Provisional upto May 2013, Source: Revised National Vector Borne Diseases Control Programe

Control Strategies under Urban Malaria Scheme

Under the scheme, Malaria Control strategy will comprise of (i) Parasite control & (ii) Vector control

i. **Parasite control:** Treatment is done through passive agencies viz. hospitals, dispensaries both in private & public sectors and private practitioners. In

mega cities malaria clinics are established by each health sector/ malaria control agencies viz. Municipal Corporations, Railways, Defence services

ii. **Vector control comprises of the following components**

- Source reduction
- Use of larvicides
- Use of larvivorous fish
- Space spray
- Minor engineering
- Legislative measure

The control of urban malaria lies primarily in the implementation of urban byelaws to prevent mosquito breeding in domestic and peri-domestic areas, or residential blocks and government/commercial buildings, construction sites. Use of larvivorous fish in the water bodies such as slow moving streams, lakes, ornamental ponds, etc. is also recommended. Larvicides are used for water bodies, which are unsuitable for use of larvivorous fish. Awareness campaigns are also undertaken by Municipal Bodies/Urban area authorities.

The control measures recommended under UMS are as below:

Source reduction (**Guidelines for Source Reduction**)

Environmental methods of controlling mosquito breeding including source reduction minor engineering works, by filling ditches, pits, low lying areas, streamlining, canalizing, desilting, deweeding, trimming of drains, water disposal and sanitation, emptying water containers once in a week and observing weekly Dry Day etc.

a. **Anti-larval methods**

Chemical

Recurrent anti-larval measures at **weekly intervals** with approved chemical

larvicides to control the vector mosquitoes are recommended. The following chemical larvicides are used in the Urban Malaria Scheme programme:

Biological Control (**Guidelines for Larvivorous fish**)

In some urban areas larvivorous fish like Gambusia and Guppy are also used in certain situations where the chemical control is not feasible. Biological larvicide, Bacillus thuringiensisisraelensis either wettable powder or aqueous suspension are also used for control of aquatic stages of vector mosquitoes.

1. **Aerosol Space Spray**

Space spraying of pyrethrum extract (2%) in 50 houses in and around every malaria and dengue positive cases to kill the infective mosquitoes is recommended.

Combating TB …..

Indicator: Incidence, prevalence and Death rates associated with TB

Controlling TB in India is a tremendous challenge. The TB burden in India is still staggering. Every year, 1.8 million persons develop the disease, of which about 800,000 are infectious; and, until recently, 370,000 died of it annually —1,000 every day. The disease is a major barrier to social and economic development. An estimated 100 million workdays are lost due to illness. Society and the country also incur a huge cost due to TB—nearly US$ 3 billion in indirect costs and US$ 300 million in direct costs.

The Revised National Tuberculosis Control Programme (RNTCP), based on the DOTS (Directly Observed Treatment Short course) strategy, began as a pilot in 1993 and was launched as a national programme in 1997. Rapid RNTCP expansion began in late 1998. By the end of 2000, 30%of the country's population was covered, and by

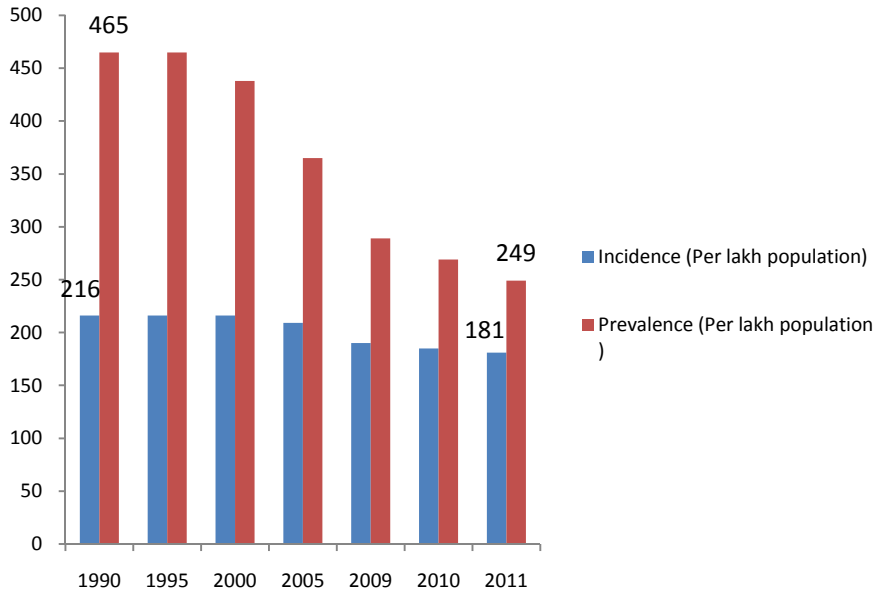
the end of 2002, 50%of the country's population was covered under the RNTCP. By the end of 2003, 778 million population was covered, and at the end of year 2004 the coverage reached to 997 million. By December 2005, around 97% (about 1080 million) of the population had been covered, and the entire country was covered under DOTS by 24th March 2006.

Every day in India, under the RNTCP, more than 15,000 suspects are being examined for TB, free of charge. The diagnosis of these patients and the follow-up of patients on treatment is achieved through the examination of more than 50,000 laboratory specimens. As a result of these examinations, each day, about 3,500 patients are started on treatment, stopping the spread of TB in the community. In order to achieve this, more than 600,000 health care workers have been trained and more than 11,500 designated laboratory Microscopy Centres have been upgraded and supplied with binocular microscopes since the inception of the RNTCP. As a result of rapid expansion in diagnostic facilities, the proportion of sputum- positive cases confirmed in the laboratory are double that of the previous programme and is on par with international standards. Despite the rapid expansion, overall performance remains good and in many areas is excellent. Treatment success rates have tripled from 25%in the earlier programme to 86%in RNTCP.

The World Health Organisation (WHO), in its latest report on tuberculosis (TB) has said that India needs to speed up its capacity for diagnosis and treatment of patients, especially those suffering from multi-drug resistant (MDR) tuberculosis. In its recommendations to India, home to the world's largest number of TB patients, including those suffering from Multi Drug Resistant (MDR) TB and total drug-resistant (TDR) TB, the WHO says that "case notifications (of TB) must be improved by forging stronger linkages with the private health sector and enforcing reporting of diagnosed cases that is now mandated by law". As per the 'WHO Report 2012 Global

Tuberculosis Control' the prevalence[14] rate of TB in India has come down from 465 per 100,000 population in 1990 to 249 in 2011 per 100, 000 population.

Fig.8.5: Trend in incidence and Prevalence of TB in India



Source: M/o Health and Family Welfare

The Mortality due to TB has reduced from 38 per lakh population in 1990 to 24 in 2011.

Table 8.6: Tuberculosis situation in India

Year	Incidence (Per lakh population)	Prevalence (Per lakh population)	Mortality (Per Lakh Population)
1990	216	465	38
1995	216	465	38
2000	216	438	39
2005	209	365	36
2009	190	289	29
2010	185	269	27
2011	181	249	24

Source: M/o Health and Family Welfare

[14] Prevalence is a measurement of *all* individuals affected by the disease at a particular time, whereas incidence is a measurement of the number of *new* individuals who contract a disease during a particular period of time.

Indicator: Proportion of TB cases detected and cured under DOTS

Every patient who is cured stops spreading TB, and every life saved is a child, mother, or father who will go on to live a longer, TB-free life. The strategy of DOTS is based largely on research done in India in the field of TB over the past 35 years. Since 1997, after successful piloting DOTS has been implemented in India as the Revised National Tuberculosis Control Programme (RNTCP). In the RNTCP, the proportion of TB cases which are confirmed in the laboratory and the cure rate are both more than double that of the previous programme. The operational feasibility of DOTS in the Indian context has been demonstrated, with 8 out of 10 patients treated in the programme being cured, as compared with approximately 3 out of 10 in the previous programme. Multidrug -resistant tuberculosis (MDRTB) is a result and symptom of poor management of TB patients. DOTS has been shown to prevent the emergence of MDRTB and to reverse the trend of MDRTB in communities in which it has emerged. TB is the most common opportunistic infection among people living with HIV. The Ministry of Health and Family Welfare has reported that, the latest status of treatment of TB under DOTS reveals that, the proportion of TB cases detected is 70% and cured is 85% under DOTS.

Initiatives towards addressing the burden of TB…..

Revised National Tuberculosis Control Programme (RNTCP)

a. The programme is focusing on the reduction in the default rates amongst all new and re-treatment cases and is undertaking steps for the same.
b. To improve access to tribal and other marginalized groups the programme has developed a Tribal action plan which is being implemented with the provision of additional TB Units and DMCs in tribal/difficult areas, additional staff, compensation for transportation of patient & attendant and higher rate of salary to contractual staff.
c. At present RNTCP has established 2325 partnerships with NGOs and 13997 partnerships with private practitioners and private sector partners to catch

the patients outside the public sector. In addition 315 medical colleges (including private ones) have been involved in RNTCP by the end of March 2013.

d. Health facilities in government sector outside Health Ministry have been involved viz. ESI, Railways, Ports and the ministries of Mines, Steel, coal, etc.

e. Intensified Public Private Mix project is being undertaken with Indian Medical Association (IMA) in 16 states and with Catholic Bishop Conference of India (CBCI), a faith based organisation (FBO), in 19 States under the Global Fund supported Rolling Continuation Channel (RCC) Project.

f. Under the Global Fund Round 9 project civil society organizations are undertaking activities in 374 districts across 23 states to enhance the visibility and reach of the programme and engage with communities and community based care providers to improve TB care and control.

TB HIV Coordination:

To combat TB in HIV patients

g. The TB-HIV collaborative activities which were being undertaken in 14 states in 2006 were scaled up to all the states in 2007.

h. During 2012, 529749 TB suspects were referred from ICTCs to RNTCP and of them 9955 were diagnosed as having TB and in the same period 44063 TB patients were tested for HIV and of them about 7843 were diagnosed as HIV positive and offered access to HIV care.

Programmatic Management of Drug Resistant TB (PMDT) services:

The programme realizes the need for rapidly scaling up the PMDT services for early diagnosis and treatment of the Drug Resistant TB patients. By 2015 these services will be made available to all smear positive cases registered under the programme early during treatment including TB-HIV cases. Programme is in the process of establishing a network of 43 accredited laboratories across the country. These laboratories will be capable of performing conventional (i.e. Solid Culture and DST) and rapid diagnostic tests (i.e. Liquid Culture & DST and Molecular tests) for

MDR TB. In addition the programme is also accrediting and involving existing laboratories in Government Medical Colleges as well laboratories in the NGO and Private Sector to supplement the laboratory capacity. The PMDT services have been initiated in all 35 States/UTs of India with in some districts. All the districts in the country achieved complete geographical coverage by March 2013 and move towards universal access to quality diagnosis and treatment of MDR TB patient by gradually extending the opportunity to diagnose early during the treatment of TB. Also other newer rapid diagnostic test, such as Automated Nucleic acid amplification test (NAAT), like Gene Xpert etc. are under consideration.

Advocacy Communication and Social Mobilization (ACSM)

ACSM is a priority activity in the programme. The ACSM activities are inbuilt into the programme and are implemented intensively from the National level to the most peripheral level till the community. RNTCP has a well-conceived ACSM strategy in place. There is a dedicated IEC Resource Center in the programme website with relevant communication materials in various languages for local use. RNTCP has established its own branding of DOTS with a logo which has been widely recognized. Further provision of dedicated human resources at State and district levels for ACSM activities has been made in the programme.

4.6 TB Notification:

TB continues to be a major public health problem accounting for substantial morbidity and mortality in the country. Early diagnosis and complete treatment of TB is the corner-stone of TB prevention and control strategy. Inappropriate diagnosis and irregular/incomplete treatment with anti-TB drugs may contribute to complications, disease spread and emergence of Drug Resistant TB. In order to ensure proper TB diagnosis and case management, reduce TB transmission and address the problems of emergence and spread of Drug Resistant-TB, it is essential to have complete information of all TB cases. Towards the same, a Government Order

No Z-28015/2/2012-TB dated 7th May 2012 has been issued by the Government of India mandating all the healthcare providers to notify every TB case diagnosed and/or treated to local authorities i.e. District Health Officer / Chief Medical Officer of a district and Municipal health Officer of a Municipal Corporation / Municipality or to the Nodal Public Health Authority (for this purpose) or officials designated by the States/UTs for this purpose every month in a given format. For the purpose of this notification, healthcare providers will include clinical establishments run or managed by the Government (including local authorities), private or NGO sectors and/or individual practitioners.

TB-Diabetes Mellitus collaborative activities

As a consequence of urbanization as well as socio-economic development, there has been escalating epidemic of Diabetes Mellitus (DM). Available evidences and modeling studies indicate that 15-20% of all TB in India also suffer from DM and that diabetes worsens TB treatment outcomes- increased death, failure and relapse rates. Epidemiological models using 2000 data in India have shown that DM accounts for 20% of smear-positive pulmonary TB and studies indicates that the increase in DM prevalence in India has been an important obstacle to reducing TB incidence in the country.

In year 2011, World Health Organization has released the "Collaborative framework for care and control of tuberculosis and diabetes." One of the important activities of the Collaborative Framework is the routine implementation of bi-directional screening of the two diseases. India has adopted WHO framework for the care and control of Diabetes and Tuberculosis, where in bidirectional screening between two diseases has been worked out within the routine health services.

The Central TB Division took the matter to Director General of Health Services (DGHS) of Government of India who advised Non Communicable Disease (NCD) programme / National Programme for Prevention and Control of Cancer, Diabetes,

Cardiovascular Diseases and Stroke (NPCDCS), to issue appropriate directives to all concerned authorities in 100 districts presently under Non communicable Disease (NCD) programme to incorporate and prioritize the screening of all TB patients (all ages). Such arrangement will expand to additional 200 districts in 2014 as per NPCDCS programme expansion to other districts in the country.

Intensive and focused initiatives with added momentum are going on in India, to tackle the burden of diseases like HIV/ AIDS, Malaria and TB and the efforts have resulted in reversing the trend. Sustaining the achievement of trend reversal is the present challenge before the Country and initiatives with focus on vulnerable areas/ target population are being taken to overcome the challenge.

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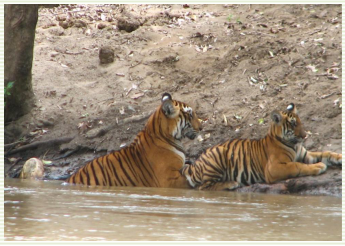
Chapter 9
PROTECTING THE ENVIRONMENT



Goal 7: Ensure Environmental Sustainability

TARGET 9: Integrate the principle of sustainable development into country policies and programmes and reverse the loss of environmental resources.

Indicators

- Proportion of land area covered by forest
- Ratio of area protected to maintain biological diversity to surface area
- Energy use per unit of GDP(Rupee)
- Carbon Dioxide emission per capita and consumption of Ozone -depleting Chlorofluoro Carbons (ODP tons)
- Proportion of the Households using solid fuels

TARGET 10: Halve, by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation

Indicators

- Proportion of population with sustainable access to an improved water source, urban and rural
- Proportion of population with access to improved sanitation, urban and rural

TARGET 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers

Indicators

- Slum population as percentage of urban population

Many of the greatest challenges to humanity in the future will relate to the effects of global environmental changes – in climate, urbanization, water availability, and loss of biological diversity. The 'Environment' comprises all entities, natural or manmade, external to oneself, and their interrelationships, which provide value, now or perhaps in the future, to humankind. Environmental concerns relate to their degradation through actions of humans. Sustainability of forest ecosystem is an essential component of the environmental conservation efforts and any degradation of forests will have an adverse impact on various systems such as water resources, agriculture, biodiversity, environment, climate and human health, besides, the subsistence living of tribal and other communities living in and around forest areas.

Natural resource depletion (water, mineral, forest, sand, rocks etc.), environmental degradation, loss of biodiversity and loss of resilence in ecosystems etc are the major environmental issues faced by India. The **Forest Conservation Act** of India, 1980 with amendments in 1988, provides for conservation of forests and matters connected with protection of trees from illegal felling and destruction. The National Environment policy 2006 has evolved from the recognition that only such development is sustainable, which respects ecological constraints. India enacted a Forest Rights Act, 2006 to vest forest rights and titles on traditional forest dwelling communities. India's forests have long been an important part of her culture and a defining feature of her landscape.

Indicator: Proportion of land area covered by forest

India recognizes that conserving, expanding and improving the quality of our forests is a major national priority. This has enormous domestic and global benefits. Not only it is an efficient way to mitigate the effects of climate change but it also improves India's water security, safeguards rich biodiversity and provides livelihood security for millions of people. As per 2011 assessment, the Country has a forest cover of 692027 km^2, which is 21.05% of the Country's geographical area. The forest cover (revised) estimate for 2009 shows total forest cover of 692394km^2which indicates a decline of 367 km^2 in 2011. The States which reported major decline are

Andhra Pradesh (281 km^2), Manipur (190 km^2), and Nagaland (146 km^2). During 2009-11, Forest Cover increased more than 50 sq. km. in Punjab, (100 sq.km), Jharkhand (83 sq.km), Tamil Nadu ((74 sq.km), Aandaman and Nicobar Islands (62 sq.km) and Rajasthan (51 sq.km).

Table 9.1: Forest Cover in India

Class	Area (sq.km)				% of Geographic Area			
Forest Cover	**2003**	**2007**	**2009**	**2011**	**2003**	**2007**	**2009**	**2011**
Very dense forest	51285	83510	83428	83471	1.56	2.54	2.54	2.54
Moderately dense forest	339279	319012	320238	320736	10.32	9.7	9.74	9.76
Open Forest	287769	288377	288728	287820	8.76	8.77	8.78	8.75
Total Forest Cover	**678333**	**690899**	**692394**	**692027**	**20.64**	**21.02**	**21.06**	**21.05**

Source: State of Forest Report 2011

Area wise, state of Madhya Pradesh has the largest forest cover (77,700 km^2) in the Country followed by Arunachal Pradesh (67,410km^2), Chhattisgarh (55674km^2), Maharashtra (50646 km^2) and Odisha (48903 km^2). In terms of percentage of forest cover with respect to total geographical area, Mizoram with 90.68% has the highest, followed by Lakshadeep (84.56%), Andaman & Nicobar Islands (81.51%), Arunachal Pradesh (80.50%), Nagaland (80.33%), Meghalaya (77.02%) and Tripura (76.07%).

Afforestation is progressing…

In India nearly 200 million people are dependent on forests for livelihood. Concerted programmes are making them partners in conservation of forests. National Afforestation Programme (NAP) implemented by M/o Environment and Forests is a Participatory Approach to Sustainable Development of Forests. The overall objective of the scheme is to develop the forest resources with people's participation, with focus on improvement in livelihoods of the forest-fringe communities, especially the poor. NAP Scheme aims to support and accelerate the ongoing process of devolving forest protection, management and development functions to decentralized institutions of Joint Forest Management Committee (JFMC) at the village level, and Forest Development Agency (FDA) at the forest division level.

Indicator: Ratio of area protected to maintain biological diversity to surface area

India is one of the 17 mega diverse countries with 4 global biodiversity hotspots. Ratio of area protected to maintain biological diversity to surface area is the appropriate indicator to measure the country's bio-diversity strength. The network of protected areas in India, presently covers about 5.06% of the country's total geographic area. A network of 689 Protected Areas (PAs) has been established (as on 31/12/13), extending over 1,66,352.63 sq. kms comprising 102 National Parks, 526 Wildlife Sanctuaries, 57 Conservation Reserves and 4 Community Reserves (5.06% of total geographical area). There is a positive change in the network of protected areas in the Country as in 2011, the network included 668 Protected Areas (PAs), extending over 1,61,221.57 sq. kms (4.90% of total geographical area).

Table 9.2: Protected Areas of India –as on 31/12/2013

	No.	Area	% of Geographical Area of India
National Parks (NPs)	102	40075 km^2	1.22 %
Wildlife Sanctuaries (WLSs)	526	124239 km^2	3.78%
Conservation Reserves (CRs)	57	2017.94km^2	0.06 %
Community Reserves	4	20.69 km^2	0.0 %
Protected Areas (PAs)	**689**	**166352.63 km^2**	**5.06 %**

Source: M/o Environment and Forests

Also, 41Tiger Reserves and 32 Elephant Reserves have been designated for species specific management of tiger and elephant habitats.

National Mission for a Green India

The National Mission for a Green India is one of the eight Missions under the National Action Plan on Climate Change (NAPCC). The Green India Mission (GIM) recognizes that climate change phenomena will seriously affect and alter the distribution, type and quality of natural resources of the country and the associated livelihoods of the people. GIM acknowledges the influences that the forestry sector has on environmental amelioration through climate mitigation, food security, water security, biodiversity conservation and livelihood security of forest dependent communities. GIM puts the "greening" in the context of climate change adaptation and mitigation, meant to enhance ecosystem services like carbon sequestration and storage (in forests and other ecosystems), hydrological services and biodiversity;

along with provisioning services like fuel, fodder, small timber and NTFPs. The GIM has the objectives:

- Increased forest/tree cover on 5m ha of forest/non-forest lands and improved quality of forest cover on another 5 m ha (a total of 10 m ha) Improved ecosystem services including biodiversity, hydrological services and carbon sequestration as a result of treatment of 10 m ha.
- Increased forest-based livelihood income for 3 million forest dependent households
- Enhanced annual CO_2sequestration of 50-60 million tones by the year 2020.

The Mission aims to respond to climate change by a combination of adaptation and mitigation measures, which would help:

- enhancing carbon sinks in sustainably managed forests and other ecosystems;
- adaptation of vulnerable species/ ecosystems to the changing climate; and
- adaptation of forest dependant local communities in the face of climatic variability.

The country is on track in increasing the protection network for arresting the diversity losses and for maintaining ecological balance.

The United Nations General Assembly has declared 2011 to 2020 as the UN Decade on Biodiversity (UNDB) with a view of raising awareness about the importance of biodiversity (or the variety of life on earth), and achieving the 20 headline targets of the ten year 'Strategic Plan'. The Ministry of Environment and Forests and the Convention on Biological Diversity launched the United Nations Decade on Biodiversity (UNDB) (2011-2020) for Asia and the Pacific, on 23rd May 2011.

REDD (Reducing Emissions from Deforestation and Forest Degradation) is the global endeavour to create an incentive for developing countries to protect, better manage and save their forest resources, thus contributing to the global fight against climate change. REDD+ goes beyond merely checking deforestation and forest degradation, and includes incentives for positive elements of conservation, sustainable management of forests and enhancement of forest carbon stocks. REDD+ conceptualizes flow of positive incentives for demonstrated reduction in deforestation or for enhancing quality and expanse of forest cover. It works on the basis of creating a financial value for the carbon stored and enhanced in biomass and soil of standing forests. Countries that reduce emissions and undertake sustainable management of forests will be entitled to receive funds and resources as incentives. India is playing a positive role through its REDD+ initiatives and has taken a firm stance in favour of a comprehensive REDD+ approach. It has presented an ambitious Green India Mission Programme under its National Action Plan on Climate Change.

Indicator: Energy use per unit of GDP (Rupee)

Per-capita Energy Consumption (PEC) during a year is computed as the ratio of the estimate of total energy consumption during the year to the estimated mid-year population of that year. Energy Intensity is defined as the amount of energy consumed for generating one unit of Gross Domestic Product (at constant prices). PEC and Energy intensity are the most used policy indicators, both at national and international levels. In the absence of data on consumption of non-conventional energy from various sources, particularly in rural areas in the developing countries,

including India, these two indicators are generally computed on the basis of consumption of conventional energy.

In India, the consumption of energy in petajoules[15] was in the form of electricity which accounted for about 57.57% of the total consumption during 2011-12. Coal and Lignite were second (19.91%), while Crude Petroleum (18.75%) was third. The total consumption of energy from conventional sources increased from 44,448 petajoules during 2010-11 to 47,264 petajoules during 2011-12, showing an increase of 6.33%. The Per-capita Energy Consumption (PEC) (the ratio of the estimate of total energy consumption during the year to the estimated mid-year population of that year) increased from 2232.5 KWh in 1990-91 to 6,205.25 KWh in 2011-12. The annual increase in PEC from 2010-11 to 2011-12 was 7.19%. The Energy Intensity (amount of energy consumed for generating one unit of Gross Domestic Product, at 1999-2000 prices) has shown a mixed trend during 1990-2012, while showing an overall decline from 0.1594 KWh in 1990-91 to 0.145 KWh(at 2004-05 prices) in 2011-12.

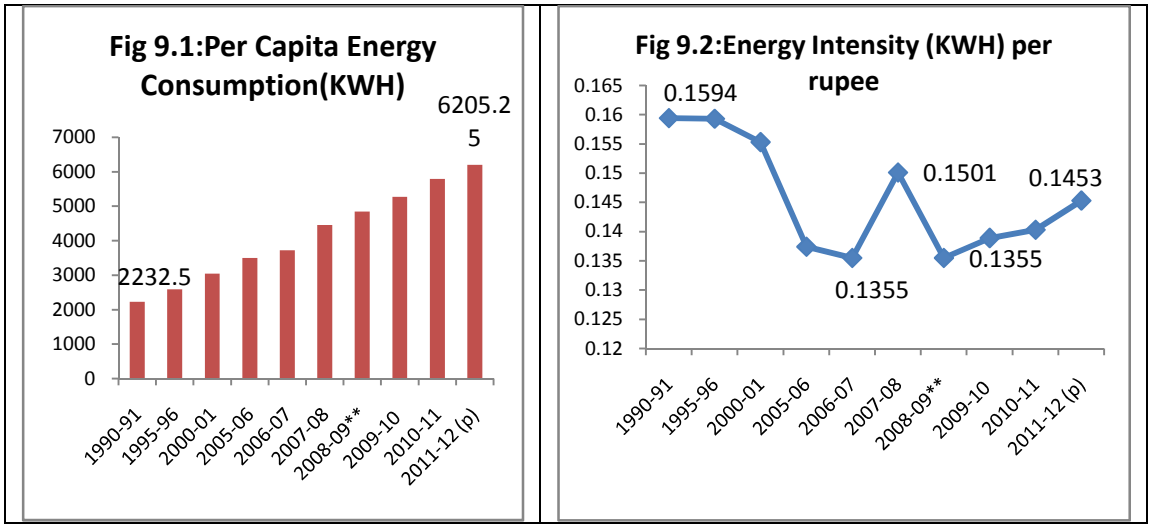
Table 9.3: Trends in Per Capita Energy Consumption and Energy Intensity in India (KWh)

Year	Per Capita Energy Consumption(KWH)	Energy Intensity (KWH) per rupee@
1990-91	2232.50	0.1594
1995-96	2593.58	0.1593
2000-01	3047.81	0.1553
2005-06	3497.59	0.1374
2006-07	3727.24	0.1355
2007-08	4451.59	0.1501
2008-09**	4846.24	0.1355
2009-10	5276.58	0.1389
2010-11	5789.03	0.1403
2011-12 (p)	6205.25	0.1453
Growth rate of 2011-12 over 2010-11 (%)	**7.19**	**3.56**

@ Energy intensity =Amount of energy consumed for producing one unit of GDP, **till 2008-09 GDP estimates are with 1999-2000 prices and from 2008-09 with 2004-05 prices. Source : Energy Statistics 2013.

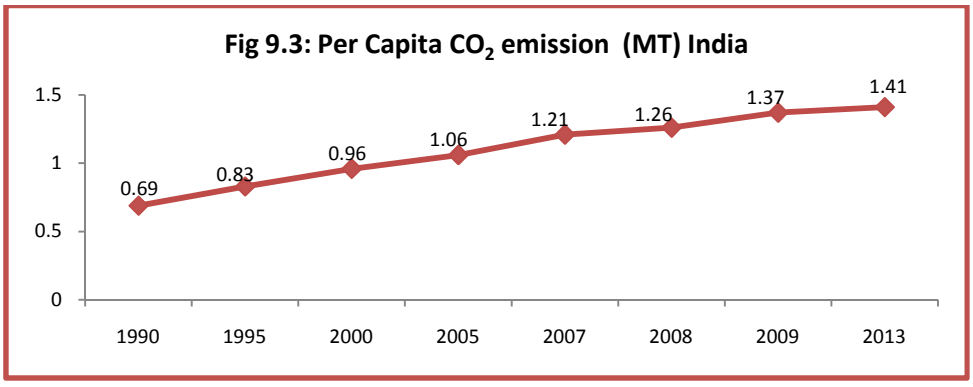
[15] 1 petejoule = 10^{15} Joules

The trends shown in Per Capita energy consumption and Energy intensity during 1990 to 2012 are presented below.



Indicator: Carbon Dioxide emission per capita and consumption of Ozone -depleting Chlorofluoro Carbons (ODP tons)

Carbon dioxide (CO_2) is the primary greenhouse gas emitted through human activities. Human activities are altering the carbon cycle—both by adding more CO_2 to the atmosphere and by influencing the ability of natural sinks, like forests, to remove CO_2 from the atmosphere. While CO_2 emissions come from a variety of natural sources, human-related emissions are responsible for the increase that has occurred in the atmosphere since the industrial revolution. As per the Key World Energy Statistics 2013, by International Energy Agency, the per capita CO_2 emission (MT) of India is 1.41 (MT) whereas the corresponding estimate for world and Asia are respectively 4.5 (MT) and 1.51 (MT). In India, the per capita CO_2 emission (MT) increased steadily during 1990 to 2013.



Source: International Energy Agency

In 2013, the estimated CO_2 emission (Million Tonnes) for India is 1745.06. The Carbon dioxide emission showed a percentage increase of 199.68% in 2013 over 1990 for India whereas the corresponding increase for the World was 49.49%. During 2009 to 2013, the percentage increase in CO_2 emission was 10% for India and 8% for the world.

Table 9.4: Change in Carbon Dioxide emissions

	1990	1995	2000	2005	2007	2008	2009	2013
Carbon dioxide emissions Million tonnes (Sectoral approach) - India	582.3	776.6	972.5	1160	1357	1431	1585.8	1745.06
Carbon dioxide emissions Million tonnes (Sectoral approach) -World	20966	21792	23493	27188	29048	29454	28999.4	31342

Source:International Energy Agency

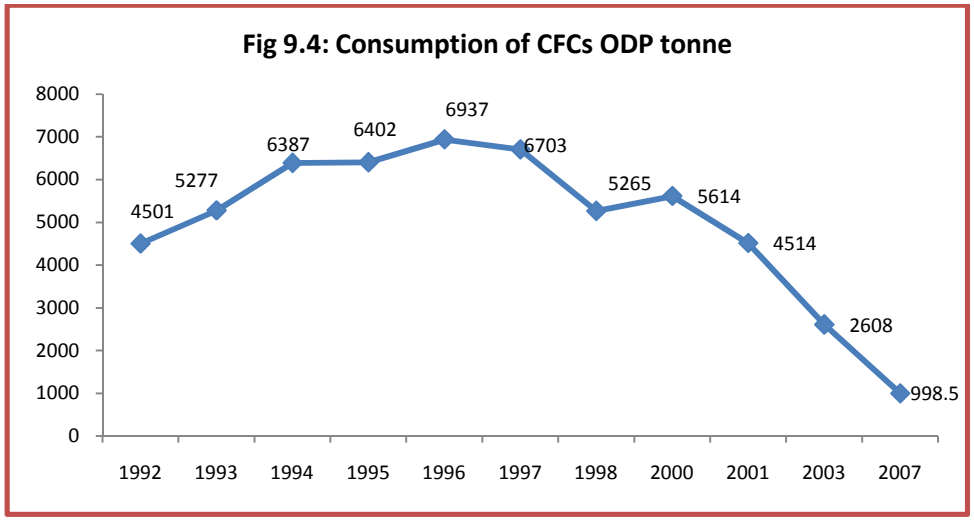
Protecting Ozone Layer….

India became Party to the Vienna Convention for the Protection of the Ozone Layer on 18th March, 1991 and the Montreal Protocol on Substances that Deplete the Ozone Layer on 19th June,1992. India was mainly producing and using nine of the 96 substances controlled under the Montreal Protocol. These are CFC-11, CFC-12, CFC-113, HCFC-22 halon-1211, halon-1301, CTC, Methyl Chloroform and Methyl Bromide.

India had prepared a detailed Country Programme (CP) in 1993 to phase-out ODS in accordance with its National Industrial Development Strategy. The objectives of the CP were to phase-out ODSs by accessing the Protocol's Financial Mechanism without undue economic burden to both consumers and industry manufacturing various types of equipments using ODSs. The other objectives of the CP were minimisation of economic dislocation as a result of conversion to non-ODS technologies, maximisation of indigenous production, preference to one time replacement, emphasis on decentralized management and minimisation of obsolescence. India has phased out production and consumption of CFCs, CTC and halons except use of pharmaceutical grade CFCs in manufacturing of Metered Dose

Inhalers (MDIs) for Asthma and Chronic Obstructive Pulmonary Diseases (COPD) patients.

In accordance with the National Strategy for ODS phase-out, the Ministry of Environment and Forests, Government of India, has notified Rules covering various aspects of production, sale, consumption, export and import of ODS. In 2007, consumption of CFC is estimated at 998 ODP tones, down from 5614 ODP tones in 2000.



Source: Ozone Cell, M/o Environment and Forests

Indicator: Proportion of the Households using solid fuels

As per Census 2011, 67.3% households are using solid fuels (fire wood / crop residue, cow dung cake/ coke etc) for cooking against 74.3% in 2001. Firewood is being used as fuel in majority of the households (49% in 2011 and 52.5% in 2001). In

2011, solid fuel is used for cooking in 87% households whereas the status in urban areas is 26%. There is an increase of 11 points in the use of LPG/ PNG as cooking fuel.

Sustainable access to improved drinking water and improving sanitation facilities

Indicator: Proportion of population with sustainable access to an improved water source, urban and rural

The study of the drinking water facility requires analysing the access to different sources of drinking water and sufficiency of drinking water. The accessibility of drinking water at household level has other aspect like the distances travelled by members of a household to reach the source of drinking water. The quality of drinking water is also a very important component in maintaining good health of the population. Many households attempt to improve the quality of water they drink by adopting various methods for treating the water before drinking.

In NSS 69th round (July- Dec 2012), the improved source of drinking water include: 'bottled water', 'piped water into dwelling', 'piped water to yard/plot', 'public tap/standpipe', 'tube well/borehole', 'protected well', 'protected spring', and 'rainwater collection'. During 2012, in rural India, 88.5% households had improved source of drinking water while in urban India 95.3% households had improved source of drinking water. The NSS 2012 also shows that while in rural Kerala only 29.5 % of households got drinking water from 'improved sources', the proportion was 80% or

more for most of the other bigger states except Jharkhand (64.4%). On the other hand, in the urban areas of most of the bigger states, more than 90%of households got drinking water from 'improved sources' with the notable exception of Kerala (56.8 percent). This can be attributed to the fact of 'uncovered wells' being the major source of drinking water in both rural (50.5%) and urban (43.9%) areas in Kerala as revealed by Census 2011.

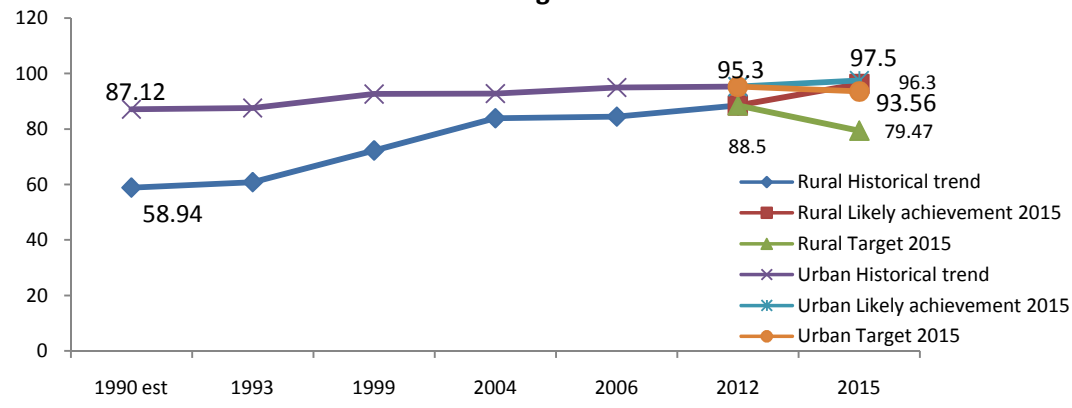
The Census provides details of sources of drinking water accessed by the households. In 2011, in rural India, Hand Pump/ Tube well (51.9%) is the main source of drinking water followed by Tap (30.8%). In urban India Tap water (70.6%) is the major source followed by Hand Pump/ Tube well (20.8%).

Table 9.5: Sources of Drinking Water (%) – Census

	Tap		Well		Hand Pump/ Tube well		Other sources	
	2011	2001	2011	2001	2011	2001	2011	2001
Rural India	30.8	24.3	13.3	22.2	51.9	48.9	4.0	4.5
Urban India	70.6	68.7	6.2	7.7	20.8	21.4	2.5	2.3
All India	43.5	36.7	11	18.2	42	41.2	3.5	3.9

The prevailing trend over time, suggests attainability of nearly cent percent coverage by 2015, including both rural and urban sectors. In other words, halving the proportion of households without access to safe drinking water sources from its 1990 level to be reached by 2015, has already achieved in both rural and urban areas.

Fig 9.5: Percentage of households with access to improved source of drinking water

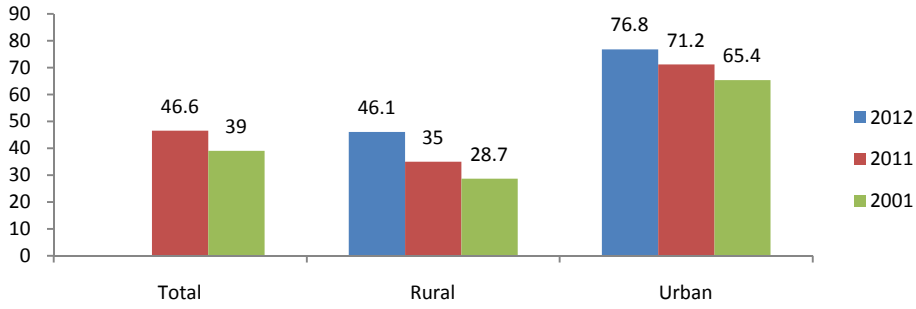


Source: NFHS, DLHS, NSS

The quality of drinking water, sufficiency of drinking water and availability within premises of households etc are important related concerns. The NSS 2012 had ascertained the selected households' perception on the quality of drinking water they received from the principal source. It was ascertained whether the water was 'bad in taste', 'bad in smell', 'bad in taste and smell', 'bad due to other reasons' or had 'no defect'. The proportion of households reporting 'no defect' of drinking water from respective principal source can be interpreted as the proportion of households that were satisfied with the quality of the drinking water they got. The result shows that 87.7 percent and 88.1 percent households in rural India and urban India respectively were getting good quality of drinking water. In rural areas of most of the bigger states, more than 75 percent of households got 'good quality' of drinking water except in Assam (58.0 percent). Similarly in urban areas of most of the bigger states more than 70 percent of households got 'good quality' of drinking water except in Assam (63.8 percent) and Jammu and Kashmir (65.6 percent).

The availability of drinking water facility within premises of the households is an indicator of the burden of the households to access the drinking water. Census 2011 revealed that, at all India level, 46.6%households has drinking water facility within premises of the households showing an improvement over 39% in 2001. NSS 2012, reveals that, in rural areas 46.1% households and in urban areas 76.8% households have drinking water facility within premises of the households.

Fig 9.6: Drinking water facility within primises of households



Source: Census 2011, 2001, NSS- 2012

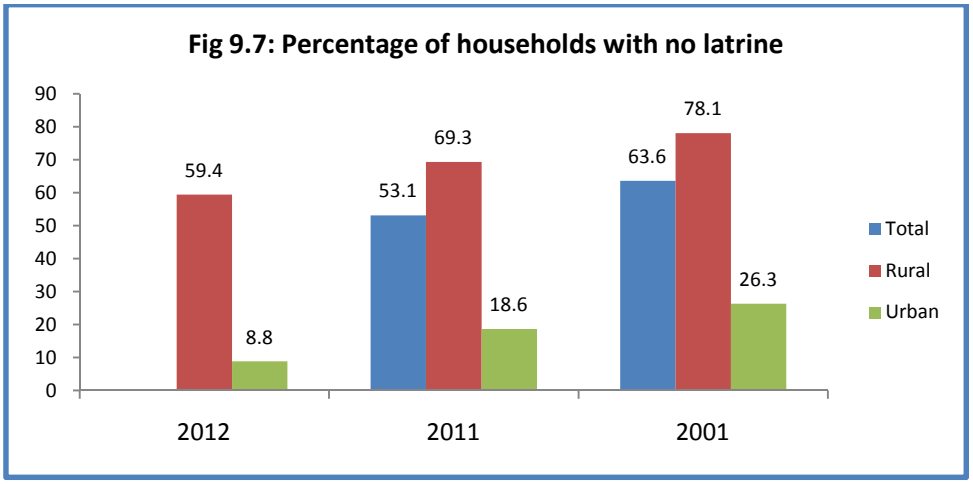
Further, during 2012, 85.8% households in rural India had sufficient[16] drinking water, the figure being 89.6 % in urban India. Among rural areas of bigger states, Uttar Pradesh had the highest (97.1%) and Jharkhand, the lowest (70.3%) proportion of households having sufficient drinking water. Similarly among urban areas of bigger states, Uttar Pradesh had the highest (96.6%) and Madhya Pradesh, the lowest (76.2%) proportion of households having sufficient drinking water.

The sanitation facility available to the households is having a huge impact on the living conditions and it is closely related to the health and hygiene of the members of households. In World Health Organization and United Nations Children's Fund's Global Water Supply and Sanitation Assessment 2000 Report, sanitation was defined to include connection to a sewer or septic tank system, pour-flush latrine, simple pit or ventilated improved pit latrine, with allowance for acceptable local technologies. The NSS 2012 shows that 59.4 percent and 8.8 percent households in rural India and urban India respectively had no latrine facilities. Across rural areas of bigger states, it is observed that during 2012, Jharkhand had the highest (90.5 %) proportion of households that had no latrine facilities, much higher than the all India proportion (59.4 percent). Other states among the bigger states where the estimated proportion among the rural households was higher than the corresponding all India figure include Tamil Nadu(66.4%), Karnataka (70.8%), Bihar (72.8%), Rajasthan (73.0%), Uttar Pradesh (75.3%), Chhattisgarh (76.7%), Madhya Pradesh (79.0%) and Odisha (81.3%). The same pattern is also observed in urban areas of these states.

The NSS 2012 revealed 59.4 percent and 8.8 percent households in rural India and urban India respectively had no latrine facilities. This has reaffirmed the census 2011 results that, more than 50% of the households of the Country are not having latrine facility, though an improvement of 10 percentage points compared to the corresponding percentage recorded during the last decade. In 2011, the percentage of households with no latrine reduced to 53.1% from 63.6% in 2001. Census 2011

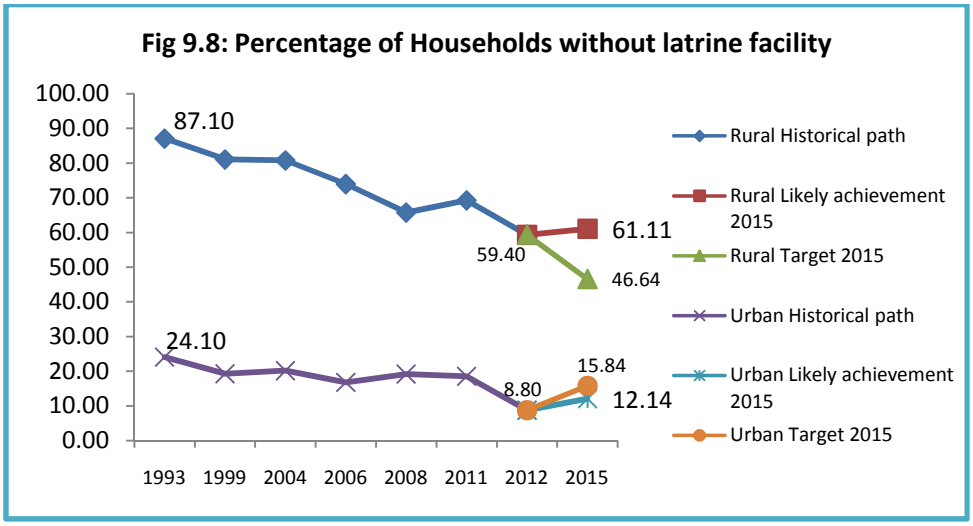
[16]The availability of drinking water from the principal source was taken as sufficient throughout the year if, in each of the calendar months of the year, availability of drinking water was sufficient.

revealed that, in rural areas 69.3% households are not having latrine facility, whereas in urban areas the corresponding figure is 18.6% in 2011.



Source: Census 2011, 2001, NSS- 2012

Towards ensuring the basic sanitation of latrine facility in households, while in urban areas, the 2015 target is likely to be met, the progress is quite lagging in rural areas.



Source: NFHS, DLHS, Census, NSS

Another important aspect of the sanitation facility is whether the households have access to 'improved source of latrine'. In NSS 2012, 'improved source' of latrine includes sources such as 'flush/pour-flush to: piped sewer system/septic tank/pit latrine', 'ventilated improved pit latrine', 'pit latrine with slab' and 'compositing toilet'. It has been observed that during 2012, 38.8% and 89.6% households in rural and urban India respectively had access to 'improved source' of latrine. Across rural areas of bigger states, it has been observed that during 2012, Kerala had the highest

(96.9%) and Jharkhand, the lowest (8.9%) proportion of households having access to 'improved source' of latrine. In urban areas of each of the bigger states, more than 75% of households had access to 'improved source' of latrine and it was highest (98.8%) in Kerala and lowest (74.9%) in Chhattisgarh.

Improving the lives in slums….

Indicator: Slum population as percentage of urban population

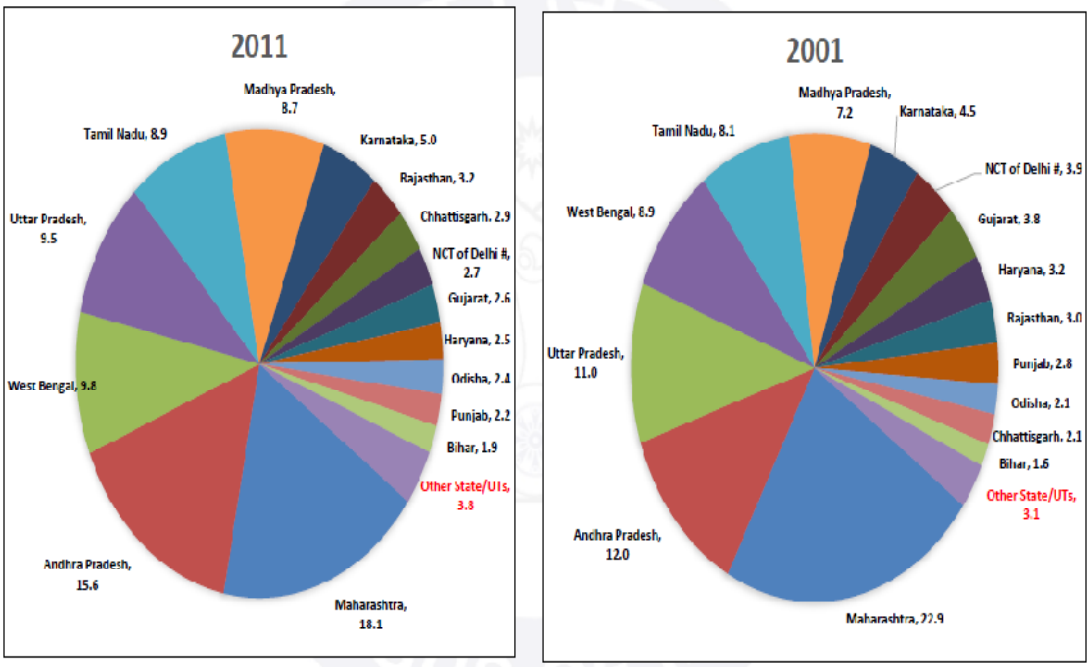
The Millennium Development Goal 7 also aims at improving the living condition of slum dwellers. In India Census, and National Sample Survey are two sources which report slum data at national level. However, the definition is not the same in both the data sources as shown below.

Table 9.6: Definition of Slum

Census 2011	NSS 2012
• All notified areas in a town or city notified as 'Slum' by State, UT administration or local government under any act including a 'Slum Act' may be considered as 'notified slums'. • All areas recognised as 'Slum' by State, UT administration or local government, Housing and Slum Boards, which may not have been formally notified as slum under any act may be considered as 'recognised slums'. • A compact area of at least 300 population or about 60-70 households of poorly built congested tenements, in unhygienic environment, usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities. Such areas should be identified by the Charge Officer and also inspected by an Officer nominated by Directorate of Census operations. Such areas may be considered as 'identified slums'.	• Areas notified as slums by the concerned municipalities, corporations, local bodies or development authorities were termed 'notified slums'. • Also, any compact settlement with a collection of poorly built tenements, mostly of temporary nature, crowded together, usually with inadequate sanitary and drinking water facilities in unhygienic conditions, was considered a slum by the survey, provided at least 20 households lived there. Such a settlement, if not a *notified* slum, was called a *non-notified* slum. (Note that while a *non-notified* slum had to consist of at least 20 households, no such restriction was imposed in case of *notified* slums.) • Slums: The word "slum" covered both *notified* slums and *non-notified* slums

As per Census 2011, total number of towns reported is 2613, showing an increase from 1743 in 2001.

Fig 9.9: State Share of slum population to total slum population of India – Census



Other States/UTs
1. Reported slum less than 1.%
Jammu & Kashmir, Uttarakhand, Jharkhand, Assam, Kerala, Tripura, Tripura, Puducherry #,Himachal Pradesh, Chandigarh # , Nagaland, Mizoram, Nagaland, Mizoram, Meghalaya, Sikkim, Arunachal Pradesh, Goa and A & N Islands #
2. State/UTs not reported slum
Manipur, Daman & Diu #, D & N Haveli # and Lakshadweep #

Other States/UTs includes :
1. Reported slum less than 1.%
Jammu & Kashmir, Uttarakhand, Jharkhand, Chandigarh #, Meghalaya, Assam,Assam,Puducherry #,Tripura and Kerala
2. State/UTs not reported slum
Himachal Pradesh, Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Daman & Diu #,D & N Haveli #, Lakshadweep #andA & N Islands #

Source: Primary Census Abstract for Slum, 2011
Office of the Registrar General & Census Commissioner, India

As per NSS 2012, at all-India level, only 10.8 percent of urban dwelling units were situated in slum. However, Census 2011 reported that 17.2% of urban households are located in slums. Census recorded a 37.14% decadal growth in the number of slum households.

Table 9.7: Slum households (Census)

	2001	2011	Decadal growth
Slum households	10150719	13920191	37.14
Urban households (slum reported towns)	43556155	62792741	44.17
Urban all towns	55832570	80888766	44.88

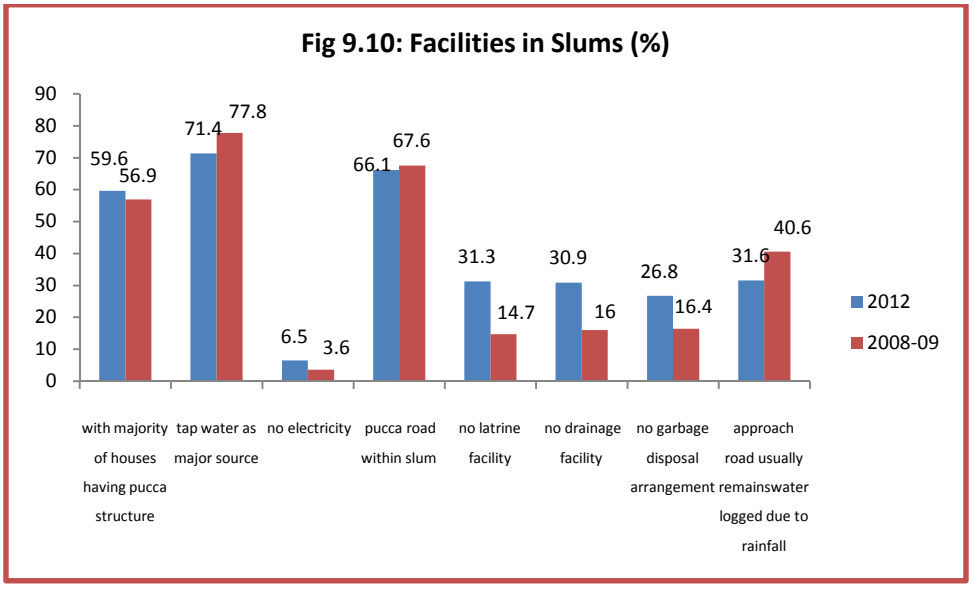
Source: Census 2011, O/o Registrar General of India

Census further reveals that in 2011, 17.36% of the urban population lives in slums.

Table 9.8: Slum Population (Census)			
	2001	2011	Decadal growth
Slum households	52371589	65494604	25.06
Urban households (slum reported towns)	223111858	291838124	30.8
Urban all towns	286119689	377106125	31.8

Source: Census 2011, O/o Registrar General of India

The NSS 2012, presents the living conditions of the households in the slums by considering the type of the structure, source of drinking water, sanitation, road etc.



Source: NSS 2012

Though, the percentage of slums with majority of houses having pucca structure has improved during 2008-12, in the areas of access to electricity, pucca road, tap water, sanitation facility etc, the situation has deteriorated, which may be attributed to the significant decadal growth of households as well as population in slums.

Focussed initiatives to ensure basic living facilities….

National Rural Drinking Water Programme

Provision of safe drinking water is a basic necessity. Water is a State subject and rural water supply has been included in the Eleventh Schedule of the

Constitution among the subjects that may be entrusted to Panchayats by the States. Considering the magnitude of the problem, the Central Government has been supplementing the efforts of the State Governments through the centrally sponsored Accelerated Rural Water Supply Programme (ARWSP) since 1972–73. The Eleventh Plan identified the major issues that need tackling during this period as the problem of sustainability, water availability and supply, poor water quality, centralized vs. decentralized approaches and financing of O&M cost while ensuring equity in regard to gender, socially and economically weaker sections of the society, school children, socially vulnerable groups such as pregnant and lactating mothers, specially disabled senior citizens etc. In order to address the above issues, the rural water supply programme and guidelines have been revised with effect from 1.4.2009 as the National Rural Drinking Water Programme (NRDWP).

The following paradigm shift has been made in the National Rural Drinking Water Programme guidelines for ensuring sustainable and environmentally friendly drinking water supply projects:

- Move forward from achieving habitation level coverage towards household level drinking water coverage.
- Move away from over dependence on single source to multiple sources through conjunctive use of surface water, groundwater and rainwater harvesting.
- Focus on ensuring sustainability in drinking water schemes and prevent slip back.
- Encourage water conservation including revival of traditional water bodies
- Achieve household level drinking water security through formulation of proper water demand and budgeting at the village level.
- Convergence of all water conservation programme at the village level.
- Move consciously away from high cost treatment technologies for tackling arsenic & fluoride contamination to development of alternative sources in respect of arsenic and alternate sources/dilution of aquifers through rainwater harvesting in respect of tackling fluoride contamination.

• Treatment of catchment area of drinking water sources through simple measures such as fencing and effective implementation of Total Sanitation Campaign (TSC) programme, prevention of sewage/animal waste leaching into surface/ underground water sources, promoting ecological sanitation to reduce use of inorganic fertilizers so as to prevent nitrate pollution in drinking water sources.

• Promotion of simple to use technologies such as terracotta based filtration systems, solar distillation and dilution through rainwater harvesting for tackling iron, salinity and suspended particulate matters.

• Linkage of water quality monitoring and surveillance with the Jalmani scheme for implementation of standalone drinking water purifications systems in rural schools

In order to ensure operationalization of the approaches mentioned above, the following main changes have been incorporated in the Rural Water Supply Programme.

• Awarding performance rather than non-performance of States. This is done by removing the weightage for the number of uncovered/partially covered habitations and water quality affected habitations in the allocation criteria for central assistance to the States.

• Introduction of an incentive of 10% of the NRDWP allocation for the States that transfer the management of rural drinking water schemes (RWS) to the Panchayati Raj Institutions.

• Increasing the percentage allocation for “Sustainability” component from 5% to 20% for implementing sustainability measures in RWS projects by the States. This component is funded on a 100% Central share basis as against the 50% Central share in regard to other components.

• Introduction of a new component of Support Fund with 5% allocation. Setting up of Water and Sanitation Support Organisation by each State to take up support activities focusing on software activities like awareness generation, capacity building, water quality testing, MIS etc.

• In order to encourage the States of North-East and J&K, that have limited resources, the fund sharing pattern for them has been liberalized from the existing 50:50 (Centre to State) to 90:10 (Centre to State).

To meet the emerging challenges in the rural drinking water sector relating to availability, sustainability and quality, the components under the programme are NRDWP (Coverage), NRDWP (Sustainability), NRDWP (Water quality), NRDWP (DDP areas), NRDWP (Natural calamity) and NRDWP (Support). In accordance with the policy of Government of India, the Department of Drinking Water Supply has earmarked 10% of the total Central outlay for the programme for the NE States.

Nirmal Bharat Abhiyan and Nirmal Gram Puraskar

Individual Health and hygiene is largely dependent on adequate availability of drinking water and proper sanitation. There is, therefore, a direct relationship between water, sanitation and health. Consumption of unsafe drinking water, improper disposal of human excreta, improper environmental sanitation and lack of personal and food hygiene have been major causes of many diseases in developing countries. India is no exception to this. Government started the Central Rural Sanitation Programme (CRSP) in 1986 primarily with the objective of improving the quality of life of the rural people and also to provide privacy and dignity to women. The concept of sanitation was expanded to include personal hygiene, home sanitation, safe water, garbage disposal, excreta disposal and waste water disposal. With this broader concept of sanitation, CRSP adopted a “demand driven” approach with the name “Total Sanitation Campaign” (TSC) with effect from 1999. The revised approach emphasized more on Information, Education and Communication (IEC), Human Resource Development, Capacity Development activities to increase awareness among the rural people and generation of demand for sanitary facilities. This enhanced people’s capacity to choose appropriate options through alternate delivery mechanisms as per their economic condition. The Programme was implemented with focus on community-led and people centered initiatives. Financial

incentives were provided to Below Poverty Line (BPL) households for construction and usage of individual household latrines (IHHL) in recognition of their achievements. Assistance was also extended for construction of school toilet units, Anganwadi toilets and Community Sanitary Complexes (CSC) apart from undertaking activities under Solid and Liquid Waste Management (SLWM).

To give a fillip to the TSC, Government of India also launched the Nirmal Gram Puraskar (NGP) that sought to recognise the achievements and efforts made in ensuring full sanitation coverage. The award gained immense popularity and contributed effectively in bringing about a movement in the community for attaining the Nirmal Status thereby significantly adding to the achievements made for increasing the sanitation coverage in the rural areas of the country. Encouraged by the success of NGP, the TSC was renamed as "Nirmal Bharat Abhiyan" (NBA). The objective is to accelerate the sanitation coverage in the rural areas so as to comprehensively cover the rural community through renewed strategies and saturation approach. The main objectives of the NBA are as under:

- Bring about an improvement in the general quality of life in the rural areas.
- Accelerate sanitation coverage in rural areas to achieve the vision of Nirmal Bharat by 2022 with all gram Panchayats in the country attaining Nirmal status.
- Motivate communities and Panchayati Raj Institutions promoting sustainable sanitation facilities through awareness creation and health education.
- To cover the remaining schools not covered under Sarva Shiksha Abhiyan (SSA) and Anganwadi Centres in the rural areas with proper sanitation facilities and undertake proactive promotion of hygiene education and sanitary habits among students.
- Encourage cost effective and appropriate technologies for ecologically safe and sustainable sanitation.
- Develop community managed environmental sanitation systems focusing on solid & liquid waste management for overall cleanliness in the rural areas.

Nirmal Bharat Abhiyan (NBA) envisages covering the entire community for saturated outcomes with a view to create Nirmal Gram Panchayats with following priorities:

- Provision of Individual Household Latrine (IHHL) of both Below Poverty Line (BPL) and Identified Above Poverty Line (APL) households within a Gram Panchayat (GP).
- Gram Panchayats where all habitations have access to water to be taken up. Priority may be given to Gram Panchayats having functional piped water supply.
- Provision of sanitation facilities in Government Schools and Anganwadis in Government buildings within these GPs.
- Solid and Liquid Waste Management (SLWM) for proposed and existing Nirmal Grams.
- Extensive capacity building of the stake holders like Panchayati Raj Institutions (PRIs), Village Water and Sanitation Committees (VWSCs) and field functionaries for sustainable sanitation.
- Appropriate convergence with Mahatma Gandhi National Rural Employment Gurantee Scheme (MNREGS) with unskilled man-days and skilled man-days.

The strategy of NBA is to transform rural India into ‘Nirmal Bharat’ by adopting the 'community led' and 'people centered' strategies and community saturation approach. A "demand driven approach" is to be continued with emphasis on awareness creation and demand generation for sanitary facilities in houses, schools and for cleaner environment.

Nirmal Gram Puraskar

The Government of India (GOI) has been promoting sanitation coverage in a campaign mode to ensure better health and quality of life for people in rural India. To add vigour to its implementation, GOI launched an award based Incentive Scheme for fully sanitized and open defecation free Gram Panchayats, Blocks, Districts and States called “Nirmal Gram Puraskar” (NGP) in October 2003 and gave away the first awards in 2005 as a component of its flagship scheme Total Sanitation Campaign (TSC). Nirmal Gram Puraskar till 2011 was given by Ministry of Drinking Water and Sanitation, Government of India at all levels of PRIs that is Gram Panchayat, Block Panchayat and district Panchayat.

Jawaharlal Nehru National Urban Renewal Mission (JNNURM)

The mission JNNURM aims to encourage reforms and fast track planned development of identified cities. Focus is to be on efficiency in urban infrastructure and service delivery mechanisms, community participation, and accountability of Urban Local Bodies towards citizens. In addition to improving the basic amenities and infrastructure in urban areas, the programme also targets to improve the conditions of Slums. The objectives of the JNNURM are to ensure that the following are achieved in the urban sector;

(a) Focussed attention to integrated development of infrastructure services in cities covered under the Mission

(b) Establishment of linkages between asset-creation and asset-management through a slew of reforms for long-term project sustainability

(c) Ensuring adequate funds to meet the deficiencies in urban infrastructural services

(d) Planned development of identified cities including peri-urban areas, outgrowths and urban corridors leading to dispersed urbanisation

(e) Scale-up delivery of civic amenities and provision of utilities with emphasis on universal access to the urban poor

(f) Special focus on urban renewal programme for the old city areas to reduce congestion and

(g) Provision of basic services to the urban poor including security of tenure at affordable prices, improved housing, water supply and sanitation, and ensuring delivery of other existing universal services of the government for education, health and social security.

The Mission comprises two Sub- Missions, namely:

(1) Sub-Mission for Urban Infrastructure and Governance which is administered by the Ministry of Urban Development through the Sub- Mission Directorate for Urban Infrastructure and Governance. The main thrust of the Sub-Mission will be on infrastructure projects relating to water supply and sanitation, sewerage, solid waste management, road network, urban transport and redevelopment of old city areas with a view to upgrading

infrastructure therein, shifting industrial and commercial establishments to conforming areas, etc.

(2) Sub-Mission for Basic Services to the Urban Poor: This will be administered by the Ministry of Urban Employment and Poverty Alleviation through the Sub-Mission Directorate for Basic Services to the Urban Poor. The main thrust of the Sub-Mission will be on integrated development of slums through projects for providing shelter, basic services and other related civic amenities with a view to providing utilities to the urban poor.

The sectors and projects eligible for JNNURM assistance in eligible cities would be as follows:

(1) Integrated development of slums, housing and development of infrastructure projects in slums in the identified cities;.

(2) Projects involving development, improvement, and maintenance of basic services to the urban poor.

(3) Slum improvement and rehabilitation of projects.

(4) Projects on water supply, sewerage, drainage, community toilets, and baths etc.

(5) Projects for providing houses at affordable cost for slum dwellers, urban poor, economically weaker sections (EWS) and lower income group (LIG) categories.

(6) Construction and improvement of drains and storm water drains.

(7) Environmental improvement of slums and solid waste management.

(8) Street lighting.

(9) Civic amenities like community halls, child care centres etc.

(10) Operation and Maintenance of assets created under this component.

(11) Convergence of health, education and social security schemes for the urban poor

Rajiv AwasYojana (RAY)

The Rajiv Awas Yojana implemented by the Ministry of Housing and Urban Poverty Alleviation envisages a “Slum Free India” with inclusive and equitable cities in

which every citizen has access to basic civic infrastructure, social amenities and decent shelter. The mission of the Programme is to encourage States/Union Territories (UTs) to tackle slums in a definitive manner, by focusing on:

1. Bringing all existing slums, notified or non-notified (including recognised and identified) within the formal system and enabling them to avail the basic amenities that is available for the rest of the city/UA;
2. Redressing the failures of the formal system that lie behind the creation of slums by planning for affordable housing stock for the urban poor and initiating crucial policy changes required for facilitating the same.

The objectives of the programme are,

- Improving and provisioning of housing, basic civic infrastructure and social amenities in intervened slums.
- Enabling reforms to address some of the causes leading to creation of slums.
- Facilitating a supportive environment for expanding institutional credit linkages for the urban poor.
- Institutionalizing mechanisms for prevention of slums including creation of affordable housing stock.
- Strengthening institutional and human resource capacities at the Municipal, City and State levels through comprehensive capacity building and strengthening of resource networks.
- Empowering community by ensuring their participation at every stage of decision making through strengthening and nurturing Slum Dwellers' Association/Federation.

The scheme is applicable to all slums within a city, whether notified or non-notified (including identified and recognised), whether on lands belonging to Central Government or its Undertakings, Autonomous bodies created under the Act of Parliament, State Government or its Undertakings, Urban Local Bodies or any other public agency and private sector. It is also applicable to "urbanized villages" inside the planning area of the city, urban homeless and pavement dwellers.

India has made significant progress in developing drinking water infrastructure and has met the Millennium Development Goal drinking water target. However, challenges remain including the need for rapid development and sustainability of supply to meet an increasing population against a variable resource distribution. Further, to ensure basic sanitation facility, to the huge population of the country, the nation needs to more focused initiatives and dedicated follow up to sustain the same. Improved management of drinking water supply and better sanitation are keys to health of the population along with social and economic progress. Improving drinking water supply and quality, eradicating open defecation and the adoption of positive hygiene behaviours will significantly contribute to reducing child morbidity, mortality and improving the nutritional status of children. Also tackling the issues related to the slums and slum population growing in numbers and improving the living conditions of slum dwellers are major among the challenges that the nation is facing today.

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Chapter 10
Booming Sectors of Telecom and IT

MDG 8: Develop a global partnership for development

Target 18: In co-operation with the private sector, make available the benefits of new technologies, especially information and communication.

Indicators

- Telephone lines and cellular subscribers per 100 population
- Internet subscribers per 100 population
- Personal computers per 100 population

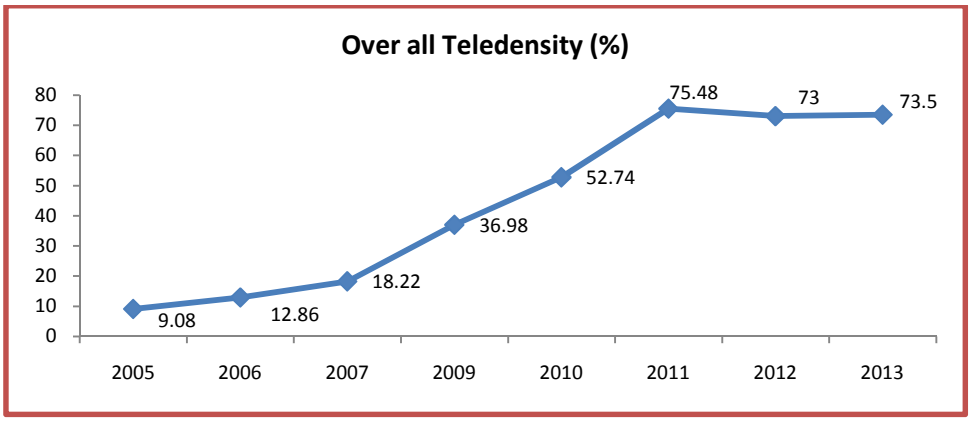
Rapid growth of Telecom sector….

The telecom services have been recognized the world-over as an important tool for socio-economic development for a nation. It is one of the prime support services needed for rapid growth and modernization of various sectors of the economy. Indian telecommunication sector has undergone a major process of transformation through significant policy reforms, particularly beginning with the announcement of National Telecom Policy (NTP) 1994 and was subsequently re-emphasized and carried forward under NTP 1999 and 2012. The NTP 2012, addresses the vision, strategic direction and the various medium term and long term issues related to Telecom Sector. The Primary objective of NTP 2012 is maximizing public good by making available affordable, reliable and secure telecommunications and broadband services across the entire

country. The main thrust of the Policy is on the multiplier effect and transformational impact of such services on the overall economy. Driven by various policy initiatives, the Indian telecom sector witnessed a complete transformation in the last decade. It has achieved a phenomenal growth during the last few years and is poised to take a big leap in the future also.

The Indian telecom network with 903.09 million telephone connections, including 873.36 million wireless telephone connections, at the end of June 2013 is second largest network in the world after China. Out of this, 357.61 million telephone connections are in rural areas and 545.48 million are in urban areas of the country.

Tele-density, which shows the number of telephones per 100 population, is an important indicator of telecom penetration in the country. Overall tele-density in the country is 73.5% as on 30/6/13.



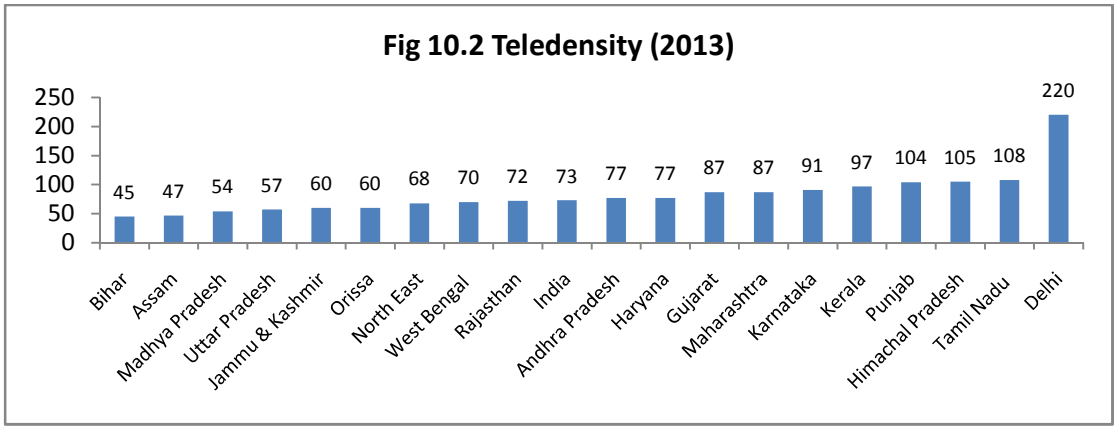
Source: Telecom Regulatory authority of India (TRAI)

As per the status of the 2nd quarter of 2013, the Urban tele-density is 145.35%, whereas rural tele-density is 41.9%.

The telecom sector has shown robust growth during the past few years. It has also undergone a substantial change in terms of mobile versus fixed phones and public versus private participation. The wireless telephone services play a major role in improving the teledensity. As per the status of 2nd quarter of 2013, the share of wireless telephones in total telephones is 96.7% vis –a -vis 40.32% in 2003. Also Private sector significantly contributes to the present day better connectivity in

telecom sector. The share of private sector in total telephones has increased to 86.05%, from 35.44% in 2003.

While, considering the present teledensity among the State/ service areas[17], it ranges from 45 in Bihar to 220 in Delhi (as on 31/5/2013).



Source: Telecom Regulatory authority of India (TRAI)

Internet revolutionizing lives…

The huge leap in telecom sector along with the advances in IT sector has led to massive progress in the internet subscriber base. There are 198.39 million Internet subscribers including 15.2 million Broadband subscribers at the end of June 2013. The internet subscribers per 100 population accessing internet only through wireline broadband connections is 1.2 and the corresponding figure including those accessing internet through wireless connections is 13.5[18]. This rapid growth is possible due to various proactive and positive decisions of the Government and contribution of both by the public and the private sectors. The rapid strides in the telecom sector have been facilitated by liberal policies of the Government that provides easy market access for telecom equipment and a fair regulatory framework for offering telecom services to the Indian consumers at affordable prices. Presently, all the telecom services have been opened for private participation. With technology development, Laptops, tablets etc have become major tools serving the purpose of personal computers in addition to Desk top computers.

[17] Maharashtra includes Mumbai Service area, Tamil Nadu includes Chennai and West Bengal includes Kolkota.

[18] Number of subscribers accessing internet through wireless connections does not include subscriber base of BSNL, MTNL, Quadrant and Videocon as they have not provided the data for March 2013.

Improving connectivity…..

The Government has taken following main initiatives for the growth of the Telecom Sector:

- **Liberalization**

The process of liberalization in the country began in the right earnest with the announcement of the New Economic Policy in July 1991. Telecom equipment manufacturing was delicensed in 1991 and value added services were declared open to the private sector in 1992, following which radio paging, cellular mobile and other value added services were opened gradually to the private sector. This has resulted in large number of manufacturing units been set up in the country. As a result most of the equipment used in telecom area is being manufactured within the country. A major breakthrough was the clear enunciation of the government's intention of liberalizing the telecom sector in the National Telecom Policy resolution of 13th May 1994.

- **National Telecom Policy 1994**

In 1994, the Government announced the National Telecom Policy which defined certain important objectives, including availability of telephone on demand, provision of world class services at reasonable prices, improving India's competitiveness in global market and promoting exports, attracting Foreign Direct Investment (FDI) and stimulating domestic investment, ensuring India's emergence as major manufacturing / export base of telecom equipment and ensuring universal availability of basic telecom services to all villages. It also announced a series of specific targets to be achieved by 1997.

- **Telecom Regulatory Authority of India (TRAI)**

The entry of private service providers brought the inevitable need for independent regulation. The Telecom Regulatory Authority of India (TRAI) was, thus, established with effect from 20th February 1997 by an Act of Parliament, called the Telecom Regulatory Authority of India Act, 1997, to regulate telecom services, including fixation/revision of tariffs for telecom services which were earlier vested with the Central Government. TRAI's mission is to create and nurture conditions for

growth of telecommunications in the country in a manner and at a pace, which will enable India to play a leading role in emerging global information society. One of the main objectives of TRAI is to provide a fair and transparent policy environment, which promotes a level playing field and facilitates fair competition. In pursuance of the above objectives, TRAI has issued from time to time a large number of regulations, orders and directives to deal with issues coming before it and provided the required direction to the evolution of Indian telecom market from a Government owned monopoly to a multi operator multi service open competitive market. The directions, orders and regulations issued, cover a wide range of subjects including tariff, interconnection and quality of service as well as governance of the Authority.

- **National Telecom Policy 1999**

The most important milestone and instrument of telecom reforms in India is the National Telecom Policy 1999 (NTP 99). The NTP- 1999 was approved on 26th March 1999, to become effective from 1st April 1999. NTP-99 laid down a clear roadmap for future reforms, contemplating the opening up of all the segments of the telecom sector for private sector participation. It clearly recognized the need for strengthening the regulatory regime as well as restructuring the departmental telecom services to that of a public sector corporation so as to separate the licensing and policy functions of the Government from that of being an operator. It also recognized the need for resolving the prevailing problems faced by the operators so as to restore their confidence and improve the investment climate.

- **Internet Service Providers (ISPs)**

Internet service was opened for private participation in 1998 with a view to encourage growth of Internet and increase its penetration. The sector has seen tremendous technological advancement and has necessitated taking steps to facilitate technological ingenuity and provision of various services.

- **Broadband Policy 2004**

Recognizing the potential of ubiquitous Broadband service in growth of GDP and enhancement in quality of life through societal applications including

tele-education, tele-medicine, e-governance, entertainment as well as employment generation by way of high-speed access to information and web based communication; the Government has announced Broadband Policy in October 2004. The main emphasis is on creation of infrastructure through various technologies that can contribute to the growth of broadband services. The prime consideration guiding the Policy includes affordability and reliability of Broadband services, incentives for creation of additional infrastructure, employment opportunities, induction of latest technologies, national security and brings in competitive environment so as to reduce regulatory interventions.

- **Tariff Changes**

The Indian Telecom Sector has witnessed major changes in the tariff structure. The Telecommunication Tariff Order (TTO) 1999, issued by regulator (TRAI), had begun the process of tariff balancing with a view to bring them closer to the costs.

- **Investment Opportunities and Incentives**

An attractive trade and investment policy and lucrative incentives for foreign collaborations have made India one of the world's most attractive markets for the telecom equipment suppliers and service providers.

- **Mobile Number Portability (MNP)**

Mobile Number Portability (MNP) allows subscribers to retain their existing telephone number when they switch from one access service provider to another irrespective of mobile technology or from one technology to another of the same or any other access service provider. The Government has announced the guidelines for Mobile Number Portability (MNP) Service Licence in the country on 1st August 2008 and has issued a separate Licence for MNP service w.e.f. 20.03.2009.

- **National Telecom Policy-2012 (NTP-2012)**

The Government approved National Telecom Policy-2012 (NTP-2012) on 31st May 2012 which addresses the Vision, Strategic direction and the various medium term and long term issues related to telecom sector. The primary objective of NTP-2012 is maximizing public good by making available affordable, reliable and secure telecommunication and broadband services across the entire country. Availability of affordable and effective communications for the citizens is at the core of the vision and goal of the NTP-2012. The policy also recognises the predominant role of the Private sector in this field and the consequent policy imperative of ensuring continued viability of service providers in a competitive environment. Pursuant to NTP -2012, these principles would guide decisions needed to strike a balance between the interests of users / consumers, service providers and government revenue.

- **National Knowledge Network**

The National Knowledge Network is a project being implemented through National Informatics Centre (NIC) is the implementing agency with the objective to interconnect all institutions of higher learning and research with a high speed data communication network to facilitate knowledge sharing and collaborative research to bridge the existing knowledge gap in the country and to evolve as a Knowledge Society and spur economic activities in the Knowledge domain.

- **National E -Governance Plan**

The National e –Governance Plan (NeGP) was approved on 16th May, 2006 with the vision to make all government services accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency and reliability of such services at affordable costs to realize the basic needs of the common man. The NeGP is a multi –stakeholder programme which primarily focuses on making critical public services available and promoting rural entrepreneurship. It comprises of 31 Mission Mode Projects (MMPs) and core e –infrastructure. The National e-Governance Plan (NeGP), takes a holistic view of e-Governance initiatives across the country, integrating them into a collective vision, a

shared cause. Around this idea, a massive countrywide infrastructure reaching down to the remotest of villages is evolving, and large-scale digitization of records is taking place to enable easy, reliable access over the internet. The ultimate objective is to bring public services closer home to citizens, as articulated in the Vision Statement of NeGP.

- **State Wide Area Networks (SWAN)**

State Wide Area Networks (SWAN) is envisaged as the converged backbone network for data, voice and video communications throughout a State / UT and is expected to cater to the information communication requirements of all the Departments. Under this Scheme, technical and financial assistance is being provided to the States/ UTs for establishing SWANs to connect all State/ UT headquarters up to the block level via District/ Sub Divisional Headquarters, in a vertical hierarchical structure with a minimum bandwidth capacity of 2Mbps per link. Steps have been initiated to integrate all SWANs using the National Knowledge Network.

More initiatives to establish better connectivity throughout the Country, by strengthening telecom and IT sector leading to improved governance and faster communications are being taken by State / Central Governments which will brighten the future.

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APPENDIX

Appendix 1

MDGs and Targets –Summary of Progress achieved by India					
Indicator		Year 1990 Actual/est. value	MDG target 2015	Likely achievement 2015	Latest status
GOAL 1: ERADICATE EXTREME POVERTY AND HUNGER **TARGET 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day**					**On -track**
Proportion of population below poverty line (%)[19]		**47.8**	**23.9**	**20.74**	**21.92 (2011-12)**
Poverty Gap Ratio	**Rural**	**No base year targets**			**5.05 (2011-12)**
	Urban				**2.7 (2011-12)**
Share of poorest quintile in national consumption (MRP method)	**Rural**	**No base year targets**			**9.76 (2009-10)**
	Urban				**7.11 (2009-10)**
TARGET 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger					**Slow or almost off-track**
Proportion of under-weight children below 3 years (%)		**52**	**26**	**33**	**40 (2005-06)**
MDG 2: ACHIEVE UNIVERSAL PRIMARY EDUCATION **TARGET 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling**					

[19] Based on revised Poverty Head Count Ratio provided by Tendulkar Committee to review the methodology for estimation of poverty.

MDGs and Targets –Summary of Progress achieved by India				
Indicator	Year 1990 Actual/est. value	MDG target 2015	Likely achievement 2015	Latest status
				On-track
Net Enrolment Ratio in primary grade (%)	77	100.0	100	99.89 (2010-11)
Proportion of pupils starting grade 1 who reach grade 5	Absolute targets for 2015	100		86.05 (2011-12)
Literacy rate of 15-24 year olds	61	100.0	100	86 (2007-08)
MDG 3: PROMOTE GENDER EQUALITY AND EMPOWER WOMEN TARGET 4 : Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015 On-track				
Ratio of girls to boys in primary education (Gender Parity Index of GER)	0.73	1.00	1	1.01 (2010-11)
Ratio of girls to boys in secondary education (Gender Parity Index of GER)	0.60 (1991)	1.00		0.88 (2010-11)
Ratio of girls to boys in tertiary education (Gender Parity Index of GER)	0.54 (1991)	1.00		0.86 (2010-11)
Female: Male literacy rate of 15-24 year olds	0.67 (1991)	1.00	1	0.88 (2007-08)
Share of women in wage employment in the non-agricultural sector (%)	12.7	50	23.1	19.3 (2011-12)
Proportion of seats held by women	Absolute targets for	50		11.46

MDGs and Targets –Summary of Progress achieved by India				
Indicator	Year 1990 Actual/est. value	MDG target 2015	Likely achievement 2015	Latest status
in national parliament (%)	2015			(2013)
MDG 4: REDUCE CHILD MORTALITY *TARGET 5 :* Reduce by two-thirds, between 1990 and 2015, the Under- Five Morality Rate Moderately on – track due to the sharp decline in recent years				
Under five mortality rate (per 1000 live births)	126	42	50	52 (2012)
Infant Mortality rate (per 1000 live births)	80	27	41	42 (2012)
Proportion of 1 year-old children immunized against measles Proportion of 1 year-old children immunized against measles	42.2	100	89	74.1 (2009)
MDG5 5: IMPROVE MATERNAL HEALTH TARGET 6 : Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio Slow or off-track				
Maternal mortality ratio (per 100,000 live births)	437	109	139	178 (2010-12)
Proportion of births attended by skilled health personnel (%)	33	100	62	52 (2007-08)
MDG 6: COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES TARGET 7 : Have halted by 2015 and begun to reverse the spread of HIV/AIDS On-track as trend reversal in HIV prevalence has achieved				
HIV Prevalence among pregnant women aged 15-24 years (%)	Target is trend reversal	-		0.39 (2010-11)

MDGs and Targets –Summary of Progress achieved by India				
Indicator	**Year 1990 Actual/est. value**	**MDG target 2015**	**Likely achievement 2015**	**Latest status**
Condom use rate of the contraceptive prevalence rate[20] (%)	**and not based on base year value**			**5.2 (2005-06)**
Condom use at last high-risk sex[21](%)				**74 (2010)**
Percentage of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS				**32.9 (2006)**
TARGET 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases **Moderately on-track as trend reversal has achieved for Annual Parasite Incidence of Malaria and for prevalence of TB**				
Annual parasite incidence (API) rate (Malaria)	**2.57**	**-**		**0.88 (2012 p)**
Prevalence of TB (including HIV) per 100,000 population	**338**	**-**		**249 (2011)**
Proportion of population in Malaria risk areas using effective Malaria prevention and treatment measures				**Data not available**
Deaths due to TB per 100,000 population	**43**	**-**		**24 (2011)**
MDG 7: ENSURE ENVIRONMENTAL SUSTAINABILITY ***TARGET 9:* Integrate the principle of sustainable development into country policies and programmes and reverse the loss of environmental resources.** **Moderately on-track**				

[20] Condom use rate of the contraceptive prevalence rate is Condom use to overall contraceptive use among currently married women,15-49 years, percent.
[21] Condom use at last high risk sex is Condom use rate among non regular sex partners 15-24 years

MDGs and Targets –Summary of Progress achieved by India					
Indicator		Year 1990 Actual/est. value	MDG target 2015	Likely achievement 2015	Latest status
Area covered under forests as percentage of geographical area		Target is trend reversal and not based on base year value	-		21.05 (2011)
Ratio of area protected to maintain biological diversity to surface area (%)					5.06 (2013)
Energy use per GDP (Rupee)					0.1453 KWH (2011-12)
Carbon dioxide emissions per capita					1.41 MT (2013)
Consumption of ozone-depleting CFCs (ODP tons)					998.5 (2007)
Proportion of population using solid fuels (%)					67.3 (2011)
TARGET 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation On-track for the indicator of drinking water, but slow for the indicator of Sanitation					
Households with sustainable access to an improved water source, (%)	Urban	87.12	93.56	97.5	95.3 (2012)
	Rural	58.94	79.47	96.3	88.5 (2012)
Households without access to sanitation (%)	Urban	24.1	15.84	12.14	8.8 (2012)
	Rural	87.1	46.64	61.11	59.4 (2012)
TARGET 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million					

MDGs and Targets –Summary of Progress achieved by India					
Indicator		Year 1990 Actual/est. value	MDG target 2015	Likely achievement 2015	Latest status
slum dwellers **The pattern not statistically discernible**					
Slum population as percentage of urban population					**17.36% (2011)**
MDG 8: DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT **TARGET 18 : In cooperation with the private sector, make available the benefits of new technologies, especially information and communications** **On-track**					
Telephone per 100 population		**Target is increasing trend and not based on base year value**	-		**73.5 (2013)**
Internet subscribers per 100 Population	**(accessing internet only through wireline broadband connection)**				**1.2 (2013)**
	Including wireless				**13.5 (2013)**
Personal computers per 100 population					**Data not available**

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Appendix-2

METHODOLOGY NOTE ON MDG TRACKING

The methodology for tracking the MDGs in this report is the one prescribed by the UNSD for developing countries. This methodology is characterised by the simplicity of its formulation and ease of interpretation. The indicators in India's MDG framework are mostly direct indicators which obviates the need for imputation or indirect derivation of the measures of the identified indicators. This simplifies the review exercise and eliminates the need to depend on assumptions. Following is the schematic description of the tracking methodology adopted for the review exercise of this report.

For the purpose of this report, both historical rate of change and required rate of change (which are explained below) have not been calculated explicitly in order to avoid confusion regarding proper interpretation and mathematical calculations involved in using the rates for deriving the actual measures of the indicators for the year 2015, for that matter for any other time point. For better comprehension of laymen, the actual projected values of the indicators for future time points (e. g., 2015) are more acceptable than the rates of change of different indicators.

In the statistical tracking of MDGs, the estimation of the likely achievement for the year 2015 is required for the indicators which have explicit (relative, absolute) target for 2015. The underlying assumption of the estimation procedure in the MDG tracking is that, the rate of change in a indicator values slows down with improvement in the level of the condition that the indicator measures and consequentially the indicator follows an exponential pattern over time. The target value for the year 2015 is determined by applying the MDG definition of the target on the indicator value for the year 1990. The 2015 value of the indicator is projected on the basis of observed values of the indicator at various time points. Thus, the historical rate of change is used to project the likely achievement for the year 2015 of the indicator.

Indicator Selection Criteria

1. Indicators that are directly related to a target: the indicators corresponding to various targets under each of the MDGs are given at Appendix
2. Indicators relevant to India are those which are directly related to the targets for which progress is measured for developing countries, i.e. excludes those related to developed countries and least developed or island countries
3. Two categories of Indicators having quantitative targets to be reached by 2015 are covered for tracking purpose, viz.

a. Explicit target values for 2015
    i. Relative (reduce by ½, 2/3, ¾)
    ii. Absolute (full enrolment, gender parity)
b. Reversal of trends
    i. "Halt and begun to reverse…." (Goal 6)
    ii. "Reverse the loss of environmental resources"(Goal 7, Target 9)

Tracking Progress Principles

- Keep it simple
    - Most MDG indicators move relatively slowly over time
    - Data gaps and number of observations don't allow sophisticated time series analysis
    - Use all the information available which will lead to more efficient estimates

Indicator Tracking Technique

- Calculate 'required' rate of change, from the latest available value, for the target to be met on time, i.e., by 2015
- Calculate 'historical' rate of change between 1990 and the latest year for which an indicator value is available
- Compare the required with the historical rates of change

Estimate Historical Rate of Change

$X_t = ae^{bt}$ where X_t is indicator value for year t, which gives for t=0,

$X_0 = a$

Again,

$\text{Ln } X_t = \text{Ln } a + bt$ Taking natural logarithm of both sides of equation above

$= \text{Ln } X_0 + bt$ …… (1)

i.e. (b^) $= (\text{Ln } X_t - \text{Ln } X_0)/t$ …… (2)

In terms of historical rate of change, r

$X_t = X_0 (1+ r)^t$

i.e. $\text{Ln } X_t - \text{Ln } X_0 = t \text{ Ln}(1+r)$

or, $(\text{Ln } X_t - \text{Ln } X_0)/t = \text{Ln}(1+r)$

or, $(1+r) = \exp[(\text{Ln } X_t - \text{Ln } X_0)/t$

or, $r = \exp[(\text{Ln } X_t - \text{Ln } X_0)/t - 1$ …… (3)

Using relation (2) in (3) we get

$r = \exp(b^{\wedge}) - 1$ where r is historical rate of change

State-wise and national estimates of the indicators at observation time points have been subjected to the relationship (1) to arrive at their logarithmic values. These values being linear in time series, provide the logarithmic values of the measure corresponding to future points of time, from which the estimates at the given point of future time may be derived by anti-log calculation.

Calculate required rate of change

- For indicators with an explicit target, i.e. those selected for monitoring Goals 1-5 and Goal 7, Target 10

$r^* = (X^*/X_T)^{1/(2015-T)} - 1$ Where X^* is target value (for year 2015) and X_T is indicator value for last available year

$r^* = 0$ if target has already been reached, i.e:

- $X_T \leq X^*$ for indicators of which values have to decrease
- $X_T \geq X^*$ for indicators of which values have to increase
- For indicators requiring trend reversal the required rate of change is not relevant
    - Classification of decision has to be based on historical rate of change alone

Cut-offs

- Target is considered to have been achieved if indicator has reached a certain pre-defined absolute value called 'cut-off' value. The rationale for having a cut-off value is as follows:
    - Reducing e.g. child mortality rates by 2/3 from some already achieved low levels might be tremendously costly
    - Prevents countries/regions or areas that slightly slip back from high achievement being classified as 'regressing'
- Cut-offs as applicable to different indicators are given in the following Table

Indicators	MDG target	Cut-off
Proportion of population below poverty line	**Reduce by half**	**5%**
Proportion of underweight children	**Reduce by half**	**5%**
Proportion of population undernourished	**Reduce by half**	**5%**
Primary enrolment ratio(NER)	**100**	**95%**
Proportion of pupils reaching grade 5	**100**	**95%**
Primary completion rate	**100**	**95%**
Primary girls-boys ratio	**100**	**95%**
Secondary girls-boys ratio	**100**	**95%**
Tertiary girls-boys ratio	**100**	**95%**
Child mortality rate(U5MR)	**Reduce by 2/3**	**45 per 1,000 live births**
Infant mortality rate	**Reduce by 2/3**	**35 per 1,000 live births**
Maternal mortality rate	**Reduce by 3/4**	**25 per 100,000 live births**
HIV prevalence	**Reverse prevalence**	**decrease**
TB prevalence	**Reverse prevalence**	**decrease**
TB death rate	**Reverse incidence**	**decrease**
Forested land cover	**Reverse loss**	**increase**
Protected areas	**Reverse loss**	**increase**
Per capita carbon dioxide emissions	**Reverse emissions**	**decrease**
Per capita CFC consumption	**Reverse consumption**	**decrease**
% of population without access to water	**Reduce by half**	**5%**
% of population without access to sanitation	**Reduce by half**	**5%**

Appendix 3

Addressing MDGs in 12th Plan

MDG GOALS, TARGETS AND INDICATORS	12TH PLAN (2012- 2017) TARGETS	Important 12th Plan Schemes
GOAL 1: ERADICATE EXTREME POVERTY AND HUNGER		
TARGET 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day		
1A. Poverty Headcount Ratio (percentage of population below the national poverty line) *2.* Poverty Gap ratio *3.* Share of poorest quintile in national consumption	1) Head-count ratio of consumption poverty to be reduced by 10 percentage points over the preceding estimates by the end of 12th five year plan. 2) Generate 50 million new work opportunities in the non-farm sector and provide skill certification to equivalent numbers during the Twelfth Five Year Plan.	• National Food Security Mission • Rashtriya Krishi Vikas Yojana • National Rural Employment Scheme (MGNREGA) • Indira Awas Yojana • National Rural Livelihood Mission • National Urban Livelihood Mission • Rajiv Awas Yojana
TARGET 2: Halve, between 1990 and 2015, the proportion of people who suffer from Hunger		
4. Prevalence of underweight children under three years of age.	3. Reduce under-nutrition among children aged 0–3 years to half of the NFHS-3 levels (NFHS -3 estimates under nutrition below 3 years at 40%, hence the 12th FYP is to reduce it to 20% by 2017).	• Integrated Child Development Schemes (ICDS)
GOAL 2: ACHIEVE UNIVERSAL PRIMARY EDUCATION		
TARGET 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling		
6. Net Enrolment Ratio in primary education 7. Proportion of pupils starting Grade 1 who reach Grade 5 8.Literacy rate of 15-24 year olds	4. Mean Years of Schooling to increase to seven years.	• Sarva Shiksha Abhiyan • National Programme Nutritional Support to Primary Education (Mid Day Meal)
GOAL 3: PROMOTE GENDER EQUALITY AND EMPOWER WOMEN		
TARGET 4 :Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015		
9. Ratio of girls to boys in primary, secondary and tertiary education (Gender Parity Index (GPI of GER)	5. Enhance access to higher education by creating two million	• Sarva Shiksha Abhiyan • National Programme Nutritional Support to Primary

Addressing MDGs in 12th Plan

MDG GOALS, TARGETS AND INDICATORS	12TH PLAN (2012- 2017) TARGETS	Important 12th Plan Schemes
in Primary, Secondary and Tertiary education) 10. Ratio of literate women to men, 15-24 years old. 11. Share of women in wage employment in the non-agricultural sector 12. Proportion of seats held by women in National Parliament.	additional seats for each age cohort, aligned to the skill needs of the economy. 6.Eliminate gender and social gap in school enrolment (that is, between girls and boys, and between SCs, STs, Muslims and the rest of the population)	Education (Mid Day Meal) • Rashtriya Madhyamic Shiksha Abhiyan • Rashtriya Uchhtar Shiksha Abhiyan • National Mission for Empowerment of Women including Indira Gandhi Matritav Sahyog Yojana
GOAL 4: REDUCE CHILD MORTALITY		
***TARGET 5 :* Reduce by two-thirds, between 1990 and 2015, the Under- Five Morality Rate**		
*13.*Under- Five Mortality Rate *14.* Infant mortality rate *15.* Proportion of 1 year-old children immunized against measles	7. Reduce IMR to 25 by the end of the Twelfth Five Year Plan -by 2017. (MDG target is to reduce it to 27 per 1000 live births by 2015).	• National Health Mission including NRHM • Integrated Child Development Schemes (ICDS)
GOAL 5: IMPROVE MATERNAL HEALTH		
TARGET 6 :Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio		
16. Maternal mortality ratio *17.* Proportion of births attended by skilled health personnel	8. Reduce MMR to 1 per 1,000 live births, (ie MMR at 100 per 100000 live births) by the end of the Twelfth Five Year Plan -by 2017. (MDG goal is to reduce it to 109 by 2015).	• National Health Mission including NRHM • Integrated Child Development Schemes (ICDS) • National Mission for Empowerment of Women including Indira Gandhi Matritav Sahyog Yojana
GOAL 6: COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES		
TARGET 7 :Have halted by 2015 and begun to reverse the spread of HIV/AIDS		
18. HIV prevalence among pregnant women aged 15-24 years *19.* Condom use rate of the contraceptive prevalence rate (Condom use to overall contraceptive use among currently married women,15-49 years, percent) *19A.* Condom use at last high risk sex (Condom use rate among non regular sex partners 15-24 years) *19B.* Percentage of population		• National AIDS & STD Control Programme

Addressing MDGs in 12th Plan

MDG GOALS, TARGETS AND INDICATORS	12TH PLAN (2012- 2017) TARGETS	Important 12th Plan Schemes
aged 15-24 years with comprehensive correct knowledge of HIV/AIDS		
TARGET 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases		
21. Prevalence and death rates associated with Malaria 22. Proportion of population in Malaria risk areas using effective Malaria prevention and treatment measures (Percentage of population covered under use of residuary spray in high risk areas) 23. Prevalence and death rates associated with Tuberculosis. *24.* Proportion of Tuberculosis cases detected and cured under DOTS		• National Vector Borne Diseases Control Programme • Revised National TB Control Programme
GOAL 7: ENSURE ENVIRONMENTAL SUSTAINABILITY		
***TARGET 9:* Integrate the principle of sustainable development into country policies and programmes and reverse the loss of environmental resources.**		
25. Proportion of land area covered by forest 26. Ratio of area protected to maintain biological diversity to surface area. 27. Energy use per unit of GDP(Rupee) 28. Carbon Dioxide emission per capita and consumption of Ozone -depleting Chlorofluoro Carbons (ODP tons) 29. Proportion of the Households using solid fuels	9. Increase green cover (as measured by satellite imagery) by 1 million hectare every year during the Twelfth Five Year Plan.	• National Afforestation Programme (National Mission for Green India) • National CFC consumption phase out plan
TARGET 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation		
30. Proportion of population with sustainable access to an improved water source, urban and rural 31. Proportion of population with	10. Ensure 50 per cent of rural population has access to 40 lpcd piped drinking water supply, and 50 per	• National Rural Drinking Water Programme • Nirmal Bharat Abhiyan

Addressing MDGs in 12th Plan

MDG GOALS, TARGETS AND INDICATORS	12TH PLAN (2012- 2017) TARGETS	Important 12th Plan Schemes
access to improved sanitation, urban and rural	cent gram panchayats achieve Nirmal Gram Status by the end of Twelfth Five Year Plan	
***TARGET 11 :* By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers**		
		• Jawaharlal Nehru National Urban Renewal Mission • Rajiv Awas Yojana
GOAL 8: DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT		
TARGET 18 : In cooperation with the private sector, make available the benefits of new technologies, especially information and communications		
47. Telephone lines and cellular subscribers per 100 population 48 A. Internet subscribers per 100 population *48B.* Personal computers per 100 population	11. Increase rural tele-density to 70 per cent by the end of Twelfth Five Year Plan.	• National E Governance and Action Plan

Appendix - 4

MDG indicators –Data / Programme sources

MDG	INDICATOR	Data / Programme Source	Further details
MDG 1: Eradicate Extreme Poverty and Hunger	Proportion of population below poverty line (%)	Planning Commission	Special releases on the basis of NSSO consumption data
	Poverty Gap Ratio	Planning Commission	Special releases on the basis of NSSO consumption data
	Share of Poorest Quintile in National Consumption	NSSO	
	Proportion of under-weight children below 3 years (%)	Ministry of Health and Family Welfare	National Family Health Survey
MDG 2: Achieve Universal Primary Education	Net Enrolment Ratio in primary grade (%)	M/o Human Resources Development	District Information System on Education
	Proportion of Pupil starting Grade 1 who reaches Grade 5	M/o Human Resources Development	District Information System on Education
	Literacy rate of 15-24 year olds	O/o Registrar General of India	Census
MDG 3: Promote Gender Equality and Empower Women	Ratio of girls to boys in primary, secondary, tertiary education (Gender Parity Index of GER)	M/o Human Resources Development	
	Female: Male literacy rate of 15-24 year olds	Census	
	Share of women in wage employment in the non-agricultural sector (%)	NSSO	
MDG 4: Reduce Child Mortality	Under five mortality rate (per 1000 live births)	O/o Registrar General of India	Sample Registration System Report
	Infant Mortality rate (per 1000 live births)	O/o Registrar General of India	Sample Registration System Bulletin & Report

MDG	INDICATOR	Data / Programme Source	Further details
	Proportion of 1 year old children immunized against measles	M/o Health and Family Welfare	NFHS, DLHS, Coverage Evaluation Survey (GOI-UNICEF-2009)
MDG 5: Improve Maternal Health	Maternal mortality ratio (per 100,000 live births)	O/o Registrar General of India	Special Report of Sample Registration System
	Percentage of deliveries assisted by skilled personnel	Ministry of Health and Family Welfare	National Family Health Survey, District Level Household Survey
MDG 6: Combat HIV/AIDS, Malaria and Other Diseases	HIV Prevalence among pregnant women aged 15-24 years (%)	Ministry of Health and Family Welfare	HIV Sentinel Surveillance Surveys, D/o AIDS control (NACO)
	Condom use rate of the contraceptive prevalence rate (Condom use to overall contraceptive use among currently married women, 15-49 yrs, percent)	Ministry of Health and Family Welfare, D/o AIDS control	National Family Health Survey
	Condom use at last high risk sex (Condom use rate among non-regular sex partners 15-24 yrs) (%)	M/o Health and Family Welfare, D/o AIDS control	HIV Sentinel Surveillance Surveys, D/o AIDS control (NACO)
	Percentage of Population aged 15-49 years with comprehensive correct knowledge of HIV/AIDS	M/o Health and Family Welfare, D/o AIDS control	Behavioural Surveillance Surveys, D/o AIDS control (NACO)
	Annual parasite incidence rate (Malaria)	Directorate of National Vector Borne Disease Control Programme M/o H&FW	Surveillance Data
	Death rates associated with Malaria	Directorate of National Vector Borne Disease Control Programme M/o H&FW	Surveillance Data
	Deaths due to TB per 100,000 population	M/o Health and Family Welfare,	WHO Report –Global Tuberculosis Control
	Proportion of Tuberculosis Cases Detected and Cured under DOTS	M/o Health and Family Welfare, Directorate of Revised National TB Control Programme	Success Rate among new S+ve cases **(**%)- Revised National Tuberculosis Control Programme Reports

MDG	INDICATOR	Data / Programme Source	Further details
GOAL 7: ENSURE ENVIRONMENTAL SUSTAINABILITY	Area covered under forests as percentage of geographical area	M/o Environment and Forests	
	Ratio of Area Protected to Maintain Biological Diversity to Surface Area	M/o Environment and Forests	
	Per Capita Energy Consumption	CSO, MOSPI	Energy consumption data available from State Electricity Boards
	Carbon Dioxide emissions per capita (MT)	M/o Environment and Forests	International energy agency
	Consumption of Ozone-depleting Chlorofluoro Carbons (ODP Tons)	M/o Environment and Forests	Ozone cell
	Proportion of the Households Using Solid Fuels	O/o Registrar General of India	Census
	Households with sustainable access to an improved water source, (%)	O/o Registrar General of India NSSO	Census
	Households without access to sanitation (%)	O/o Registrar General of India NSSO	Census
	Slum population as percentage of urban population	O/o Registrar General of India NSSO	Census
GOAL 8: Develop a global partnership for development	Telephone lines and cellular subscribers per 100 population	Telecom Regulatory Authority of India	
	Internet subscribers per 100 population	Telecom Regulatory Authority of India	

Appendix 5

Abbreviations

ACSM - Advocacy Communication and Social Mobilization
AIE - Alternative & Innovative Education
ANC - Anti Natal Care
ANM - Auxiliary Nursing Midwifery
API - Annual Parasite Incidence
APIP - Annual Programme Implementation Plan
ARI -Acute Respiratory Infections
ART - Anti Retroviral Treatment
ARWSP - Accelerated Rural Water Supply Programme
ASHA - Accredited Social Health Activist
AWC - Anganwadi Centres
BeMOC - Basic Emergency Obstetric Care
BPL - Below Poverty Line
BSS - Behavioural Surveillance Survey
CEmOC - Comprehensive Emergency Obstetric Care
CES -Coverage Evaluation Survey
CFC - Chloro Fluoro Carbons
CHC - Community Health Centre
CMIS - Computerized Management Information System
CRSP - Central Rural Sanitation Programme
CSC - Community Sanitary Complexes
CTC - Carbon Tetra Chloride
DBT - Direct Benefit Transfer
DGHS - Director General of Health Services
DISE - District Information System on Education
DLHS - District Level Household Survey
DOTS - Directly Observed Treatment, Short Course
EBB - Educationally Backwards Blocks
ECCE - Early Childhood Care and Education
EDPT - Early case Detection and Prompt Treatment
EGS - Education Guarantee Scheme
EQAS - External Quality Assessment Scheme
EWS - Economically Weaker Sections
FDA - Forest Development Agency
FDI - Foreign Direct Investment
FOGSI - Federation of Obstetric and Gynecological Society of India
FRU - First Referral Units

FYP - Five year Plans
GDP - Gross Domestic Product
GER - Gross Enrolment Ratio
GIM - Green India Mission
GOI - Government of India
GPI- Gender Parity Index
GPS - Global Positioning System
HBNC - Home Based New Born Care
IAY - Indira Awas Yojana
ICDS - Integrated Child Development Services
ICTC - Integrated Counselling and Testing Centre
IEC - Information, Education & Communication
IGMSY - Indira Gandhi Matritva Sahyog Yojana
IMR - Infant Mortality Rate
IMNCI - Integrated Management of Neonatal and child illness
IPU -Inter parliamentary union
ISPs - Internet Service Providers
IT - Information Technology
JFMC - Joint Forest Management Committee
JNNURM - Jawaharlal Nehru National Urban Renewal Mission
JSSK - Janani Shishu Suraksha Karyakram
JSY - Janani Suraksha Yojana
KSY - Kishori Shakti Yojana
LHV - Lady Health Worker
LIG - Lower Income Group
LSAS - Life Saving Anaesthetic Skills
MCTS - Mother Child Tracking System
MDG - Millennium Development Goals
MDMS - Mid Day Meal Scheme
MDR - Maternal Death Review
MDR TB -Multi Drug Resistant TB
MGNREGA - Mahatma Gandhi National Rural Employment Scheme
MHRD - Ministry of Human Resource Development
MIS - Management Information System
MMP - Mission Mode Projects
MMR - Maternal Mortality Ratio
MNP - Mobile Number Portability
MRP - Mixed Reference period
MTP - Medical Termination of Pregnancy
NACO - National AIDS Control Organisation
NACP - National AIDS Control Programme
NAMP - National Anti-Malaria Programme
NAP - National Afforestation Programme

NAPCC - National Action Plan on Climate Change
NBA - Nirmal Bharat Abhiyan
NBCC - Newborn Baby Care Corners
NBSU - Newborn Stabilization Units
NeGP - National e-Governance Plan
NER - Net Enrolment Ratio
NFHS - National Family Health Survey
NFSM - National Food Security Mission
NGP - Nirmal Gram Puraskar
NIC - National Informatics Centre
NMCP - National Malaria Control Programme
NMEP - National Malaria Eradication Programme
NPCDCS - National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke
NPEGEL - National Programme for Education of Girls at Elementary Level
NP-NSPE - National Programme of Nutritional Support to Primary Education
NRDWP - National Rural Drinking Water Programme
NRHM - National Rural Health Mission
NRLM - National Rural Livelihood Mission
NSS - National Sample Survey
NSSK - Navjat Shishu Suraksha Karyakram
NTFP - Non -Timber Forest Product
NTP - National Telecom Policy
NULM - National Urban livelihood Mission
NVBDCP - Directorate of National Vector Borne Disease Control Programme
O/o RGI - Office of Registrar General of India
ODP - Ozone Depleting Potential
ODS - Ozone Depleting Substances
ORS - Oral Rehydration Solution
PA - Protected Areas
PDS - Public Distribution System
PEC - Per-capita Energy Consumption
PGR - Poverty Gap Ratio
PHC - Primary Health Centre
PHCR - Poverty Head Count Ratio
PLHIV - People Living with HIV
PMDT - Programmatic Management of Drug Resistant TB
PPTCT - Prevention of Parent to Child Transmission
PRI - Panchayati Raj Institution
RAY - Rajiv Awas Yojana
REDD - Reducing Emissions from Deforestation and Forest Degradation
RGSEAG - Rajiv Gandhi Scheme for Empowerment of Adolescent Girls
RKVY - Rashtriya Krishi Vikas Yojana

RMNCH - Reproductive Maternal Newborn and Child Health
RMSA - Rashtriya Madhyamik Shiksha Abhiyan
RNTCP - Revised National Tuberculosis Control Programme
RRE - Red Ribbon Express
RTE - Right to Education
RTI - Reproductive & Tract Infections
RWS - Rural Drinking Water Schemes
SBA - Skilled Attendance at Birth
SGSY - Swarnjayanti Gram Swarojgar Yojana
SLWM - Solid and Liquid Waste Management
SN - Staff Nurse
SNCU - Special New Born Care Unit
SRS- Sample Registration System
SSA - Sarva Shiksha Abhiyan
STI - Sexually Transmitted Infections
SWAN - State Wide Area Networks
TDR TB - Total Drug Resistant TB
TRAI - Telecom Regulatory Authority of India
TSC - Total Sanitation Campaign
TTO - Telecommunication Tariff Order
U5MR - Under Five Mortality Rate
UA - Urban Area
UEE - Universal Elementary Education
UMS - Urban Malaria Scheme
UNDB - United Nations Decade on Biodiversity
UNDG - United Nations Development Group
URP - Uniform Reference Period
UT - Union Territory
VHND - Village Health and Nutrition Day
VWSC - Village Water and Sanitation Committee

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Appendix 6

Table 1: Poverty Head Count Ratio (Tendulkar Methodology)							
S.No.	**States/U.T.'s**	**1990 est**	**1993-94**	**2004-05**	**2011-12**	**Likely achievement 2015**	**target 2015**
1	Andhra Pradesh	49.74	44.6	29.9	9.2	8.27	24.87
2	Arunachal Pradesh	63.51	54.5	31.1	34.67	27.72	31.76
3	Assam	57.92	51.8	34.4	31.98	27.34	28.96
4	Bihar	62.28	60.5	54.4	33.74	33.03	31.14
5	Chhattisgarh	51.32	50.9	49.4	39.93	39.82	25.66
6	Delhi	16.49	15.7	13.1	9.91	9.34	8.25
7	Goa	19.78	20.8	25	5.09	5.09	9.89
8	Gujarat	39.62	37.8	31.8	16.63	15.98	19.81
9	Haryana	40.02	35.9	24.1	11.16	9.87	20.01
10	Himachal Pradesh	38.72	34.6	22.9	8.06	7.17	19.36
11	Jammu & Kashmir	31.74	26.3	13.2	10.35	7.99	15.87
12	Jharkhand	65.74	60.7	45.3	36.96	33.25	32.87
13	Karnataka	55.11	49.5	33.4	20.91	18.29	27.55
14	Kerala	35.51	31.3	19.7	7.05	6.15	17.76
15	Madhya Pradesh	43.57	44.6	48.6	31.65	31.65	21.78
16	Maharashtra	50.85	47.8	38.1	17.35	16.42	25.43
17	Manipur	75.40	65.1	38	36.89	29.93	37.70
18	Meghalaya	43.57	35.2	16.1	11.87	8.86	21.79
19	Mizoram	10.99	11.8	15.3	20.4	20.40	5.50
20	Nagaland	25.50	20.4	9	18.88	13.29	12.75
21	Odisha	59.63	59.1	57.2	32.59	32.96	29.81
22	Puducherry	38.27	30.9	14.1	9.69	7.25	19.14
23	Punjab	22.83	22.4	20.9	8.26	8.36	11.41
24	Rajasthan	39.44	38.3	34.4	14.71	14.62	19.72
25	Sikkim	31.99	31.8	31.1	8.19	8.59	16.00
26	Tamil Nadu	50.20	44.6	28.9	11.28	9.91	25.10
27	Tripura	31.07	32.9	40.6	14.05	15.96	15.53
28	Uttar Pradesh	50.67	48.4	40.9	29.43	27.94	25.34
29	Uttarakhand	31.81	32	32.7	11.26	11.88	15.91
30	West Bengal	40.92	39.4	34.3	19.98	19.37	20.46
	All India	**47.80**	**45.3**	**37.2**	**21.9**	**20.74**	**23.90**
Source: Planning Commission							

Table 2: Poverty Gap Ratio for 2004-05 & 2011-12 (MRP Consumption Distribution)					
S.No.	States	Rural		Urban	
		2004-05	2011-12	2004-05	2011-12
1	Andhra Pradesh	6.971	1.6	4.813	0.87
2	Arunachal Pradesh	7.408	9.79	4.637	4.93
3	Assam	7.033	5.79	4.243	3.83
4	Bihar	12.678	6.24	11.425	6.8
5	Chhattisgarh	13.693	8.98	7.203	5.2
6	Delhi	1.925	1.79	1.994	1.62
7	Goa	5.558	0.74	4.297	0.7
8	Gujarat	9.341	3.27	3.922	1.64
9	Haryana	4.729	2.08	4.93	1.76
10	Himachal Pradesh	4.221	1.03	1.066	0.76
11	Jammu & Kashmir	2.108	1.91	2.122	0.95
12	Jharkhand	11.115	6.88	5.77	4.85
13	Karnataka	6.507	3.26	6.191	3.09
14	Kerala	4.368	1.59	4.042	0.83
15	Madhya Pradesh	12.574	8.33	8.59	3.86
16	Maharashtra	11.939	4.65	6.479	1.55
17	Manipur	5.706	6.64	5.117	6.14
18	Meghalaya	1.398	1.58	2.8	1.46
19	Mizoram	3.485	7.51	1	0.62
20	Nagaland	1.018	3.75	0.539	1.76
21	Odisha	17.369	7.01	9.603	3.15
22	Puducherry	3.991	3.71	1.331	0.84
23	Punjab	3.755	1.18	3.171	1.56
24	Rajasthan	7.009	3.21	5.747	1.56
25	Sikkim	5.623	0.96	3.35	0.45
26	Tamil Nadu	7.429	2.47	4.093	1.1
27	Tripura	9.577	2.17	3.801	1.72
28	Uttar Pradesh	9.164	5.68	7.802	5.29
29	Uttarakhand	5.797	1.25	5.086	1.55
30	West Bengal	7.922	3.7	5.287	2.7
	All India	**9.635**	**5.05**	**6.078**	**2.7**

Source: Planning Commission

Table 3: Share in national consumption for the poorest quintile class of MPCE (NSS 2009-10)							
Sr.no	**State / UT**	**URP**		**MRP**		**MMRP**	
		Rural	**Urban**	**Rural**	**Urban**	**Rural**	**Urban**
	All India	**9.41**	**6.97**	**9.75**	**7.11**	**9.85**	**7.21**
1	Andhra Pradesh	9.59	7.13	9.79	7.46	10.13	7.59
2	Arunachal Pradesh	8.19	7.7	9.1	8.2	8.58	7.86
3	Assam	11.07	7.83	11.48	7.78	11.18	7.35
4	Bihar	10.97	8.17	11.28	8.64	11.67	8.51
5	Chhatisgarh	9.86	7.6	11.15	8.24	10.85	7.83
6	Delhi	15.08	7.51	15.24	7.39	12.56	7.71
7	Goa	10.44	7.72	11.05	9.59	11.23	9.01
8	Gujrat	10.69	7.94	10.65	8.18	10.73	8.49
9	Haryana	8.69	7.56	9.09	7.54	9.59	7.31
10	Himachal Pradesh	9.33	6.6	9.84	6.9	10.48	6.84
11	Jammu & Kashmir	10.86	9.26	11.62	9.4	11.34	9.57
12	Jharkhand	10.65	7.32	11.3	7.46	11.79	7.48
13	Karnataka	10.87	7.48	10.93	6.86	10.89	7.43
14	Kerala	7.09	5.32	8.12	6.74	8.82	6.73
15	Madhya Pradesh	9.25	7.24	9.61	7.34	9.58	7.11
16	Maharashtra	9.96	6.44	10.55	6.85	10.62	7.06
17	Manipur	13.32	11.51	13.77	12.1	13.51	11.91
18	Meghalaya	12.66	10.06	13.1	10.03	12.85	9.81
19	Mizoram	10.98	9.83	12.17	10.02	11.6	9.64
20	Nagaland	12.66	10.56	13.18	11.39	13.14	10.25
21	Odisha	9.76	7.24	10.26	7.39	10.24	7.71
22	Punjab	9.58	7.42	9.71	7.56	9.75	8.03
23	Rajasthan	11.19	7.83	11.6	8.68	11.15	8.53
24	Sikkim	10.12	10.71	10.73	11.54	10.6	9.14
25	Tamilnadu	10.14	8.07	10.26	8.21	10.18	8.24
26	Tripura	11.91	8.97	11.94	9.21	11.93	8.64
27	Uttarakhand	9	8.02	7.8	8.06	7.9	8.31
28	Uttar Pradesh	10.44	7.61	11.19	7.21	11.12	7.47
29	West Bengal	10.79	6.97	11.4	7.16	11.08	7.16
30	Andaman & N. Island	11.48	9.62	11.38	8.84	10.99	9.47
31	Chandigarh	7.44	4.68	5.87	5.43	6.85	5.96
32	Dadra & Nagar Haveli	11.89	13.11	11.73	11.4	13.13	11.27
33	Daman & Diu	9.93	10.69	9.03	9.31	9.96	12.52
34	Lakshadweep	8.75	8.75	9.37	10.36	10.4	9.06
35	Puducherry	10.55	9.04	11.22	7.6	11.16	7.61
Source: National Sample Survey Office							

Table : 4 Proportion of Underweight Children(< 3yrs)							
Sr.no.	**STATES/UTs**	**1990 estimated**	**1992-93**	**1998-99**	**2005-06**	**Likely achievement 2015**	**target 2015**
1	Andhra Pradesh	44.41	42.9	34.2	29.8	22.17	22.21
2	Arunachal Pradesh	28.62	32.1	21.9	29.7	25.50	14.31
3	Assam	43.48	44.1	35.3	35.8	29.48	21.74
4	Bihar	49.28		52.2	54.9	59.00	24.64
5	Chhattisgarh	60.12		53.2	47.8	41.02	30.06
6	Delhi	38.09	36.2	29.9	24.9	18.58	19.04
7	Goa	28.90	29.3	21.3	21.3	15.92	14.45
8	Gujarat	42.82	42.7	41.6	41.1	39.82	21.41
9	Haryana	28.60	31	29.9	38.2	43.29	14.30
10	Himachal Pradesh	40.35	38.4	36.5	31.1	26.78	20.17
11	Jammu & Kashmir	36.54		29.2	24	18.14	18.27
12	Jharkhand	48.17		51.5	54.6	59.36	24.09
13	Karnataka	48.28	46.4	38.6	33.3	25.59	24.14
14	Kerala	22.25	22.1	21.7	21.2	20.54	11.12
15	Madhya Pradesh	43.75		50.8	57.9	69.80	21.87
16	Maharashtra	52.24	47.3	44.8	32.7	25.39	26.12
17	Manipur	19.33	19.1	20.1	19.5	20.03	9.67
18	Meghalaya	32.02	36.9	28.6	42.9	44.17	16.01
19	Mizoram	19.27	17.2	19.8	14.2	13.03	9.63
20	Nagaland	17.36	18.7	18.8	23.7	27.66	8.68
21	Odisha	54.07	50	50.3	39.5	33.98	27.04
22	Punjab	39.66	39.9	24.7	23.6	14.79	19.83
23	Rajasthan	45.36	41.8	46.7	36.8	34.91	22.68
24	Sikkim	13.67		15.5	17.3	20.24	6.84
25	Tamil Nadu	42.88	40.7	31.5	25.9	18.06	21.44
26	Tripura	42.67	42.1	37.3	35.2	30.36	21.34
27	Uttar Pradesh	56.78		48.1	41.6	33.81	28.39
28	Uttarakhand	42.38		36.3	31.7	26.12	21.19
29	West Bengal	56.11	53.2	45.3	37.6	28.79	28.05
	India	**52.00**	**51.5**	**42.7**	**40.4**	**32.85**	**26.00**

Source: NFHS, M/o HFW

Table 5: GROSS ENROLMENT RATIO (GER) All Categories				
Sr. No.	States/ Union Territories	Classes I-V		
		Boys	Girls	Total
1	Andhra Pradesh	99.68	99.38	99.53
2	Arunachal Pradesh	184.51	176.92	180.78
3	Assam	93.08	95.57	94.31
4	Bihar	131.33	123.64	127.68
5	Chhattisgarh	125.55	119.99	122.81
6	Goa	106.91	101.52	104.27
7	Gujarat	119.39	121.42	120.33
8	Haryana	90.62	100.22	94.91
9	Himachal Pradesh	109.10	109.36	109.22
10	Jammu & Kashmir	108.27	111.71	109.89
11	Jharkhand	145.87	148.45	147.13
12	Karnataka	105.22	104.12	104.68
13	Kerala	91.38	91.48	91.43
14	Madhya Pradesh	131.21	139.66	135.24
15	Maharashtra	105.49	103.74	104.65
16	Manipur	195.71	188.36	192.09
17	Meghalaya	193.66	196.31	194.98
18	Mizoram	191.73	180.03	185.95
19	Nagaland	103.73	102.77	103.27
20	Odisha	118.73	120.11	119.40
21	Punjab	109.11	108.33	108.76
22	Rajasthan	110.29	109.54	109.94
23	Sikkim	164.42	158.75	161.59
24	Tamil Nadu	111.01	112.56	111.76
25	Tripura	134.91	133.27	134.10
26	Uttar Pradesh	123.80	130.35	126.88
27	Uttarakhand	107.85	110.17	108.95
28	West Bengal	91.45	93.92	92.66
29	A&N Islands	87.54	84.90	86.23
30	Chandigarh	78.59	78.08	78.35
31	D&N Haveli	104.30	107.03	105.59
32	Daman & Diu	76.53	82.62	79.25
33	Delhi	125.97	129.64	127.66
34	Lakshadweep	81.44	80.84	81.15
35	Puducherry	104.82	102.27	103.56
	INDIA	**115.39**	**116.69**	**116.01**

Source: Ministry of Human Resources Development

Table 6: Net Enrolment Ratio and Survival Rate							
Sr.no	**State/Uts**	**Net Enrolment Ratio: Primary Level**			**Ratio of enrolment of Grade V to I**		
		2008-09	**2009-10**	**2010-11**	**2009-10**	**2010-11**	**2011-12**
1	A&N Islands	66.83	71.99	70.93	-	-	-
2	Andhra Pradesh	79.39	80.22	85.68	85.36	85.54	86.27
3	Arunachal Pradesh	-	-	-	41.18	42.52	50.21
4	Assam	-	-	-	70.57	62.36	63.09
5	Bihar	-	-	-	57.75	69.19	85.59
6	Chandigarh	72.76	73.06	77.56	-	-	-
7	Chattisgarh	97.96	-	-	80.66	85.81	91.31
8	Dadra & Nagar Haveli	-	-	-	96.91	94.76	97.6
9	Daman & Diu	75.91	82.56	80.5	87.5	92.64	89.9
10	Delhi	90.64	93.58	96.29	92.91	99.67	-
11	Goa	56.27	58.76	58.37	-	-	-
12	Gujarat	86.03	85.8	85.73	91.53	88.35	89.54
13	Haryana	71.59	73.51	75.71	86.14	94.98	96.77
14	Himachal Pradesh	91.15	88.91	90.16	-	99.81	-
15	Jammu & Kashmir	95.2	97.18	95.33	88	82.37	76.09
16	Jharkhand	-	-	-	62	73.8	76.51
17	Karanataka	98.61	99.23	99.85	97.95	96.87	97.43
18	Kerala	65.28	65.48	66.33	-	-	-
19	Lakshadweep	84.55	86.96	78.23	-	-	-
20	Madhya Pradesh	-	-	-	77.58	82.64	96.36
21	Maharashtra	87.98	88.01	88.26	90.75	96.79	-
22	Manipur	-	-	-	56.08	60.52	61.95
23	Meghalaya	-	-	-	55.08	52.97	45.68
24	Mizoram	-	-	-	75.66	62.81	64.76
25	Nagaland	-	-	-	69.53	70.05	74.24
26	Odisha	95.52	96.4	99.43	86.47	82.42	87.14
27	Puducherry	85.19	86.7	85.98	-	-	-
28	Punjab	59.69	63.05	89.41	91.55	80.14	87.61
29	Rajasthan	-	89.6	87.31	63.04	63.78	73.63
30	Sikkim	98.04	99.19	-	91.54	77.79	-
31	Tamil Nadu	99.3	99.15	98.15	-	-	-
32	Tripura	-	-	-	92.65	95.48	93.22
33	Uttar Pradesh	-	95.69	94.18	79.85	84.57	82.85
34	Uttarakhand	91.21	86.52	88.94	81.72	79.72	80.98
35	West Bengal	84.51	-	-	68.8	72.8	74.69
	All States	**98.59**	**98.28**	**99.89**	**78.08**	**81.62**	**86.05**

Source: DISE Flash Statistics 2011-12

Table 7 : Percentage literates among youth (15-24 year olds) and Female : Male literacy rate													
Sr.no.	State Name	% literates among youth: Census 2001					% literates among youth: NSSO (2007-08)					Female : Male literacy rate (15-24years)	
		all	female	male	rural	urban	all	female	male	rural	urban	Census 2001	NSSO 2007-08
1	Jammu & Kashmir	68	57	78	63	83	88	83	93	87	94	0.73	0.89
2	Himachal Pradesh	92	89	95	92	94	98	97	99	98	97	0.94	0.98
3	Punjab	83	81	85	81	87	90	89	91	89	91	0.95	0.98
4	Chandigarh	87	85	89	81	88	89	83	93	88	89	0.96	0.89
5	Uttaranchal	84	78	90	83	88	90	87	93	90	90	0.87	0.94
6	Haryana	83	75	89	81	88	89	85	93	87	95	0.84	0.91
7	Delhi	88	85	90	87	88	91	88	93	96	91	0.94	0.95
8	Rajasthan	72	55	87	68	84	78	64	90	74	89	0.63	0.71
9	Uttar Pradesh	67	53	78	63	77	80	73	87	79	84	0.68	0.84
10	Bihar	57	43	69	53	80	67	55	77	64	86	0.62	0.71
11	Sikkim	83	80	87	83	89	97	95	98	97	96	0.92	0.97
12	Arunachal Pradesh	70	62	78	65	86	84	77	90	80	97	0.79	0.86
13	Nagaland	76	73	78	73	90	99	98	100	100	97	0.94	0.98
14	Manipur	84	80	89	81	92	94	92	96	93	97	0.9	0.96
15	Mizoram	93	93	93	88	98	98	98	98	97	100	1	1
16	Tripura	84	79	89	82	94	92	90	94	92	97	0.89	0.96
17	Meghalaya	74	74	74	69	92	97	96	97	96	97	1	0.99
18	Assam	74	68	79	71	90	92	90	94	92	97	0.86	0.96
19	West Bengal	77	71	82	73	86	87	83	91	85	93	0.87	0.91
20	Jharkhand	65	50	79	57	88	75	62	86	70	93	0.63	0.72
21	Odisha	75	66	85	73	89	84	78	91	82	95	0.78	0.86
22	Chhattisgarh	79	69	88	75	91	89	86	92	88	96	0.78	0.93
23	Madhya Pradesh	75	63	85	69	88	85	77	92	82	93	0.74	0.84
24	Gujarat	80	72	88	75	89	89	83	94	84	96	0.82	0.88

Table 7 : Percentage literates among youth (15-24 year olds) and Female : Male literacy rate													
Sr.no.	**State Name**	**% literates among youth: Census 2001**					**% literates among youth: NSSO (2007-08)**					**Female : Male literacy rate (15-24years)**	
		all	**female**	**male**	**rural**	**urban**	**all**	**female**	**male**	**rural**	**urban**	**Census 2001**	**NSSO 2007-08**
25	Daman & Diu	86	79	89	84	90	98	93	100	97	100	0.89	0.93
26	Dadra & Nagar Haveli	67	48	80	60	89	85	63	99	83	97	0.6	0.64
27	Maharashtra	90	85	93	87	92	95	92	97	94	96	0.91	0.95
28	Andhra Pradesh	74	65	82	68	86	87	82	92	84	94	0.79	0.89
29	Karnataka	80	74	86	75	89	89	85	93	87	95	0.86	0.91
30	Goa	93	91	94	94	91	94	95	94	97	92	0.97	1.01
31	Lakshadweep	97	96	97	96	97	97	96	98	100	95	0.99	0.98
32	Kerala	98	98	99	98	99	100	100	100	99	100	0.99	1
33	Tamil Nadu	88	84	93	85	93	97	95	99	96	98	0.9	0.96
34	Puducherry	94	92	96	93	95	97	96	98	94	100	0.96	0.98
35	A & N Islands	93	91	94	92	95	99	98	99	99	99	0.97	0.99
	India	**76**	**68**	**84**	**72**	**87**	**86**	**80**	**91**	**83**	**93**	**0.81**	**0.88**

Source: Census 2001, NSSO 2007-08

Table 8: Gender Parity Index (GPI) 2010-11 (All Categories)									
Sr. No.	**States/Union Territories**	**Classes I-V**	**Classes VI-VIII**	**Classes I-VIII**	**Classes IX-X**	**Classes I-X**	**Classes XI-XII**	**Classes IX-XII**	**Classes I-XII**
1	Andhra Pradesh	1	1	1	1	1	0.9	0.96	0.99
2	Arunachal Pradesh	0.96	0.95	0.95	0.93	0.95	0.93	0.93	0.96
3	Assam	1.03	1.02	1.03	0.9	1.01	0.8	0.88	1
4	Bihar	0.94	0.88	0.92	0.8	0.91	0.75	0.78	0.9
5	Chhattisgarh	0.96	0.94	0.95	0.93	0.95	0.81	0.89	0.94
6	Goa	0.95	0.93	0.94	0.95	0.94	1.04	0.99	0.95
7	Gujarat	1.02	0.91	0.98	0.79	0.95	0.84	0.81	0.94
8	Haryana	1.11	1.03	1.08	1.17	1.09	1	1.09	1.08
9	Himachal Pradesh	1	0.96	0.99	0.99	0.99	0.98	0.98	0.98
10	Jammu & Kashmir	1.03	0.96	1.01	0.94	1	0.95	0.95	0.99
11	Jharkhand	1.02	0.99	1.01	0.91	1	0.89	0.91	1
12	Karnataka	0.99	0.97	0.98	0.98	0.98	1.04	1	0.99
13	Kerala	1	0.95	0.98	0.98	0.98	1.12	1.04	1
14	Madhya Pradesh	1.06	1.02	1.05	0.66	0.99	0.69	0.67	0.97
15	Maharashtra	0.98	0.94	0.97	0.94	0.96	0.83	0.89	0.95
16	Manipur	0.96	0.93	0.95	0.96	0.95	0.82	0.91	0.94
17	Meghalaya	1.01	1.12	1.04	1.02	1.03	1.27	1.08	1.04
18	Mizoram	0.94	0.94	0.94	1.04	0.95	0.98	1.01	0.95
19	Nagaland	0.99	1.02	1	1.08	1.01	0.91	1.01	1.01
20	Odisha	1.01	0.97	1	0.93	0.99	0.82	0.9	0.98
21	Punjab	0.99	0.96	0.98	1.02	0.98	1	1.01	0.98
22	Rajasthan	0.99	0.8	0.93	0.69	0.89	0.63	0.67	0.86
23	Sikkim	0.97	1.22	1.04	1.12	1.04	1.07	1.1	1.04
24	Tamil Nadu	1.01	0.99	1	1.02	1.01	1.24	1.1	1.02
25	Tripura	0.99	0.99	0.99	1	0.99	0.78	0.94	0.98
26	Uttar Pradesh	1.05	0.9	1	0.81	0.97	0.77	0.79	0.96
27	Uttarakhand	1.02	1.07	1.04	0.95	1.02	0.97	0.96	1.02
28	West Bengal	1.03	1.04	1.03	1.02	1.03	0.9	0.98	1.02
29	A&N Islands	0.97	0.97	0.97	0.94	0.96	1.11	1.01	0.98
30	Chandigarh	0.99	0.91	0.96	0.83	0.93	1.1	0.95	0.96
31	D&N Haveli	1.03	1	1.02	0.97	1.02	0.88	0.93	1.02
32	Daman & Diu	1.08	1.12	1.09	1.08	1.09	1.28	1.18	1.12
33	Delhi	1.03	0.96	1	0.97	0.99	0.99	0.97	0.99
34	Lakshadweep	0.99	1.26	1.09	1.07	1.09	1.12	1.09	1.09
35	Puducherry	0.98	0.93	0.96	0.98	0.96	1.18	1.05	0.98
	INDIA	**1.01**	**0.95**	**0.99**	**0.88**	**0.97**	**0.86**	**0.87**	**0.96**

Source: M/o Human Resources Development

Table 9: Gender Parity Index for Enrolment in Primary, Secondary and Tertiary Grades

Sr.no	State/UT	Gender parity index for primary classes i-v					Gender parity index for secondary classes IX -X					Gender parity index for higher education (tertiary)				
		2004-05	2005-06	2006-07	2007-08	2010-11	2004-05	2005-06	2006-07	2007-08	2010-11	2004-05	2005-06	2006-07	2007-08	2010-11
1	Andhra Pradesh	1.01	1.01	1	1	1	0.82	0.85	0.87	0.9	1	0.59	0.6	0.63	0.58	0.76
2	Arunachal	0.89	0.9	0.9	0.92	9.96	0.82	0.78	0.83	0.88	0.93	0.63	0.67	0.69	0.75	0.58
3	Assam	0.99	1	1.02	1	1.03	0.79	0.79	0.79	0.88	0.9	0.7	0.51	0.49	0.51	1.01
4	Bihar	0.75	0.75	0.77	0.82	0.94	0.48	0.54	0.58	0.62	0.8	0.38	0.24	0.25	0.43	0.77
5	Chhattisgarh	0.94	0.77	0.94	0.95	0.96	0.68	0.71	0.75	0.75	0.93	0.59	0.77	0.76	0.74	0.72
6	Goa	0.98	0.96	0.97	0.98	0.95	0.98	1	1	1	0.95	1.37	1.32	1.36	1.19	1.16
7	Gujarat	0.87	0.87	0.87	0.88	1.02	0.78	0.76	0.79	0.79	0.79	0.78	0.88	0.81	0.75	0.8
8	Haryana	1.06	1.04	1.04	1.07	1.11	0.88	0.91	0.97	0.95	1.17	0.91	0.99	0.96	0.92	0.76
9	Himachal	0.99	1.01	1	1	1	0.93	0.94	0.91	0.94	0.99	0.93	0.9	1.05	1.21	1
10	Jammu &	0.98	0.95	0.95	0.95	1.03	0.81	0.83	0.83	0.83	0.94	0.93	0.83	0.9	0.92	0.98
11	Jharkhand	0.84	0.86	0.89	1	1.02	0.67	0.67	0.71	0.75	0.91	0.61	0.68	0.68	0.56	0.85
12	Karnataka	0.98	0.98	0.97	0.98	0.99	0.94	0.95	0.94	0.97	0.98	0.81	0.74	0.73	0.84	0.92
13	Kerala	1	1	1.01	1.01	1	1.04	1.03	1.07	1.08	0.98	1.22	1.12	1.14	1.1	1.34
14	Madhya	0.95	0.96	0.96	0.99	1.06	0.64	0.65	0.67	0.67	0.66	0.52	0.55	0.49	0.79	0.79
15	Maharashtra	1	0.98	0.96	0.97	0.98	0.91	0.92	0.92	0.91	0.94	0.72	0.74	0.76	0.75	0.79
16	Manipur	0.96	0.96	0.96	0.97	0.96	0.93	0.93	0.94	0.95	0.96	0.79	0.76	0.86	0.59	0.86
17	Meghalaya	1.03	0.98	0.99	0.98	1.01	1.04	1.04	1.02	1.1	1.02	0.83	0.91	0.89	0.97	1.29
18	Mizoram	0.93	0.98	0.96	0.94	0.94	1.02	1	1	1	1.04	0.61	0.68	0.66	0.99	0.96
19	Nagaland	0.98	0.98	0.98	1	0.99	0.98	1.03	1.03	1.03	1.08	0.89	0.55	0.73	0.95	0.65
20	Odisha	0.97	0.97	0.96	1	0.97	0.67	0.67	0.83	0.86	0.93	0.26	0.23	0.25	0.31	0.78
21	Punjab	1.08	1.08	1.09	0.98	1.01	1.02	1	0.94	1.04	1.02	1.2	1.01	0.97	1.2	0.62
22	Rajasthan	0.93	0.95	0.95	0.95	0.99	0.48	0.52	0.56	0.58	0.69	0.57	0.56	0.59	0.73	0.72
23	Sikkim	0.99	0.97	1.01	0.98	0.97	1.01	1.02	1.03	1.04	1.12	0.75	0.82	0.84	0.79	0.85
24	Tamil Nadu	0.98	0.99	1	1	1.01	0.98	1.02	1.05	1.06	1.02	0.76	0.72	0.72	0.87	0.8
25	Tripura	0.96	0.95	0.96	0.98	0.99	0.88	0.89	0.87	0.94	1	0.72	0.73	0.73	0.8	0.69
26	Uttar Pradesh	0.94	0.93	0.93	1.05	1.05	0.68	0.67	0.67	0.81	0.81	0.74	0.74	0.69	0.63	1.14
27	Uttarakhand	1.01	1.03	1.05	1.09	1.02	0.83	0.9	0.9	0.84	0.95	0.96	0.95	0.95	0.9	1.13
28	West Bengal	0.99	0.96	1.01	0.99	1.03	0.78	0.77	0.78	0.84	1.02	0.61	0.58	0.65	0.62	0.79
29	A&N Islands	0.98	1	1.02	1.06	0.97	1.05	0.99	1.05	1.04	0.94	1.42	1.34	1.39	1.3	1.39
30	Chandigarh	0.9	0.87	0.89	0.87	0.99	1.15	1.1	1.19	1.02	0.83	1.49	1.38	1.53	1.08	0.96

Table 9: Gender Parity Index for Enrolment in Primary, Secondary and Tertiary Grades

Sr.no	State/UT	Gender parity index for primary classes i-v					Gender parity index for secondary classes IX -X					Gender parity index for higher education (tertiary)				
		2004-05	2005-06	2006-07	2007-08	2010-11	2004-05	2005-06	2006-07	2007-08	2010-11	2004-05	2005-06	2006-07	2007-08	2010-11
31	D&N Haveli	0.93	0.96	0.98	1.01	1.03	0.73	0.79	0.67	0.63	0.97	0.15	-	-	0	1.14
32	Daman & Diu	0.88	0.87	0.92	0.86	1.08	1.03	0.88	0.98	1.45	1.08	1.82	1.18	1.31	2.99	2.11
33	Delhi	1.11	1.04	1	1.02	1.03	1.13	1.14	1.03	1.03	0.97	1.3	1.14	1.05	1.21	0.85
34	Lakshadweep	0.89	0.93	1.02	0.94	0.99	1.1	1.15	1.16	1.43	1.07	-	-	0	0.54	
35	Puducherry	0.87	0.88	0.87	0.87	0.98	0.99	0.99	1	0.98	0.98	0.96	0.83	0.79	0.93	0.92
	India	**0.95**	**0.94**	**0.94**	**0.98**	**1.01**	**0.79**	**0.8**	**0.82**	**0.85**	**0.88**	**0.71**	**0.69**	**0.69**	**0.7**	0.86

M/o Human Resource Development

Table 10: Percentage share of females in wage employment (regular wage/salaried and casual labours) in the non-agriculture sector according to usual status (ps+ss)										
Sr.no.	State/U.T./All-India	2004-05			2009-10			2011-12		
		rural	urban	rural+urban	rural	urban	rural+urban	rural	urban	rural+urban
1	Andhra Pradesh	24.3	22.7	23.5	27	19.3	23.1	27.5	19.3	22.9
2	Arunachal Pradesh	18.7	18.4	18.6	18.1	16.2	17.3	17.8	15.6	16.6
3	Assam	14.9	20.1	16.4	12.8	13.7	13	12.6	14.9	13.2
4	Bihar	9.3	8.4	9	3.4	7.1	4.2	5.7	7.8	6.1
5	Chhattisgarh	20.2	21.1	20.6	25.2	21.7	23.4	28.6	29.9	29.3
6	Delhi	1.4	14.5	13.6	5.3	10.3	9.9	23.3	16.5	17.1
7	Goa	30.8	26.8	28.7	23.5	19.4	22.3	29.5	28.1	28.9
8	Gujarat	18.6	17	17.7	13.4	19.7	17.6	16.8	13.4	14.5
9	Haryana	7.9	13.8	10.3	11.5	15.3	13.4	7.9	17.1	12
10	Himachal Pradesh	14.1	19.8	15.3	17	20.3	17.4	20	21.7	20.4
11	Jammu & Kashmir	8.1	11.3	9.3	6.8	19	11.1	8.3	18.7	11.1
12	Jharkhand	15.4	19.8	16.8	11.6	14.6	12.5	7.2	13.1	9.1
13	Karnataka	22.3	20.1	20.9	25.2	21.2	22.6	17.3	23.3	20.9
14	Kerala	27.4	27.7	27.5	29.1	29.7	29.3	31.9	28.3	30.8
15	Madhya Pradesh	25.9	19.7	22.6	19.8	18.1	18.9	20.7	15	18.3
16	Maharashtra	17.5	21.9	20.7	11.5	18.2	16.4	16.1	21.6	20.1
17	Manipur	16.1	26	20.2	34.5	15.9	29.3	47.9	15.5	41.6
18	Megahlaya	19.5	47.2	33.7	27.3	31.9	29	31.5	27.6	30
19	Mizoram	19.4	21.9	21.2	29.7	20	23.4	42	20.2	27.6
20	Nagaland	15.1	22.8	19.1	24.3	8.7	17.5	13.3	15.3	14.5
21	Odisha	20.6	21.7	21	18.6	14	17.2	19.6	15.1	18.4
22	Punjab	8.8	18.5	13.5	13.8	15.1	14.5	11.1	18.3	14.5
23	Rajasthan	16.7	14.5	15.9	37	14	30	26.1	14.6	22.6
24	Sikkim	21.2	22.6	21.5	26.7	19.7	25.6	21.1	23.7	22.2
25	Tamil Nadu	25.5	24.6	25	31.4	19.9	24.6	42.9	22.6	32.5
26	Tripura	12	23.2	14	34.7	24.3	32.9	35.7	23.2	33.8
27	Uttarakhand	10.6	19.6	14.8	11.9	14.9	13.1	8.7	9.9	9.1
28	Uttar Pradesh	8.2	10.3	9.1	7.3	9.8	8.2	8	13.1	10
29	West Bengal	18.7	16.9	17.7	22.8	17	20.2	17.8	20.4	19.1

30	A & N Islands	18.3	19.2	18.8	24.7	26.2	25.5	24.8	27.9	26.4
31	Chandigarh	1.1	23.9	21.9	17	24.1	22.6	5.5	14.9	13.9
32	Dadra & Nagar Haveli	20.3	11.7	19.2	5.6	0.6	3.1	18.6	15.5	16.8
33	Daman & Diu	13	20.8	16.4	5.7	15.6	9.7	3.3	18.5	6.6
34	Lakshadweep	0	15.6	6.6	20	30	24.8	15	18.2	15.2
35	Puducherry	21.6	20.3	20.6	17.5	26.3	24	26.8	22.6	24
	all-India	**17.9**	**19.2**	**18.6**	**19.6**	**17.6**	**18.6**	**19.9**	**18.7**	**19.3**

Note: Since from the tabulation it is not possible to derive the casual labours in public works separately for agricultural sector and non-agricultural sector, all the casual workers in public works have been included in the non-agricultural sector

Source: NSS 61st round on Employment and unemployment 2004-05
NSS 66th round on Employment and unemployment (2009-10)
NSS 68th round on Employment and unemployment (2011-12)

Table 11: Trends in Under Five Mortality Rate											
Sr.no	**State**	**1990 estimate**	**1992**	**1998**	**2005**	**2009**	**2010**	**2011**	**2012**	**Likely achievement 2015**	**target 2015**
1	Andhra Pradesh	100	91.2	85.5	63.2	52	48	45	43	40	33
2	Arunachal Pradesh	76	72	98.1	87.7					108	25
3	Assam	142	142.2	89.5	85	87	83	78	75	70	47
4	Bihar	138	127.5	105.1	84.8	70	64	59	57	53	46
5	Chhattisgarh				90.3	67	61	57	55		
6	Delhi	86	83.1	55.4	46.7	37	34	32	28	26	29
7	Goa	51	38.9	46.8	20.3					14	17
8	Gujarat	115	104	85.1	60.9	61	56	52	48	45	38
9	Haryana	111	98.7	76.8	52.3	60	55	51	48	45	37
10	Himachal Pradesh	68	69.1	42.4	41.5	51	49	46	43	42	23
	India	**125**	**109.3**	**94.9**	**74.3**	**64**	**59**	**55**	**52**	**49**	**42**
11	Jammu & Kashmir	134	59.1	80.1	51.2	50	48	45	43	38	45
12	Jharkhand				93	62	59	54	50		
13	Karnataka	94	87.3	69.8	54.7	50	45	40	37	36	31
14	Kerala	33	32	18.8	16.3	14	15	13	13	11	11
15	Madhya Pradesh	148	130.3	137.6	94.2	89	82	77	73	70	49
16	Maharashtra	75	70.3	58.1	46.7	36	33	28	28	26	25
17	Manipur	68	61.7	56.1	41.9					32	23
18	Meghalaya	105	86.9	122	70.5					67	35
19	Mizoram	30	29.3	54.7	52.9					92	10
20	Nagaland	22	20.7	63.8	64.7					183	7
21	Odisha	136	131	104.4	90.6	84	78	72	68	66	45
22	Punjab	76	68	72.1	52	46	43	38	34	35	25
23	Rajasthan	113	102.6	114.9	85.4	74	69	64	59	59	38
24	Sikkim	136		71	40.1					18	45
25	Tamil Nadu	103	86.5	63.3	35.5	33	27	25	24	20	34
26	Tripura	97	104.6	51.3	59.2					34	32
27	Uttar Pradesh	152	141.3	122.5	96.4	85	79	73	68	65	51
28	Uttarakhand				56.8						
29	West Bengal	102	99.3	67.6	59.6	40	37	38	38	31	34

Source: Office of Registrar General Of India, National Family Health Surveys

Table 12: Under Five Mortality Rate 2012						
Sr.no	**State**	**Total**	**male**	**female**	**Rural**	**Urban**
1	Kerala	13	12	14	13	10
2	Tamil Nadu	24	23	26	28	20
3	Maharashtra	28	27	28	33	20
4	Delhi	28	27	30	39	26
5	Punjab	34	29	40	38	26
6	Karnataka	37	35	39	40	31
7	West Bengal	38	37	39	40	29
8	Andhra Pradesh	43	40	46	48	31
9	Jammu & Kashmir	43	42	45	46	30
10	Himachal Pradesh	43	40	46	43	37
11	Haryana	48	45	52	52	39
12	Gujarat	48	46	50	56	32
13	Jharkhand	50	47	54	53	31
	India	**52**	**49**	**56**	**58**	**32**
14	Chhattisgarh	55	48	62	57	40
15	Bihar	57	54	60	58	39
16	Rajasthan	59	52	67	65	36
17	Odisha	68	67	70	72	42
18	Uttar Pradesh	68	62	75	72	49
19	Madhya Pradesh	73	69	78	79	46
20	Assam	75	71	80	80	37

Source: SRS Report 2012, Office of Registrar General of India

Table 13: Trends in Infant mortality Rate															
Sr.no	State	1990	1990	1990	1990	1990	1994	2003	2007	2009	2010	2011	2012	Likely achievement 2015	Target 2015
		Female	Male	Total	Rural	Urban	Total	Total	Total	Total	Total	Total	Total		
1	Andhra Pradesh	68	72	70	73	56	65	59	54	49	46	43	41	41	23
2	Arunachal Pradesh	79.5	71.5	75.3	75.7	70.5	40.1	34	37	32	31	32	33	27	25
3	Assam	73	78	76	78	39	78	67	66	61	58	55	55	54	25
4	Bihar	74	75	75	77	46	67	60	58	52	48	44	43	42	25
5	Chhatisgarh								59	54	51	48	47		
6	Delhi								36	33	30	28	25		
7	Goa	22.2	19.4	20.7	20.8	20.6	3.5	16	13	11	10	11	10	11	7
8	Gujarat	70	73	72	79	54	64	57	52	48	44	41	38	38	24
9	Haryana	77	62	69	73	53	70	59	55	51	48	44	42	42	23
10	Himachal Pradesh	75	62.6	68.4	70	40.3	59	49	47	45	40	38	36	36	23
	India	**81**	**78**	**80**	**86**	**50**	**74**	**60**	**55**	**50**	**47**	**44**	**42**	**40**	**27**
11	Jammu & Kashmir								51	45	43	41	39		
12	Jharkhand								48	44	42	39	38		
13	Karnataka	64	76	70	80	39	67	52	47	41	38	35	32	31	23
14	Kerala	13	19	16	17	15	16	11	13	12	13	12	12	11	5
15	Madhya Pradesh	112	110	111	120	61	98	82	72	67	62	59	56	54	37
16	Maharashtra	62	55	58	64	44	55	42	34	31	28	25	25	23	19
17	Manipur	21.5	37.3	29.1	29.8	26.3	23.8	16	12	16	14	11	10	10	10
18	Meghalaya	53.6	55.1	54.3	54.8	49.4	47.3	57	56	59	55	52	49	54	18
19	Mizoram								23	36	37	34	35		
20	Nagaland								21	26	23	21	18		
21	Odisha	123	121	122	127	68	103	83	71	65	61	57	53	51	41
22	Punjab	71	52	61	66	45	53	49	43	38	34	30	28	28	20
23	Rajasthan	88	80	84	88	59	84	75	65	59	55	52	49	49	28
24	Sikkim	43.5	59.6	51.4	52.2	45.9	26.8	33	34	34	30	26	24	26	17
25	Tamil Nadu	61	57	59	70	37	59	43	35	28	24	22	21	19	20
26	Tripura	41.2	50.7	46	46.3	42	39.1	32	39	31	27	29	28	26	15
27	Uttar Pradesh	104	94	99	105	67	88	76	69	63	61	57	53	52	33
28	Uttarakhand								48	41	38	36	34		
29	West Bengal	62	64	63	68	41	62	46	37	33	31	32	32	28	21

Source: SRS, Office of Registrar General of India

Table 14: Infant Mortality Rate 2012						
Sr.no	**State**	**Total**	**male**	**female**	**Rural**	**Urban**
1	Kerala	12	10	13	13	9
2	Tamil Nadu	21	21	22	24	18
3	Delhi	25	24	26	36	23
4	Maharashtra	25	24	26	30	17
5	Punjab	28	27	29	30	24
6	Karnataka	32	30	34	36	25
7	West Bengal	32	31	33	33	26
8	Gujarat	38	36	39	45	24
9	Jharkhand	38	36	39	39	27
10	Jammu & Kashmir	39	38	40	41	28
11	Andhra Pradesh	41	40	43	46	30
12	Haryana	42	41	44	46	33
	India	**42**	**41**	**44**	**46**	**28**
13	Bihar	43	42	45	44	34
14	Chattisgarh	47	46	47	48	39
15	Rajasthan	49	47	51	54	31
16	Odisha	53	52	54	55	39
17	Uttar Pradesh	53	52	55	56	39
18	Assam	55	54	57	58	33
19	Madhya Pradesh	56	54	59	60	37

Source: SRS 2012, Office of Registrar General of India

Table 15: Percentage of One year old Children immunised against Measles													
Sr.no	**Area Name**	**1992-93**	**1998-99**	**2000**	**2001**	**2002**	**2002-04**	**2005**	**2005-2006**	**2007-08**	**2009**	**Likely achievement 2015**	**target 2015**
1	Andaman & Nicobar Islands			89	94.1		85.5					69.66	100
2	Andhra Pradesh	53.7	64.7	61.4	50.8	79.7	74	82.7	69.4	88.6	90.4	100.00	100
3	Arunachal Pradesh	27.5	33.6	41	67.1		38.1		38.3		48.2	91.20	100
4	Assam	25.8	24.6	29	66.3	62.6	35.9	44.2	37.4	64.4	80.1	100.00	100
5	Bihar		16.2	20.8	13.3	13.8	26.9	28.4	40.4	54.2	58.2	100.00	100
6	Chandigarh			80.1	84.3		76			87.3		58.94	100
7	Chhattisgarh		40		75	77.5	67.8	72	62.5	79.9	73.1	78.61	100
8	Dadra & Nagar Haveli			84.1	83.3		86.1			84.4		95.65	100
9	Daman & Diu			75.1	88.3		77.2			90.9		78.14	100
10	Delhi	69.6	77.5	77.5	75	77	73.7	84.3	78.2	83.1	83.3	89.05	100
	Goa	77.8	84.3	94	95		89.2	94.5	91.2	94.1	91.5	100.00	100
11	Gujarat	55.9	63.6	62.3	65.3	71.9	65.2	82.5	65.7	72.6	78	87.86	100
12	Haryana	60.9	72.2	59.5	64.3	63.3	65.2	70.5	75.5	69	79.9	78.21	100
13	Himachal Pradesh	71.8	89.1	86	93.3		88.6	92.9	86.3	94.5	96.2	100.00	100
14	Jammu & Kashmir		68.9	65.5	85		77.9	87.9	78.3	81.4	77.2	90.55	100
15	Jharkhand		18.2		27	29.2	32.3	58	47.6	70.5	67.5		
16	Karnataka	54.9	67.3	72.2	67.1	85.6	77.2	88.8	72	85.2	89.9	100.00	100
17	Kerala	60.5	84.6	88.4	91.9	93.6	87.9	94.5	82.1	87.9	86.2	100.00	100
18	Lakshadweep			93.1	95		89.7			92		75.69	100
19	Madhya Pradesh		34.1	47.7	57.8	81.1	47	58.8	61.4	57.7	61.9	80.89	100
20	Maharashtra	70.2	84.3	82.6	88.5	95	85.4	82.3	84.7	84.5	91.2	95.96	100
21	Manipur	37	45.8	61.8	51.7		53.3		52.8		60.3	91.57	100

22	Meghalaya	13.2	17.7	36.7	55		29.9		43.8	52.5	74.1	100.00	100

Table 15: Percentage of One year old Children immunised against Measles

Sr.no	Area Name	1992-93	1998-99	2000	2001	2002	2002-04	2005	2005-2006	2007-08	2009	Likely achievement 2015	target 2015
23	Mizoram	65.1	71	62.7	84.2		59.5		69.5	80.4	81.1	69.14	100
24	Nagaland	10	19.6	32.4	52.5		38.2		27.3		52.2	100.00	100
25	Odisha	40.2	54	59.1	62.1		67.8	81.9	66.5	81.1	71.9	100.00	100
26	Puducherry			89.3	93.3		96.4			94.2		100.00	100
27	Punjab	64.8	76.5	65.8	76.3	77.6	76.8	87.5	78	89.1	87.3	99.84	100
28	Rajasthan	31.3	27.1	33.6	34.5	24.7	35.9	68.2	42.7	67.5	65.6	90.75	100
29	Sikkim		58.9	78.9	82.5		83.2		83.1	92.5	87.8	100.00	100
30	Tamil Nadu	71.5	90.2	85.1	91.7	96.1	94.9	88.7	92.5	95.6	88.4	100.00	100
31	Tripura	28.9	44.6	43.4	63.6		49.7		59.9	51.7	68.8	100.00	100
32	Uttar Pradesh		33.5	29.7	28.1	29.2	35.4	42.1	37.7	47	52.8	68.12	100
33	Uttarakhand		56		54.6	62.1	54.4	72	71.6	82.1	75.8	100.00	100
34	West Bengal	42.5	52.4	65.4	60.8	86	65	72.6	74.7	82.8	77.2	100.00	100
	India	**42.2**	**50.7**	**50.4**	**55.6**	**61.4**	**56**	**68.1**	**58.8**	**69.6**	**74.1**	**89.06**	**100**

2007-08: DLHS -3, 2009 : Coverage Evaluation Survey, UNICEF and GOI

Table 16: Maternal mortality ratio (Deaths per 100,000 live births)											
	Area Name	**1990 est**	**1997**	**1997-98**	**1999-2001**	**2001-03**	**2004-06**	**2007-09**	**2010-12**	**likely achievement 2015**	**target 2015**
1	Andhra Pradesh	298	154	197	220	195	154	134	110	93	74
2	Assam	544	401	568	398	490	480	390	328	309	136
3	Bihar/Jahrkhand	736	451	531	400	371	312	261	219	167	184
4	Gujarat	308			202	172	160	148	122	106	77
5	Haryana	108	105	136	176	162	186	153	146	157	27
6	Karnataka	316	195	245	266	228	213	178	144	129	79
7	Kerala	279	195	150	149	110	95	81	66	50	70
8	Madhya Pradesh/ Chhatisgarh	603	498	441	407	379	335	269	230	192	151
9	Maharashtra	234	135	166	169	149	130	104	87	73	59
10	Odisha	482	361	346	424	358	303	258	235	202	121
11	Punjab	333	196	280	177	178	192	172	155	135	83
12	Rajasthan	725	677	508	501	445	388	318	255	215	181
13	Tamil Nadu	197	76	131	167	134	111	97	90	76	49
14	UttarPradesh/ Uttarakhand	855	707	606	539	517	440	359	292	242	214
15	West Bengal	667	264	303	218	194	141	145	117	85	167
	India	**437**	**408**	**398**	**327**	**301**	**254**	**212**	**178**	**140**	**109**

Source: O/o Registrar General of India

Table 17: Trends in Maternal Mortality Ratio, Maternal Mortality Rate and Life Time Risk										
		Maternal Mortality Ratio (MMR)			Maternal Mortality Rate			Life Time Risk		
Sr.no	Area Name	2004-06	2007-09	2010-12	2004-06	2007-09	2010-12	2004-06	2007-09	2010-12
1	Andhra Pradesh	154	134	110	10.9	9.1	6.9	0.4	0.3	0.2
2	Assam	480	390	328	34.4	27.5	21.5	1.2	1	0.8
3	Bihar/Jharkhand	312	261	219	38.4	30.1	22.8	1.3	1	0.8
4	Gujarat	160	148	122	14.8	12.8	9.5	0.5	0.4	0.3
5	Haryana	186	153	146	17.4	13.5	11.6	0.6	0.5	0.4
6	**INDIA**	**254**	**212**	**178**	**20.7**	**16.3**	**12.4**	**0.7**	**0.6**	**0.4**
7	Karnataka	213	178	144	14	10.8	8.1	0.5	0.4	0.3
8	Kerala	95	81	66	4.9	4.1	3.3	0.2	0.1	0.1
9	Madhya Pradesh/Chhattisgarh	335	269	230	36.9	27.4	21.1	1.3	1	0.7
10	Maharashtra	130	104	87	9.3	6.9	5.2	0.3	0.2	0.2
11	Odisha	303	258	235	24.9	19.5	16	0.9	0.7	0.6
12	Other	206	160	136	13.44	10.2	7.8	0.5	0.4	0.3
13	Punjab	192	172	155	13.7	11.3	9	0.5	0.4	0.3
14	Rajasthan	388	318	255	47.5	35.9	25.2	1.6	1.2	0.9
15	Tamil Nadu	111	97	90	6.6	5.6	5	0.2	0.2	0.2
16	Uttar Pradesh/Uttarakhand	440	359	292	53.8	40	28.7	1.9	1.4	1
17	West Bengal	141	145	117	10	9.2	6.6	0.3	0.3	0.2

Source: O/o Registrar General of India

Table 18: Percentage of deliveries assisted by a skilled health professional								
Sr.no	**State**	**1992-1993**	**1998-1999**	**2005-2006**	**2007-08**	**2009**	**Likely achievement 2015**	**Target 2015**
1	Andhra Pradesh	48.9	65.2	74.9	75.6	95.6	100	100
2	Arunachal Pradesh	22	31.9	30.2	48.8	71.9	74.85	100
3	Assam	18	21.4	31	39.9	65.5	71.70	100
4	Bihar		24.8	29.3	31.7	53.2	55.52	100
5	Chhattisgarh		32.3	41.6	29.6	56.4	50.49	100
6	Delhi	53.8	65.9	64.1	71.6	84.6	86.37	100
7	Goa	89.2	90.8	94	96.7	99.8	100.00	100
8	Gujarat	43.4	53.5	63	61.6	85.2	88.32	100
9	Haryana	31.5	42.1	48.9	53.2	69.3	76.76	100
10	Himachal Pradesh	25.6	40.2	47.8	50.9	53.7	69.95	100
11	Jammu & Kashmir		42.4	56.5	58.6	82.9	95.68	100
12	Jharkhand		17.5	27.8	24.9	47.3	54.33	100
13	Karnataka	46.6	59.1	69.7	71.6	88.4	97.81	100
14	Kerala	90.2	94.1	99.4	99.4	99.9	100.00	100
15	Madhya Pradesh		28.9	32.7	69.2	82.9	100.00	100
16	Maharashtra	53.1	59.4	68.7	49.9	85.5	74.29	100
17	Manipur	39.9	53.9	59	55.3	82.7	82.86	100
18	Meghalaya	37.9	20.6	31.1	28.9	65.2	43.93	100
19	Mizoram	62.2	67.5	65.4	63.3	85.1	76.68	100
20	Nagaland	18.9	32.8	24.7	24.7	43.8	38.27	100
21	Odisha	19	33.4	44	50.8	79.1	98.28	100
22	Punjab	47.3	62.6	68.2	76.9	66.7	84.37	100
23	Rajasthan	19.3	35.8	41	52.6	75.8	94.13	100
24	Sikkim		35.1	53.7	56.7	69.9	92.15	100
25	Tamil Nadu	69.3	83.7	90.6	95.5	98.6	100.00	100
26	Tripura	32.2	47.5	48.8	47.2	83.1	78.80	100
27	Uttar Pradesh		21.8	27.2	30	64.2	66.71	100
28	Uttarakhand		34.6	38.5	35.2	58.7	54.58	100
29	West Bengal	33.9	44.2	47.6	51.5	72.6	74.21	100
	India	**33**	**42.4**	**46.6**	**52**	**76.2**	**77.29**	**100**
NFHS, DLHS (2007-08), CES (2009)								

Table 19: Trend in Antenatal care and institutional delivery											
Sr.no	State	At least 1 ANC			≥ 3 ANC			Institutional Delivery			
		CES-2009	DLHS-3 (2007-08)	DLHS-2 (2002-04)	CES-2009	DLHS-3 (2007-08)	DLHS-2 (2002-04)	SRS (2012) [22]	CES-2009	DLHS-3 (2007-08)	DLHS-2 (2002-04)
1	Andhra Pradesh	99.5	95.9	94.5	97.0	89.4	87.9	92.1	94.3	71.8	60.9
2	Arunachal Pradesh	69.8	63.1	58.6	50.4	46.3	40.9	-	69.9	47.6	34.8
3	Assam	89.6	74.3	61.5	66.4	45	42.3	71.1	64.4	35.1	26.8
4	Bihar	84.3	59.1	37.9	33.8	26.3	19.6	59.5	48.3	27.5	23
5	Chhattisgarh	98.7	79.6	78.9	71.4	51.1	48.7	63.3	44.9	18	20.2
6	Delhi	95.9	91.6	81.4	83.4	71.7	67.3	88.7	83.6	68.7	49.9
7	Goa	99.2	99	96.9	97.7	95.8	84.2	-	99.8	96.4	91.2
8	Gujarat	94.8	71.5	87.9	83.2	54.8	61.4	86.1	78.1	56.4	52.2
9	Haryana	89.4	87.2	87.6	68.6	51.8	48.5	74.5	63.3	46.8	35.1
10	Himachal Pradesh	91.3	86.6	91	67.4	59.4	67.7	68.8	50.3	48.3	45.1
11	Jammu & Kashmir	93.8	84.3	87.6	87.0	73.3	80.2	78.6	80.9	54.9	70.5
12	Jharkhand	87.6	55.8	52.2	57.5	30.5	32.8	46.5	40.1	17.7	22.4
13	Karnataka	97.5	90.2	91.5	91.3	81.2	80	90.8	86.4	65.1	58
14	Kerala	97.4	99.8	99.7	90.8	95.2	96.8	99.4	99.9	99.4	97.8
15	Madhya Pradesh	92.3	61.7	74.1	60.0	34	34.6	92.8	81	46.9	28.2
16	Maharashtra	97.3	91.8	92.9	82.6	74.4	72	86.3	81.9	63.5	57.9
17	Manipur	93.7	75.1	77.8	85.0	57.2	58	-	80	41	44.6
18	Meghalaya	95.1	55.4	54.6	71.0	39.5	43.8	-	63.7	24.5	30.9
19	Mizoram	91.9	89.5	74.3	79.0	62.4	56.3	-	83	55.7	52.6

[22] Government hospital and Private hospital

Table 19: Trend in Antenatal care and institutional delivery										
Sr.no	State	At least 1 ANC			≥ 3 ANC			Institutional Delivery		
		CES-2009	DLHS-3 (2007-08)	DLHS-2 (2002-04)	CES-2009	DLHS-3 (2007-08)	DLHS-2 (2002-04)	SRS (2012) [23]	CES-2009	DLHS-3 (2007-08)	DLHS-2 (2002-04)
20	Nagaland	53.7		55.6	29.4		32.9	-	30.4		17.8
21	Odisha	98	84	75.9	77.0	54.5	47.3	69	75.5	44.1	34.4
22	Punjab	95.3	83.3	89.5	73.4	64.6	64.3	80.3	60.3	63.1	48.9
23	Rajasthan	86.8	56.6	68.1	55.2	27.6	33.3	80.8	70.4	45.4	31.4
24	Sikkim	91.9	95.2	89.5	87.3	69.8	67.9	-	68.9	49.5	58.6
25	Tamil Nadu	98.5	98.9	99.4	92.6	95.6	96.1	92.7	98.4	94	86.1
26	Tripura	90.9	67.2	82.2	83.1	43.9	66.1	-	82.6	46.2	62.4
27	Uttar Pradesh	71.6	64.2	57.8	38.2	21.8	24.6	53.9	62.1	24.5	22.4
28	Uttarakhand	74.6	55.3	62.6	54.8	32.2	27.9	-	53.5	30	23.7
29	West Bengal	99	96.1	90.7	83.2	66.9	64.6	74.7	69.5	49.1	46.3
	INDIA	**89.6**	**75.2**	**73.4**	**68.7**	**49.8**	**50**	**73.1**	**72.9**	**47**	**40.5**

Source: M/o Health and Family Welfare, SRS 2012- O/o Registrar General of India

[23] Government hospital and Private hospital

Table 20: HIV prevalence among pregnant women aged 15-24 years (%)

Sr.no	State	2004	2005	2006	2007	2008	2010-11
1	A & N Islands	0	0	0.14	0.13	0	0
2	Andhra Pradesh	1.52	1.59	1.26	0.98	1.15	0.66
3	Arunachal Pradesh	0	0.54	0.11	0	0.39	0.1
4	Assam	0	0	0.04	0.18	0.09	0.07
5	Bihar	0.26	0.59	0.3	0.33	0.33	0.17
6	Chandigarh	0.43	0	0.45	0.43	0	0
7	Chhattisgarh	0	0.3	0.11	0.25	0.32	0.38
8	Dadra Nagar Haveli	0	0.43	0	0.39	0	0
9	Daman & Diu	0.61	0	0	0.23	0.22	0
10	Delhi	0.39	0.41	0.08	0.25	0.23	0.34
11	Goa	1.17	0	0.28	0.47	0.78	0.56
12	Gujarat	0.16	0.16	0.56	0.44	0.33	0.31
13	Haryana	0	0.1	0.1	0.53	0.22	0.19
14	Himachal Pradesh	0.21	0.15	0.1	0.05	0.5	0.13
15	Jammu & Kashmir	0	0	0.09	0.08	0	0
16	Jharkhand	0	0.08	0.14	0.07	0.42	0.52
17	Karnataka	1.41	1.57	1.02	0.75	0.81	0.6
18	Kerala	0.43	0.34	0.09	0.42	0.19	0.11
19	Madhya Pradesh	0.41	0.24	0.27	0.19	0.24	0.4
20	Maharashtra	0.86	0.98	0.8	0.7	0.53	0.3
21	Manipur	1.44	0.92	1.09	0.9	0.38	0.54
22	Meghalaya	0	0	0	0	0	0.07
23	Mizoram	1.18	1.15	0.88	0.88	0.6	0.64
24	Nagaland	2.43	2.03	1.58	1.13	1.35	0.55
25	Odisha	0.46	0.55	0.58	0.27	0.35	0.45
26	Puducherry	0.39	0.2	0	0	0.21	0
27	Punjab	0.12	0.24	0.19	0.13	0.36	0.39
28	Rajasthan	0.15	0.51	0.28	0.22	0.25	0.53
29	Sikkim	0	0.24	0	0	0	0.15
30	Tamil Nadu	0.62	0.51	0.5	0.54	0.35	0.29
31	Tripura	0.35	0	0.4	0.36	0	0
32	Uttar Pradesh	0.42	0.11	0.24	0.08	0.2	0.29
33	Uttarakhand	0	0	0.1	0.11	0.26	0.33
34	West Bengal	0.36	0.81	0.27	0.38	0.18	0.11
	India	**0.86**	**0.89**	**0.57**	**0.49**	**0.48**	**0.39**

Source: HIV Sentinel Surveillance, D/o Aids Control

Table 21: Condom use at rate of the contraceptive prevalence rate (Condom use to overall contraceptive use among currently married women, 15-49 years, percent)		
Sr.no	**State**	**Female - Current Condom Use (%)**
1	Andaman & Nicobar	
2	Andhra Pradesh	0.5
3	Arunachal Pradesh	2.8
4	Assam	2.3
5	Bihar	2.3
6	Chandigarh	
7	Chhattisgarh	2.9
8	Dadar Nagar Haveli	
9	Daman & Diu	
10	Delhi	22.9
11	Goa	7.5
12	Gujarat	5.8
13	Haryana	11.8
14	Himachal Pradesh	11.5
15	Jammu & Kashmir	8
16	Jharkhand	2.7
17	Karnataka	1.7
18	Kerala	5.5
19	Lakshadweep	
20	Madhya Pradesh	4.8
21	Maharashtra	6.2
22	Manipur	4.1
23	Meghalaya	2.4
24	Mizoram	1.4
25	Nagaland	2.6
26	Odisha	3
27	Puducherry	
28	Punjab	15.5
29	Rajasthan	5.7
30	Sikkim	4.1
31	Tamil Nadu	2.3
32	Tripura	3.2
33	Uttar Pradesh	8.6
34	Uttarakhand	15.7
35	West Bengal	4.3
	India	**5.2**

Source: NFHS-3(2005-06)

Table 22: Condom use rate of the contraceptive prevalence rate among currently married women, 15-49 years (percent)				
Sr. No.	**State/Union Territory**	**NFHS-3 (2005-06)**	**NFHS-2 (1998-99)**	**NFHS-1 (1992-93)**
1	Andhra Pradesh	0.5	0.7	0.7
2	Arunachal Pradesh	2.8	0.7	0.7
3	Assam	2.3	1.8	1.7
4	Bihar	2.3	0.6	NA
5	Chhattisgarh	2.9	2.1	NA
6	Delhi	22.9	17.5	20.5
7	Goa	7.5	4.9	3.9
8	Gujarat	5.8	3.5	1.8
9	Haryana	11.8	6.8	5.2
10	Himachal Pradesh	11.5	5	5.3
11	Jammu & Kashmir	8	4.8	NA
12	Jharkhand	2.7	1.1	NA
13	Karnataka	1.7	1	1.2
14	Kerala	5.5	3.1	2.9
15	Madhya Pradesh	4.8	3.1	NA
16	Maharashtra	6.2	4	2.5
17	Manipur	4.1	1.3	1.2
18	Meghalaya	2.4	1.3	0.5
19	Mizoram	1.4	0.9	0.7
20	Nagaland	2.6	1.8	2.1
21	Odisha	3	0.9	0.6
22	Punjab	15.5	13.8	8.9
23	Rajasthan	5.7	3.1	1.5
24	Sikkim	4.1	1.5	NA
25	Tamil Nadu	2.3	1.5	1.6
26	Tripura	3.2	1.4	1.6
27	Uttar Pradesh	8.6	4	NA
28	Uttarakhand	15.7	6.2	NA
29	West Bengal	4.3	2.9	1.9
	India	**5.2**	**3.1**	**2.4**

Source: National Family Health Surveys

Table 23: Estimated new HIV infections (in 15+ years population)					
Sr.no	**State/UT**	**2008**	**2009**	**2010**	**2011**
1	Andhra Pradesh	19,588	18,548	17,465	16,603
2	Arunachal Pradesh	128	161	204	257
3	Assam	1,428	1,693	2,018	2,408
4	Bihar	8,647	8,115	7,866	7,797
5	Chhattisgarh	4,249	4,370	4,482	4,565
6	Delhi	1,986	2,080	2,143	2,234
7	Goa	164	151	140	132
8	Gujarat	6,995	6,750	6,545	6,455
9	Himachal Pradesh	648	643	637	626
10	Haryana	1,612	1,593	1,588	1,580
11	Jharkhand	5,441	6,461	7,657	9,085
12	Jammu & Kashmir	627	771	958	1,192
13	Karnataka	10,299	9,695	9,285	9,024
14	Kerala	1,161	965	863	789
15	Meghalaya	263	317	382	460
16	Maharashtra	8,510	7,397	6,570	5,893
17	Manipur	1,594	1,544	1,433	1,354
18	Madhya Pradesh	2,132	2,238	2,308	2,387
19	Mizoram	389	387	380	376
20	Nagaland	621	596	573	560
21	Odisha	11,340	11,869	12,306	12,703
22	Punjab	2,969	3,020	3,179	3,325
23	Rajasthan	4,831	4,575	4,432	4,364
24	Sikkim	66	75	84	94
25	Tamil Nadu	3,287	3,166	2,926	2,738
26	Tripura	646	736	835	951
27	Uttarakhand	1,470	1,886	2,411	3,081
28	Uttar Pradesh	7,704	7,613	7,647	7,745
29	West Bengal	7,620	7,533	7,375	7,289
30	Andaman & Nicobar	12	12	12	12
31	Chandigarh	205	220	233	252
32	Dadar & Nagar	31	36	41	48
33	Daman & Diu	30	35	40	47
34	Puducherry	38	33	33	33
	India	**116,731**	**115,285**	**115,051**	**116,456**

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Table 24: Number of People Living with HIV/AIDS (PLHA) receiving first line ART				
Cumulative number of PLHA as on March 2013				
Sr.no	**State**	**Adults**	**Children**	**Total**
1	Andhra Pradesh	129579	5996	135575
2	Arunachal Pradesh	46	2	48
3	Assam	2143	112	2255
4	Bihar	14106	804	14910
5	Chandigarh	2655	256	2911
6	Chhattisgarh	3499	299	3798
7	Delhi	12207	837	13044
8	Goa	1594	117	1711
9	Gujarat	30471	1774	32245
10	Haryana	3408	201	3609
11	Himachal Pradesh	2015	194	2209
12	Jammu & Kashmir	1050	68	1118
13	Jharkhand	3778	266	4044
14	Karnataka	86874	5902	92776
15	Kerala	7531	399	7930
16	Madhya Pradesh	8412	606	9018
17	Maharashtra	135491	8912	144403
18	Manipur	7761	539	8300
19	Meghalaya	279	12	291
20	Mizoram	1849	147	1996
21	Nagaland	3676	183	3859
22	Odisha	6100	285	6385
23	Puducherry	815	68	883
24	Punjab	10389	601	10990
25	Rajasthan	14832	937	15769
26	Sikkim	70	7	77
27	Tamil Nadu	65759	3454	69213
28	Tripura	304	9	313
29	Uttar Pradesh	24912	1469	26381
30	Uttarakhand	1415	104	1519
31	West Bengal	14032	785	14817
	Total	**5,97,052**	**3,53,45**	**6,32,397**

Source: D/o AIDS Control

Table 25: Estimated Adult HIV prevalence (15-49 years of age)					
Sr.no	**State/UT**	**2008**	**2009**	**2010**	**2011**
1	Andhra Pradesh	0.91	0.85	0.8	0.75
2	Arunachal Pradesh	0.07	0.09	0.11	0.13
3	Assam	0.04	0.05	0.06	0.07
4	Bihar	0.23	0.22	0.21	0.2
5	Chhattisgarh	0.24	0.25	0.26	0.27
6	Delhi	0.19	0.2	0.21	0.22
7	Goa	0.53	0.49	0.45	0.43
8	Gujarat	0.38	0.36	0.34	0.33
9	Himachal Pradesh	0.16	0.16	0.17	0.17
10	Haryana	0.11	0.11	0.11	0.11
11	Jharkhand	0.16	0.18	0.21	0.25
12	Jammu & Kashmir	0.04	0.05	0.06	0.08
13	Karnataka	0.62	0.58	0.55	0.52
14	Kerala	0.14	0.13	0.13	0.12
15	Meghalaya	0.08	0.09	0.11	0.13
16	Maharashtra	0.55	0.5	0.45	0.42
17	Manipur	1.43	1.36	1.29	1.22
18	Madhya Pradesh	0.11	0.1	0.09	0.09
19	Mizoram	0.77	0.76	0.75	0.74
20	Nagaland	0.79	0.76	0.74	0.73
21	Odisha	0.34	0.36	0.38	0.4
22	Punjab	0.16	0.16	0.17	0.18
23	Rajasthan	0.2	0.19	0.18	0.17
24	Sikkim	0.11	0.12	0.14	0.15
25	Tamil Nadu	0.35	0.32	0.3	0.28
26	Tripura	0.17	0.19	0.22	0.24
27	Uttarakhand	0.11	0.14	0.18	0.22
28	Uttar Pradesh	0.12	0.11	0.11	0.1
29	West Bengal	0.27	0.25	0.24	0.22
30	Andaman & Nicobar	0.1	0.09	0.08	0.08
31	Chandigarh	0.22	0.24	0.26	0.28
32	Dadar & Nagar	0.1	0.11	0.12	0.14
33	Daman & Diu	0.13	0.14	0.16	0.18
34	Puducherry	0.17	0.16	0.15	0.15
	India	**0.31**	**0.3**	**0.28**	**0.27**

Source: HIV Estimation 2012

Table 26: Trend of estimated AIDS Deaths from 2008-2011					
Sr.no	**State/UT**	**2008**	**2009**	**2010**	**2011**
1	Andhra Pradesh	42,337	38,919	35,276	31,347
2	Arunachal Pradesh	20	24	32	42
3	Assam	272	304	343	388
4	Bihar	8,663	9,294	9,660	9,750
5	Chhattisgarh	1,935	2,087	2,270	2,458
6	Delhi	465	504	445	432
7	Goa	491	426	350	281
8	Gujarat	11,426	11,284	10,489	9,510
9	Himachal Pradesh	391	402	397	355
10	Haryana	970	990	1,014	1,025
11	Jharkhand	1,256	1,454	1,677	1,947
12	Jammu & Kashmir	66	73	103	146
13	Karnataka	23,136	20,686	16,927	13,514
14	Kerala	1,792	1,870	1,825	1,738
15	Meghalaya	60	69	77	88
16	Maharashtra	40,734	35,522	29,350	23,764
17	Manipur	2,117	2,059	1,999	1,905
18	Madhya Pradesh	3,706	3,711	3,580	3,324
19	Mizoram	379	363	324	286
20	Nagaland	778	739	666	581
21	Odisha	4,800	5,360	5,822	6,330
22	Punjab	1,318	1,196	1,164	1,104
23	Rajasthan	5,383	5,529	5,480	5,276
24	Sikkim	20	21	24	25
25	Tamil Nadu	13,616	12,286	10,508	8,582
26	Tripura	202	226	249	279
27	Uttarakhand	168	207	260	328
28	Uttar Pradesh	10,986	10,653	10,104	9,436
29	West Bengal	14,629	14,514	14,027	13,310
30	Andaman & Nicobar	24	23	23	22
31	Chandigarh	78	87	93	102
32	Dadar & Nagar	11	12	14	17
33	Daman & Diu	9	11	13	15
34	Puducherry	74	54	39	24
	India	**192,314**	**180,960**	**164,625**	**147,729**

Source: HIV Estimation 2012

Table 27 (a): Trend in Malaria incidence and deaths (2006-09)													
	States/UT	2006		2007		2008		2009					
Sr.no		Malaria Incidence rate (%)	Deaths per 100 Malaria Cases	Malaria Incidence rate (%)	Deaths per 100 Malaria Cases	Malaria Incidence rate (%)	Deaths per 100 Malaria Cases	Blood Slide Examination	Malaria cases	Pf cases	Deaths	Malaria Incidence rate (%)	Deaths per 100 Malaria Cases
1	Andhra Pradesh	0.36	0	0.31	0.01	0.29	0	9189256	25152	14841	3	0.27	0.01
2	Arunachal Pradesh	14.19	0.5	13.06	0.11	11.62	0.09	213893	22066	6602	15	10.32	0.07
3	Assam	4.6	0.24	3.92	0.16	3.12	0.1	3021920	91413	66557	63	3.02	0.07
4	Bihar	1.14	0.04	1.12	0.06	1.73	0	115174	3255	2408	21	2.83	0.65
5	Chhattisgarh	5.05	0	4.21	0	4.05	0	3250904	129397	104055	11	3.98	0.01
6	Goa	1.8	0.14	2.74	0.11	2.47	0.21	417110	5056	1056	10	1.21	0.2
7	Gujarat	0.81	0.05	0.75	0.1	0.56	0.08	1E+07	45902	8485	34	0.45	0.07
8	Haryana	1.79	0	1.27	0	1.39	0	2083245	30168	781	0	1.45	0
9	Himachal Pradesh	0.02	0	0.02	0	0.04	0	397327	192	0	0	0.05	0
10	Jammu & Kashmir	0.04	0	0.06	0.42	0.05	0.46	464748	346	21	0	0.07	0
11	Jharkhand	9.25	0	9.23	0.02	8.4	0.01	3347069	230683	91194	28	6.89	0.01
12	Karnataka	0.63	0.05	0.56	0.04	0.53	0.02	9321098	36859	5723	0	0.4	0
13	Kerala	0.1	0.28	0.1	0.31	0.1	0.22	2054473	2046	249	5	0.1	0.24
14	Madhya Pradesh	0.99	0.06	0.99	0.05	1.13	0.05	9609659	87628	24581	26	0.91	0.03
15	Maharashtra	0.32	0.24	0.5	0.27	0.5	0.22	1.5E+07	93818	24962	227	0.64	0.24
16	Manipur	2.86	0.3	0.99	0.34	0.53	0.28	114720	1069	620	1	0.93	0.09
17	Meghalaya	10.31	0.56	11	0.65	11.22	0.18	501419	76759	74251	192	15.31	0.25
18	Mizoram	4.89	1.12	3.95	1.23	4.45	1.24	171793	9399	7387	119	5.47	1.27
19	Nagaland	3.66	2.23	4.7	0.52	3.74	0.37	156259	8489	2893	35	5.43	0.41
20	Odisha	7.67	0.07	7.52	0.06	7.46	0.06	5015489	380904	336047	198	7.59	0.05
21	Punjab	0.07	0	0.07	0	0.08	0	2996929	2955	35	0	0.1	0
22	Rajasthan	1.15	0.06	0.78	0.08	0.71	0.09	7845840	32709	1767	18	0.42	0.06
23	Sikkim	1.17	0	0.77	0	0.62	0	6688	42	16	1	0.63	2.38

Table 27 (a): Trend in Malaria incidence and deaths (2006-09)													
	States/UT	2006		2007		2008		2009					
Sr.no		Malaria Incidence rate (%)	Deaths per 100 Malaria Cases	Malaria Incidence rate (%)	Deaths per 100 Malaria Cases	Malaria Incidence rate (%)	Deaths per 100 Malaria Cases	Blood Slide Examination	Malaria cases	Pf cases	Deaths	Malaria Incidence rate (%)	Deaths per 100 Malaria Cases
24	Tamil Nadu	0.44	0	0.39	0	0.33	0.01	7801419	14988	448	1	0.19	0.01
25	Tripura	7.6	0.13	6.56	0.28	7.59	0.2	361848	24430	22952	62	6.75	0.25
26	Uttarakhand	0.38	0	0.41	0	0.47	0	208350	1264	43	0	0.61	0
27	Uttar Pradesh	2.32	0	2.37	0	2.25	0	3527695	55437	660	0	1.57	0
28	West Bengal	3.03	0.13	1.88	0.11	2	0.12	5336895	141211	36982	74	2.65	0.05
29	A&N Islands	2.27	0.03	2.66	0	2.83	0	133504	5760	3056	0	4.31	0
30	Chandigarh	0.59	0	0.39	0	0.45	0	94301	430	4	0	0.46	0
31	D & N Haveli	2.9	0	6.49	0	5.86	0	62279	3408	1181	0	5.47	0
32	Daman & Diu	0.48	0	0.37	0	0.42	0	24123	97	19	0	0.4	0
33	Delhi	0.1	0	0.03	0	0.04	0	509231	169	0	0	0.03	0
34	Lakshadweep	0	0	0	0	0	0	426	8	0	0	1.88	0
35	Puducherry	0.03	0	0.05	0	0.06	6.94	90550	65	1	0	0.07	0
	India	**1.67**	**0.1**	**1.59**	**0.09**	**1.57**	**0.07**	**1E+08**	**1563574**	**839877**	**1144**	**1.51**	**0.07**

Source of Data: Directorate of National Vector Borne Disease Control Programme, MoHFW, Govt. of India

Table 27 (b) Trend in Malaria incidence and deaths (2010-13)

		2010					2011				2012				2013*			
Sr.no		Blood Slide Examination	Malaria cases	Pf cases	Deaths	Malaria Incidence rate (%)	Deaths per 100 Malaria Cases	Blood Slide Examination	Malaria cases	Pf cases	Deaths	Blood Slide Examination	Malaria cases	Pf cases	Deaths	Blood Slide Examination	Malaria cases	Pf cases	Deaths
1	Andhra Pradesh	912064 3	33393	23259	20	0.37	0.06	936874 0	3494 9	24089	5	942396 4	24699	15695	2	643650 2	13351	9132	0
2	Arunachal Pradesh	190063	17944	5412	103	9.44	0.57	197626	13950	4856	17	150707	8368	2789	15	87109	5074	1643	11
3	Assam	4309287	68353	48330	36	1.59	0.05	4130216	47397	34707	45	3973341	29999	20579	13	3246029	17002	12758	7
4	Bihar	1337357	1908	933	1	1.43	0.05	167561	2643	1273	0	190307	2605	838	0	146668	1944	563	0
5	Chhattisgarh	3426558	152209	120080	47	4.44	0.03	3444641	136899	107472	42	3721209	124006	96924	90	2728863	82372	66880	17
9	Goa	459861	2368	275	1	0.51	0.04	418722	1187	135	3	445331	1714	170	0	369355	1282	114	0

Table 27 (b) Trend in Malaria incidence and deaths (2010-13)

Sr.no		2010						2011				2012				2013*			
		Blood Slide Examination	Malaria cases	Pf cases	Deaths	Malaria Incidence rate (%)	Deaths per 100 Malaria Cases	Blood Slide Examination	Malaria cases	Pf cases	Deaths	Blood Slide Examination	Malaria cases	Pf cases	Deaths	Blood Slide Examination	Malaria cases	Pf cases	Deaths
7	Gujarat	10689221	6650 1	13729	71	0.62	0.11	10967041	89764	16112	127	10755616	76246	10483	29	10528688	48935	6032	19
8	Haryana	2340573	18921	764	0	0.81	0	2907380	33401	1133	1	28131 99	26819	569	1	2027361	11225	126	2
9	Himachal Pradesh	393203	210	2	0	0.05	0	367499	247	2	0	401511	216	3	0	392524	130	0	0
10	Jammu & Kashmir	473268	802	43	0	0.17	0	484704	1091	45	0	490495	864	34	0	406216	612	16	0
11	Jharkhand	3383496	199842	8935 7	16	5.91	0.01	3441614	160653	7030 2	17	3763323	131476	4818 8	10	2893834	7756 0	2783 0	5
12	Karnataka	9281666	44319	7936	11	0.48	0.02	9205620	24237	2648	0	9109193	16466	1278	0	7222627	10170	644	5

Table 27 (b) Trend in Malaria incidence and deaths (2010-13)

Sr.no		2010					2011				2012				2013*			
		Blood Slide Examination	Malaria cases	Pf cases	Deaths	Malaria Incidence rate (%)	Deaths per 100 Malaria Cases	Blood Slide Examination	Malaria cases	Pf cases	Deaths	Blood Slide Examination	Malaria cases	Pf cases	Deaths	Blood Slide Examination	Malaria cases	Pf cases	Deaths
13	Kerala	2143497	2299	271	7	0.11	0.3	2153277	1993	271	2	2414705	2036	236	3	2097121	1370	191	0
14	Madhya Pradesh	9230400	87165	31092	31	0.94	0.04	9900131	91851	31940	109	9580368	76538	24039	43	7164158	56865	18034	18
15	Maharashtra	16118905	139198	32387	200	0.86	0.14	16098563	9657	21401	118	16578129	58517	11875	96	14017371	37068	6888	58
16	Manipur	117986	947	487	4	0.8	0.42	120615	714	314	1	115257	255	83	0	79956	115	40	0
17	Meghalaya	437167	41642	39374	87	9.53	0.21	391397	25143	24018	53	354574	20834	19805	52	318137	21217	20249	42
18	Mizoram	3349991	15594	14664	31	4.66	0.2	213149	8861	8373	30	168421	9883	9437	25	1817799	10075	9244	19

Table 27 (b) Trend in Malaria incidence and deaths (2010-13)

Sr.no		2010					2011				2012				2013*			
		Blood Slide Examination	Malaria cases	Pf cases	Deaths	Malaria Incidence rate (%)	Deaths per 100 Malaria Cases	Blood Slide Examination	Malaria cases	Pf cases	Deaths	Blood Slide Examination	Malaria cases	Pf cases	Deaths	Blood Slide Examination	Malaria cases	Pf cases	Deaths
24	Tamil Nadu	7838638	17086	623	3	0.22	0.02	7841899	22171	925	0	7682917	18869	576	0	7068412	13075	379	0
23	Sikkim	6526	49	14	0	0.75	0	6969	51	14	0	6574	77	14	0	10105	38	12	0
22	Rajasthan	8732582	50963	2331	26	0.58	0.05	8591970	54294	2973	45	8591458	45809	1394	22	6116898	23800	674	6
21	Punjab	3140465	3477	71	0	0.11	0	3120544	2693	64	3	2911782	1689	43	0	2442878	1653	24	0
20	Odisha	5240458	395651	350428	247	7.55	0.06	4650799	308968	281577	99	4616440	262842	244503	79	4106128	179570	164957	55
19	Nagaland	182804	4959	1877	14	2.71	0.28	205520	3363	950	4	214943	2891	821	1	193941	2048	444	1

Table 27 (b) Trend in Malaria incidence and deaths (2010-13)

Sr.no		2010					2011				2012				2013*			
		Blood Slide Examination	Malaria cases	Pf cases	Deaths	Malaria Incidence rate (%)	Deaths per 100 Malaria Cases	Blood Slide Examination	Malaria cases	Pf cases	Deaths	Blood Slide Examination	Malaria cases	Pf cases	Deaths	Blood Slide Examination	Malaria cases	Pf cases	Deaths
25	Tripura	330608	23939	21254	15	7.24	0.06	288076	14417	13812	12	268189	11565	10915	7	183397	5670	5408	4
26	Uttarakhand	214763	1672	183	0	0.78	0	246641	1277	123	1	267013	1948	111	0	258426	1300	92	0
27	Uttar Pradesh	4066059	64606	1382	0	1.59	0	4110871	56968	1857	0	3945295	47400	740	0	3504074	41891	490	0
28	West Bengal	5440313	134795	24693	47	2.48	0.03	5044278	66368	10858	19	5159246	55793	8669	30	4413507	24330	2277	16
29	A&N Islands	121760	2484	803	0	2.04	0	97946	1918	607	0	95372	1539	696	0	65992	922	323	0
30	Chandigarh	98930	351	6	0	0.35	0	75368	582	9	0	86991	201	3	0	38048	144	1	0

Table 27 (b) Trend in Malaria incidence and deaths (2010-13)

Sr.no		2010					2011			2012			2013*		
		Blood Slide Examination	Malaria cases	Pf cases	Deaths	Malaria Incidence rate (%)	Death s per 100 Malaria Cases	Blood Slide Examination	Malaria cases	Pf cases	Deaths	Blood Slide Examination	Malaria cases	Pf cases	Deaths
31	D & N Haveli	65104	5703	2243	0	8.76	0	58949	5150	2082	0	101055	4940	2149	1	56638	1709	490	0
32	Daman & Diu	25502	204	60	0	0.8	0	31856	262	55	0	33807	186	33	0	29849	83	3	0
33	Delhi	503926	251	1	0	0.05	0	377122	413	1	0	380515	382	1	0	278861	303	7	0
34	Lakshadweep	440	6	0	0	1.36	0	578	8	0	0	473	9	0	0	0	0	0	0
35	Puducherry	86009	175	0	0	0.2	0	241778	196	6	1	233078	143	2	0	180753	103	1	0
	India	**10867942 9**	**1599986**	**834364**	**1018**	**1.47**	**0.06**	**10896960**	**1310656**	**665004**	**754**	**1.09E+08**	**1067824**	**533695**	**519**	**89292025**	**693006**	**355966**	**285**

Table 28: Revised National Tuberculosis Control Programme - Total Patients Registered and Deaths reported under the programme

		2005			2006			2007			2008			2009			2010		2011
Sr.no	State	Total Patients Registered	Total Died	Mortality Rate	Total Patients Registered	Total Died	Mortality Rate	Total Patients Registered	Total Died	Mortality Rate	Total Patients Registered	Total Died	Mortality Rate	Total Patients Registered	Total Died	Mortality Rate	Total Patients Registered	Total Died *	Total Patients Registered **
1	Andaman & Nicobar	375	19	0.05	920	47	0.05	775	34	0.04	748	30	0.04	803	27	0.03	804	20	451
2	Andhra Pradesh	108670	5504	0.05	107131	5681	0.05	111304	5772	0.05	114624	5844	0.05	114074	6077	0.05	114414	3055	56415
3	Arunachal Pradesh	2346	141	0.06	2607	102	0.04	2746	92	0.03	2450	84	0.03	2432	71	0.03	2360	30	1201
4	Assam	29494	1358	0.05	32311	1504	0.05	36766	1561	0.04	38454	1458	0.04	39910	1718	0.04	39788	803	19083
5	Bihar	28012	1082	0.04	61151	2384	0.04	79619	2612	0.03	84404	2378	0.03	82401	2208	0.03	78510	1061	39472
6	Chandigarh	2478	63	0.03	2322	60	0.03	2411	56	0.02	2492	66	0.03	2572	50	0.02	2764	41	1313
7	Chhatisgarh	23530	1044	0.04	28209	1149	0.04	27504	1012	0.04	27280	979	0.04	27463	953	0.03	28658	502	13908
8	D & N Haveli	141	7	0.05	391	18	0.05	390	8	0.02	443	20	0.05	386	15	0.04	397	9	209
9	Daman & Diu	158	3	0.02	280	21	0.08	337	11	0.03	224	5	0.02	326	16	0.05	293	8	155
10	Delhi	45717	1077	0.02	47606	1177	0.02	49058	1241	0.03	49505	1240	0.03	50693	1420	0.03	50476	745	28253
11	Goa	1731	59	0.03	2036	95	0.05	2104	103	0.05	1996	113	0.06	1897	78	0.04	2156	49	1017
12	Gujarat	77087	3802	0.05	79821	4480	0.06	80399	4323	0.05	79365	4266	0.05	80575	4174	0.05	77839	2027	37493
13	Haryana	34516	1508	0.04	34693	1534	0.04	35591	1567	0.04	35348	1623	0.05	38241	1751	0.05	36589	839	19554
14	Himachal Pradesh	13697	584	0.04	13303	596	0.04	13611	607	0.04	13618	544	0.04	13743	564	0.04	14179	293	7372
15	Jammu & Kashmir	4478	229	0.05	10268	521	0.05	12392	494	0.04	12521	464	0.04	13164	410	0.03	13482	204	7224
16	Jharkhand	26178	988	0.04	33035	1196	0.04	36133	1300	0.04	38395	1453	0.04	39569	1297	0.03	39465	639	19633
17	Karnataka	68695	4436	0.06	64842	4304	0.07	67630	4849	0.07	66159	4708	0.07	67744	4881	0.07	68655	2589	35281
18	Kerala	25074	1166	0.05	25248	1182	0.05	24397	1230	0.05	24935	1164	0.05	27019	1155	0.04	26255	603	13189
19	Lakshadweep	4	0	0.00	16	0	0.00	15	0	0.00	11	0	0.00	24	0	0.00	13	0	5
20	Madhya Pradesh	72335	3092	0.04	74435	3130	0.04	80410	3121	0.04	80929	3052	0.04	83276	3114	0.04	87823	1578	44176
21	Maharashtra	144564	6936	0.05	138837	7167	0.05	142792	7680	0.05	139641	7966	0.06	137705	7794	0.06	136135	4016	67469

Table 28: Revised National Tuberculosis Control Programme - Total Patients Registered and Deaths reported under the programme

		2005			2006			2007			2008			2009			2010		2011
Sr.no	State	Total Patients Registered	Total Died	Mortality Rate	Total Patients Registered	Total Died	Mortality Rate	Total Patients Registered	Total Died	Mortality Rate	Total Patients Registered	Total Died	Mortality Rate	Total Patients Registered	Total Died	Mortality Rate	Total Patients Registered	Total Died *	Total Patients Registered **
22	Manipur	4639	130	0.03	4603	119	0.03	4885	155	0.03	4293	147	0.03	4239	139	0.03	3652	62	1544
23	Meghalaya	2953	166	0.06	3929	181	0.05	4857	186	0.04	4639	203	0.04	4591	278	0.06	4947	113	2440
24	Mizoram	1915	70	0.04	1912	73	0.04	2177	73	0.03	2558	86	0.03	2538	90	0.04	2310	41	1192
25	Nagaland	2934	92	0.03	2695	72	0.03	3079	87	0.03	2984	86	0.03	3614	94	0.03	3904	36	1880
26	Orissa	44501	2215	0.05	44790	2276	0.05	49285	2529	0.05	51031	2791	0.05	52145	2524	0.05	49869	1327	25395
27	Puducherry	1462	78	0.05	1513	111	0.07	1383	91	0.07	1333	67	0.05	1385	80	0.06	1437	44	806
28	Punjab	30764	1488	0.05	34537	1527	0.04	35875	1585	0.04	37076	1584	0.04	38641	1642	0.04	40637	1002	21335
29	Rajasthan	104315	3553	0.03	107783	3815	0.04	111700	4069	0.04	112192	4087	0.04	111501	4281	0.04	112987	2195	58206
30	Sikkim	1578	58	0.04	1458	53	0.04	1538	68	0.04	1641	61	0.04	1720	87	0.05	1646	37	841
31	Tamil Nadu	92725	4589	0.05	87065	4682	0.05	86113	4140	0.05	84610	4189	0.05	82634	3973	0.05	82457	2068	41251
32	Tripura	1429	87	0.06	2314	120	0.05	2573	130	0.05	2846	130	0.05	2851	149	0.05	2850	65	1438
33	Uttar Pradesh	176022	5818	0.03	224465	7822	0.03	245106	8456	0.03	278044	9639	0.03	283317	9384	0.03	277245	4338	146349
34	Uttarakhand	10825	359	0.03	11653	314	0.03	13406	346	0.03	13331	417	0.03	14300	489	0.03	14754	273	7791
35	West Bengal	107741	4784	0.04	109319	5032	0.05	107226	5214	0.05	107213	5268	0.05	105816	5258	0.05	102397	2644	52307
	Total	1293083	56585	0.04	1397498	62545	0.04	1475587	64802	0.04	1517333	66212	0.04	1533309	66241	0.04	1522147	33356	775648

Remark - *(Data available only for the period 1st Jan to 30th June 2010). Outcomes are available 13-15 months after initiating a patient on treatment.

**Data for period 1st Jan to 30th June 2011

Source: D/o RNTCP, M/o HFW

Table 29: Prevalence and Treatment outcomes of TB cases													
Sr.No	States/UTs	2004				2008				2010			
		Prevalence Rate per 100,000 population	Cure rate of new S+ve cases (%)	Success Rate among new S+ve cases (%)	% died of new S+ve cases	Prevalence Rate per 100,000 population	Cure rate of new S+ve cases (%)	Success Rate among new S+ve cases (%)	% died of new S+ve cases	Prevalence Rate per 100,000 population	Cure rate of new S+ve cases (%)	Success Rate among new S+ve cases (%)	% died of new S+ve cases
1	A & N Islands					56.5	82	84	2	40	88	90	2
2	Andhra Pradesh	134.6	84	86	6	34.7	87	89	4.8	34.7	87	89	4.7
3	Arunachal Pradesh	171.4	85	87	4	47.4	87	88	2.1	53.7	86	88	2.6
4	Assam	94	80	82	6.3	29.1	86	88	4.4	34.6	80	83	4.2
5	Bihar	61.1	87	90	2.9	21.3	81	88	3.7	19.6	80	88	2.9
6	Chandigarh	216.4	85	95	3.3	45.2	87	88	4	54.9	85	85	4.2
7	Chhattisgarh	89.9	83	95	5	27.1	83	87	4.4	30.1	78	86	4
8	Dadra Nagar Haveli					45.7	76	76	6.9	31.3	78	78	2.7
9	Daman & Diu					21.5	54	58	4.2	21.7	82	82	0
10	Delhi	284.5	85	85	2.6	56.4	88	88	2.7	67.7	85	85	3
11	Goa	36.4				32.9	81	84	6	33.5	91	92	1.9
12	Gujarat	148.3	85	85	4.8	33.8	86	87	4.5	33.2	88	89	4
13	Haryana	148	83	83	4.1	32	84	85	4.8	37.2	84	85	4.9
14	Himachal Pradesh	210.3	87	88	3.9	43.1	87	89	4.4	52.6	87	89	4.3
15	Jammu & Kashmir	26.7				23.1	89	90	5.2	25.9	89	90	2.9
16	Jharkhand	81.1	91	93	2.9	30.5	85	91	3.8	33.9	84	90	3.5
17	Karnataka	116.5	80	81	5.9	27.4	78	79	7.3	29.3	79	82	6.4
18	Kerala	77.8	88	89	4.1	18.2	81	83	5.2	18.7	83	85	4.4
19	Lakshadweep					4	100	100	0	4	100	100	0
20	Madhya Pradesh	98.1	81	84	5.3	26.9	83	86	4.6	32.8	85	88	3.9

Table 29: Prevalence and Treatment outcomes of TB cases													
Sr.No	States/UTs	2004				2008				2010			
		Prevalence Rate per 100,000 population	Cure rate of new S+ve cases (%)	Success Rate among new S+ve cases (%)	% died of new S+ve cases	Prevalence Rate per 100,000 population	Cure rate of new S+ve cases (%)	Success Rate among new S+ve cases (%)	% died of new S+ve cases	Prevalence Rate per 100,000 population	Cure rate of new S+ve cases (%)	Success Rate among new S+ve cases (%)	% died of new S+ve cases
21	Maharashtra	139.9	86	87	5.3	32.2	84	86	5.6	30	84	86	6
22	Manipur	193.9	84	85	4.4	38.1	86	86	4.4	45.8	86	86	2.5
23	Meghalaya	152	75	76	3.9	41	86	87	3.9	54.7	80	82	2.7
24	Mizoram	203.5	85	86	3.5	62.1	88	88	1.5	58.4	89	90	2.3
25	Nagaland	97.3	82	84	4.3	34.7	91	91	`1	45.9	92	93	1.8
26	Orissa	112.6	80	84	6	30.2	83	87	5.2	31	83	87	4.9
27	Pondicherry	120.3				25.7	84	84	6.6	24.8	88	88	4.7
28	Punjab	78.7	81	85	4.4	29.7	84	88	4.5	37.6	86	88	4.6
29	Rajasthan	173.4	87	88	3.4	38.1	88	90	3.5	43.4	88	90	3.2
30	Sikkim	287.3	88	89	2.3	63.3	86	86	3	71.7	86	86	1.7
31	Tamil Nadu	150.8	88	88	4.9	29	84	86	5.7	31.1	86	87	4.9
32	Tripura	5.1				19.3	87	89	5.8	20.7	89	91	2.9
33	Uttar Pradesh	116.1	83	84	4.9	33.6	85	88	4	35.6	86	89	3.5
34	Uttaranchal	94.7	92	92	3.1	31.2	79	85	2.7	36.4	82	84	3.2
35	West Bengal	122.4	87	87	4	27.5	84	86	4.4	28.8	84	86	4
	India	125.4	85	86	4.7	30.6	84	87	4.6	32.6	85	87	4.1

Source: Revised National Tuberculosis Control Programme Reports, MoHFW, Govt. of India

Table 30: Forest Cover in STATES/UTs in India – 2011 (in sq.km)							
Sr. No.	State/UT	Geographic Area	Forest Cover Area				% of G.A.
			Very Dense Forest	Moderate Dense Forest	Open Forest	Total Forest	
1	Andhra Pradesh	275069	850	26242	19297	46389	16.86
2	Arunachal Pradesh	83743	20868	31519	15023	67410	80.5
3	Assam	78438	1444	11404	14825	27673	35.28
4	Bihar	94163	231	3280	3334	6845	7.27
5	Chhattisgarh	135191	4163	34911	16600	55674	41.18
6	Delhi	1483	6.76	49.48	119.96	176.2	11.88
7	Goa	3702	543	585	1091	2219	59.94
8	Gujarat	196022	376	5231	9012	14619	7.46
9	Haryana	44212	27	457	1124	1608	3.64
10	Himachal Pradesh	55673	3224	6381	5074	14679	26.37
11	Jammu & Kashmir	222236	4140	8760	9639	22539	10.14
12	Jharkhand	79714	2590	9917	10470	22977	28.82
13	Karnataka	191791	1777	20179	14238	36194	18.87
14	Kerala	38863	1442	9394	6464	17300	44.52
15	Madhya Pradesh	308245	6640	34986	36074	77700	25.21
16	Maharashtra	307713	8736	20815	21095	50646	16.46
17	Manipur	22327	730	6151	10209	17090	76.54
18	Meghalaya	22429	433	9775	7067	17275	77.02
19	Mizoram	21081	134	6086	12897	19117	90.68
20	Nagaland	16579	1293	4931	7094	13318	80.33
21	Odisha	155707	7060	21366	20477	48903	31.41
22	Punjab	50362	0	736	1028	1764	3.5
23	Rajasthan	342239	72	4448	11567	16087	4.7
24	Sikkim	7096	500	2161	698	3359	47.34
25	Tamil Nadu	130058	2948	10321	10356	23625	18.16
26	Tripura	10486	109	4686	3182	7977	76.07
27	Uttar Pradesh	240928	1626	4559	8153	14338	5.95
28	Uttaranchal	53483	4762	14167	5567	24496	45.8
29	West Bengal	88752	2984	4646	5365	12995	14.64
30	A. & N. Islands	8249	3761	2416	547	6724	81.51
31	Chandigarh	114	1.35	9.55	5.88	16.78	14.72
32	Dadra & Nagar Haveli	491	0	114	97	211	42.97
33	Daman & Diu	112	0	0.62	5.53	6.15	5.49
34	Lakshadweep	32	0	17.18	9.88	27.06	84.56
35	Puducherry	480	0	35.37	14.69	50.06	10.43
Total		**3287263**	**83471**	**320736**	**287820**	**692027**	**21.05**

Table 30: Forest Cover in STATES/UTs in India – 2011 (in sq.km)							
Sr. No.	State/UT	Geographic Area	Forest Cover Area				% of G.A.
			Very Dense Forest	Moderate Dense Forest	Open Forest	Total Forest	

Source: India State of Forest Report 2011

Table 31 : State/UT Wise Percentage of Forest to total geographic area (1995-2011)									
Sl. No.	State/UT	1995	1997	1999	2001	2003	2005	2007	2011*
1	Andhra Pradesh	23.17	23.2	23.2	23.2	23.2	23.2	23.2	16.86
2	Arunachal Pradesh	61.55	61.55	61.55	61.55	61.55	61.55	61.55	80.5
3	Assam	39.15	39.15	39.15	34.45	34.45	34.21	34.21	35.28
4	Bihar	16.81**	16.81	16.81	6.45	6.87	6.87	6.87	7.27
5	Chhattisgarh				43.85	44.21	44.21	44.21	41.18
6	Delhi	2.83	2.83	5.73	5.73	5.73	5.73	5.73	11.88
7	Goa	32.93	37.34	37.34	33.07	33.06	33.06	33.06	59.94
8	Gujarat	9.89	9.89	9.89	9.69	9.75	9.67	9.66	7.46
9	Haryana	3.82	3.78	3.78	3.51	3.52	3.53	3.53	3.64
10	Himachal Pradesh	67.52	63.6	63.6	66.52	66.52	66.52	66.52	26.37
11	Jammu & Kashmir	9.08	9.08	9.08	9.1	9.1	9.1	9.1	10.14
12	Jharkhand				29.61	29.61	29.61	29.61	28.82
13	Karnataka	20.15	20.19	20.19	20.19	22.46	19.96	19.96	18.87
14	Kerala	28.88	28.87	28.87	28.87	28.99	28.99	28.99	44.52
15	Madhya Pradesh	35.07***	34.84	34.84	30.89	30.89	30.72	30.72	25.21
16	Maharashtra	20.75	2.08	2.08	20.13	20.13	20.13	20.13	16.46
17	Manipur	67.87	67.87	67.87	78.01	78.01	78.01	78.01	76.54
18	Meghalaya	42.34	42.34	42.34	42.34	42.34	42.34	42.34	77.02
19	Mizoram	75.59	75.59	75.59	75.59	79.3	79.3	79.3	90.68
20	Nagaland	52.02	52.05	52.05	52.05	50.05	52.05	55.62	80.34
21	Odisha	36.73	36.73	36.73	37.34	37.34	37.34	37.34	31.41
22	Punjab	5.64	5.76	5.76	6.07	6.12	6.12	6.07	3.5
23	Rajasthan	9.22	9.26	9.26	9.49	9.49	9.49	9.54	4.7
24	Sikkim	37.34	37.34	37.34	81.24	82.31	82.31	82.31	47.34
25	Tamil Nadu	17.45	17.4	17.4	17.59	17.59	17.59	17.59	18.11
26	Tripura	60	60.01	60.01	60.01	60.01	60.02	60.02	76.07
27	Uttar Pradesh	17.49^	17.55	17.55	6.98	6.98	6.97	6.88	5.95
28	Uttarakhand				64.81	64.81	64.79	64.79	45.8

29	West Bengal	13.38	13.38	13.38	13.38	13.38	13.38	13.38	14.64
30	Union Territories	78.17	79.22	79.22	78.14	78.18	78.18	78.39	74.22
	Total	**23.36**	**23.28**	**23.28**	**23.38**	**23.57**	**23.41**	**23.41**	**21.05**
Source: Compendium of Environment Statistics, 2011, India State of Forest Report,2011									
* 2011 figures corresponds to forest cover									

Table 32: Details of State wise Protected Areas in India (As on 16/7/2013)										
Sr.no	State	Area	National Park		Wildlife Sanctuaries		Conservation Reserves		Community Reserves	
			Number	Area (sq.km)	Number	Area (sq.km)	Number	Area (sq.km)	Number	Area (sq.km)
1	Andaman and Nicobar	8249	9	1153.94	96	389.39				
2	Andra Pradesh	275069	6	1388.39	21	11618.12	0	0	0	0
3	Bihar	94163	1	335.65	12	2851.67	0	0	0	0
4	Chandigarh	114	0	0	2	26.01	0	0	0	0
5	Chattisgarh	135191	3	2929.5	11	3760.37	0	0	0	0
6	Dadra Nagar Haveli	491	0	0	1	92.16	0	0	0	0
7	Damn & Diu	112	0	0	1	2.19	0	0	0	0
8	Goa	3702	1	107	6	647.91	0	0	0	0
9	Haryana	44212	2	48.25	8	233.21	2	48.72	0	0
10	Gujrat	196022	4	479.67	23	16619.81	1	227	0	0
11	Himachal Pradesh	55673	5	2271.78	32	7745.48	0	0	0	0
12	Jammu & Kashmir	222236	4	3925	15	10243.11	34	829.75	0	0
13	Jharkhand	79714	1	226.33	11	1955.82	0	0	0	0
14	Karnataka	191791	5	2628.42	25	5555.39	7	3.79	1	3.12
15	Kerala	38863	6	558.16	17	1853.24			1	1.5
16	Lakshadeep	32	0	0	1	0.01	0	0	0	0
17	Madhya Pradesh	308245	9	3656.36	25	7158.4	0	0	0	0
18	Maharashtra	307713	6	1273.6	40	14915.38	1	3.49	0	0
19	Odisha	155707	2	990.7	18	6969.15	0	0	0	0
20	Punjab	50362	0	0	12	323.79	1	4.95	2	16.07
21	Puducherry	480	0	0	1	3.9	0	0	0	0
22	Rajasthan	342239	5	3947.07	25	5592.38	7	222.27	0	0
23	Tamil nadu	130058	5	307.84	22	5018.16	1	0.03	0	0
24	Uttar Pradesh	240928	1	490	23	5221.88	0	0	0	0

Table 32: Details of State wise Protected Areas in India (As on 16/7/2013)										
Sr.no	State	Area	National Park		Wildlife Sanctuaries		Conservation Reserves		Community Reserves	
			Number	Area (sq.km)	Number	Area (sq.km)	Number	Area (sq.km)	Number	Area (sq.km)
25	Uttarakhand	53483	6	4915.44	7	2688.64	3	42.28	0	0
26	West Bengal	88752	5	1693.25	15	1102.18	0	0	0	0
27	Delhi	1483	0	0	1	27.82	0	0	0	0
28	Arunachal Pradesh	83743	2	2290.82	11	7487.75	0	0	0	0
29	Assam	78438	5	1977.79	18	1840.14	0	0	0	0
30	Mizoram	21081	2	150	8	1090.75	0	0	0	0
31	Manipur	22327	1	40	1	184.4	0	0	0	0
32	Tripura	10486	2	36.71	4	566.93	0	0	0	0
33	Meghalaya	22429	2	267.48	3	34.2	0	0	0	0
34	Nagaland	16579	1	202.02	3	20.34	0	0	0	0
35	Sikkim	7096	1	1784	7	399.1	0	0	0	0
	INDIA	**3287263**	**102**	**40075.17**	**526**	**124239.18**	**57**	**1382.28**	**4**	**20.69**

Source: Ministry of Environment & Forests

Table 33: Percentage of households with access to improved sources of drinking water					
		2008-09		2012	
Sr.no.	State/UT./all-India	Rural	Urban	Rural	Urban
1	Andhra Pradesh	92.5	89.1	91.9	97.5
2	Arunachal Pradesh	91.7	97.7	96.2	98.4
3	Assam	82.1	92.4	85.1	92.8
4	Bihar	97.3	97.5	97.6	99.7
5	Chhattisgarh	92.2	97.8	94.8	93.6
6	Delhi	80.7	96.7	83.6	97.7
7	Goa	92	91.7	83.9	99.6
8	Gujarat	91.4	95.6	89.2	95.6
9	Haryana	97.8	96.6	92.6	92.3
10	Himachal Pradesh	89.2	91.6	95.8	100
11	Jammu & Kashmir	82.5	96.6	80.6	97.9
12	Jharkhand	63.4	88.8	64.4	88.3
13	Karnataka	95.1	96.9	95.1	96
14	Kerala	69.8	82.3	29.5	56.8
15	Madhya Pradesh	90.3	93	83.2	97.1
16	Maharashtra	87.9	93.4	85.5	98.7
17	Manipur	38.9	74.2	57	69.8
18	Meghalaya	66	97.5	70.4	94.5
19	Mizoram	20.4	74.4	86.8	99.1
20	Nagaland	64.1	65	91.9	90.6
21	Odisha	83.3	91.2	82.4	95.5
22	Punjab	99	98.9	99.5	99.7
23	Rajasthan	80.1	94.8	79.1	92.3
24	Sikkim	67.4	98.2	85.2	98.8
25	Tamil Nadu	96.8	89.2	94	95
26	Tripura	76.4	96.9	87.3	99.7
27	Uttarakhand	84.1	100	92.8	99.9
28	Uttar Pradesh	96.4	98.4	96.6	99.2
29	West Bengal	94.9	98	95	94.7
30	A & N Islands	87.4	98.9	82.4	100
31	Chandigarh	97.5	100	99.9	100
32	Dadra & Nagar Haveli	89.8	98.5	94.6	93.5
33	Daman & Diu	100	95.2	87.4	90.9
34	Lakshadweep	28.3	41.1	21.5	84.9
35	Puducherry	100	96.5	100	91.5
	all-India	**90.4**	**93.9**	88.5	95.3
	Source: NSS 2008-09, 2012				

Table 34: Percentage of households with access to improved sanitation					
Sr.no	**State/U.T**	**2008-09**		**2012**	
		rural	**urban**	**rural**	**urban**
1	Andhra Pradesh	34.2	86.8	44.5	91
2	Arunachal Pradesh	40.1	74	46.5	97.9
3	Assam	71.7	97	75.4	97.1
4	Bihar	16.8	65.2	25.8	78.4
5	Chhattisgarh	15.5	65.5	20	74.9
6	Delhi	92.6	96	100	98.7
7	Goa	63.3	89	85.8	96
8	Gujarat	32.2	91	40.7	93.6
9	Haryana	53.7	86.8	74.2	98.2
10	Himachal Pradesh	51.9	90.2	73.7	95.7
11	Jammu & Kashmir	40.6	79.1	44.1	79.4
12	Jharkhand	14.3	73.7	8.9	80.1
13	Karnataka	23.7	86.4	28.4	87.7
14	Kerala	93.4	97.2	96.9	98.8
15	Madhya Pradesh	13.2	72.6	20.7	84.9
16	Maharashtra	37.9	91.3	44.3	92.7
17	Manipur	74.5	82.7	79.6	91.2
18	Meghalaya	81.8	94.4	86	99.4
19	Mizoram	96.4	99	93.4	99.9
20	Nagaland	86.4	87.6	98.1	99.4
21	Odisha	9.2	63.5	17.3	80.5
22	Punjab	61.9	91.9	77.6	93.3
23	Rajasthan	17.1	85.1	26.1	78.3
24	Sikkim	97	100	99.1	100
25	Tamil Nadu	25.2	79.9	33	86.6
26	Tripura	82.1	94.3	88.6	98.1
27	Uttarakhand	44.9	95.5	80.2	97.6
28	Uttar Pradesh	18.5	79.3	22.4	86.7
29	West Bengal	51.7	89.9	58	93.2
30	A & N Islands	59.9	93.9	71.2	95
31	Chandigarh	90	99.4	99.7	98.4
32	Dadra & Nagar Haveli	46.6	93.2	50.7	67.8
33	Daman & Diu	66.3	87.4	73.2	99.9
34	Lakshadweep	100	94.7	100	97.7
35	Puducherry	34.6	85.7	52.6	93.6
	all-India	**31.9**	**85.3**	**38.8**	89.6
	Source: NSS 2008-09, 2012				

Table 35: Telephone per 100 Population - Urban / Rural (Tele- Density) (in %)														
Sr. no	Cities/ States	Overall					Urban				Rural			
		as on March 2010	as on Dec 2010	as on 30th June 2011	as on 31 May 2013	as on 30th June2013	as on March-2010	as on Dec-2010	as on 30th June 2011	as on 30th June-2013	as on March-2010	as on Dec-2010	as on 30th June 2011	as on 30th June 2013
1	Andaman & Nicobar	29.96	41.38				41.84	58.2			22.5	30.64		
2	Andra Pradesh	57.23	70.27	76.38	77	77.8	143.18	171.99	182.34	166.54	24.33	31.28	35.53	43.61
3	Assam	29.99	35.88	42.18	47	47.49	96.54	114.11	133.91	131.61	18.47	22.16	25.95	32.1
4	Bihar	37.96	50.07	45.1	45	45.36	206.93	256.45	182.33	155.46	18.11	25.81	23.43	27.87
5	Chattisgarh	5.74	5.94				17.31	16.83			2.32	2.69		
6	Gujarat	58.46	76.12	84.68	87	87.31	95.82	124.23	138.18	135.97	33.52	43.69	48.39	53.44
7	Haryana	59.7	77.49	85.33	77	77.47	100.63	136.77	145.57	115.03	39.37	47.55	54.57	57.43
8	Himachal Pradesh	79.35	104.86	113.05	105	104.96	298.15	388.78	440.51	334.98	52.53	69.7	72.23	75.5
9	Jammu & Kashmir	49.91	46.62	51.29	60	60.91	113.19	97.46	109.74	120.41	26.93	28.02	29.79	38.56
10	Jharkhand	5.54	6				16.79	18.12			2.14	2.32		
11	Karnataka	67.81	82.25	90.48	91	91.26	142.62	166.84	183.21	169.45	24.08	32.28	35.33	43.43
12	Kerala	80.36	96.67	103.79	97	97.12	184.18	228.94	246.04	197.39	44.65	51.26	55.01	62.89
13	Madhya Pradesh	45.23	57.67	51.02	54	54.4	111.21	138.92	124.57	114.88	20.11	26.61	24.38	32.11
14	Maharashtra*	50.3	63.88	92.96	87	87.15	85.1	105.78	144.24	124.5	32.27	41.9	48.27	53.56
15	North -East-I	68.9	80.58	60.57	68	69.2	154.96	184.74	140.52	154.84	41.51	47.16	35.12	41.3
16	North -East-II	11.91	14.69				31.63	38.33			5.82	7.34		
17	Odisha	39.3	52.31	59.39	60	60.64	133.25	179.24	201.61	163.83	20.61	26.8	30.62	39.2
18	Punjab	75.44	97.97	108.4	104	103.8	123.57	162.14	177.28	152.74	42.51	53.32	59.93	67.78
19	Rajasthan	52.76	62.37	67.03	72	71.87	120.89	144.01	153.3	153.85	31.42	36.73	39.91	45.95
20	Tamil Nadu*	74.31	93.89	110.37	108	108.52	114.94	145.9	158.28	138.34	38.05	46.02	51.65	68.86
21	Uttaranchal	13.9	15.54				29.37	31.15			7.85	9.37		
22	Uttar Pradesh* -E	38.54	49.9	56.25	57	57.05	109.49	139.28	152.59	135.26	18.72	24.8		34.29
23	West Bengal*	34.81	47.84	74.75	70	69.66	105.23	141.12	162.37	138.07	23.32	32.6	39.91	42.3

Table 35: Telephone per 100 Population - Urban / Rural (Tele- Density) (in %)														
Sr. no	Cities/ States	Overall					Urban				Rural			
		as on March 2010	as on Dec 2010	as on 30th June 2011	as on 31 May 2013	as on 30th June2013	as on March-2010	as on Dec-2010	as on 30th June 2011	as on 30th June-2013	as on March-2010	as on Dec-2010	as on 30th June 2011	as on 30th June 2013
24	Kolkota	120.19	150.74											
25	Chennai	149.42	159.8											
26	Delhi	172.49	208.94	236.32	220	218.86								
27	Mumbai	143.71	174.84											
	INDIA	**52.74**	**66.17**	**73.97**	**73**	**73.5**	**119.45**	**147.52**	**163.13**	**145.35**	**24.31**	**31.22**	**35.6**	**41.9**
Source: Telecom Regulatory Authority of India (TRAI) *For June 2011, Population projection available														