Millennium Development Goals

Report of Karnataka, 2014

Planning, Programme Monitoring and Statistics Department

Government of Karnataka

Bidar
Gulbaraga
Bijapur
Yadgir
Raichur
Belgaum
Bagalkote
Dharwad
Gadag
Koppal
Bellary
Uttara Kannada
Haveri
Davanagere
Chitradurga
Shimoga
Udupi
Chickmagalur
Tumkur
Chikballapur
Kolar
Bangalore Rural
Bangalore Urban
Hassan
Dakshina Kannada
Mandya
Ramanagara
Kodagu
Mysore
Chamarajanagara

FOREWORD

This Report titled "Millennium Development Goals (MDG) Report of Karnataka, 2014" captures the achievements in Karnataka under the eight MDGs which are to be achieved by 2015. The year 2014, being the penultimate year for the MDGs, attains importance in assessing Karnataka's progress in meeting the various targets under the MDGS as well as to take stock of areas where the progress is not up to the expected level.

In the 59th meeting of the National Statistical Commission it was decided that the Planning Commission would advise the State Governments to prepare State level Reports on Millennium Development Goals (MDGs) as per the framework developed by the Social Statistics Division of M/o Statistics and Programme Implementation (MOSPI). MOSPI has brought out an India Country Report on MDGs in January, 2014. The Report for Karnataka has been prepared on the lines of MDG India Country Report, 2014.

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 has not been followed in totality; it 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 mechanism 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 adequately 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 dietary energy consumption, ratio of school attendance of orphans to school attendance of non-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 vital drugs on a sustainable basis.

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. More over data for many indicators are not available at sub state (District) level.

In spite of the above constraints, every effort has been taken to make the present Report as inclusive as possible. The latest available data have been assimilated to reflect Karnataka's achievements in respect of several Millennium Development Goals. We expect this Report will be very useful, especially for policymakers and the State Government. Ideas for further improvement of the Report are always welcome.

Principal Secretary to Government
Planning, Programme Monitoring
And Statistics Department

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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. **The MDGs framework accepted by the Government of India has been followed 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.

In the 59th meeting of the National Statistical Commission it was decided that the Planning Commission would advise the State Governments to prepare State level Reports on Millennium Development Goals (MDGs) as per the framework developed by the Social Statistics Division of M/o Statistics and Programme Implementation (MOSPI). MOSPI has brought out an India Country Report on MDGs in January, 2014. The Report for Karnataka has been prepared on the lines of the MDG India Country Report, 2014.

Although the MDGs framework adopted 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. Likewise there are a few indicators which have been modified to suit Indian context.

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.

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 target are more focused and convey in concrete terms the expected level of achievements in well-defined areas to be realized in the given time frame. Some of the MDGs targets are relative to the base year (1990) value (Target-1,2,5,6 and10) and the levels of achievement by 2015 for most of the indicators under these targets are fairly precise 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.

MDGs have helped in bringing a much needed attention 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 rigorous policies and programmes. In India the various development programmes/schemes 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.

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. For Karnataka, 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 PHCR to be reduced to 10.91% by 2017; the corresponding MDG indicator is to reduce PHCR to 27.55% by 2015. The 12th Plan aims to reduce under-nutrition among children aged 0-3 years to half of the NFHS-3 levels (that is from 33.3% to 16.7%) by the end of 12th Plan, i.e. by 2017. The corresponding MDG

indicator is to reduce prevalence of under nutrition among children below 3 years to 24.14% by 2015. The 12th Plan envisages reducing IMR to 25 per 1,000 live births, and reducing MMR to 100 per 100,000 live births by 2017, the corresponding MDG indicators are to reduce IMR to 23 per 1,000 live births and to reduce MMR to 79 per 100,000 live births by 2015.

Coming to Karnataka's achievement in respect of the MDGs, it is a mixed bag. For some indicators Karnataka has already achieved the target level well ahead of the dead line, like halving the percentage of population below the poverty line (indicator 1A). **The Poverty Head Count Ratio in 1990 was 55.11 for Karnataka, has come down to 20.91 in 2011-12 which is much below the target of 27.55 by 2015.** Net Enrolment Ratio in primary education (indicator 6) is at 99.85 in 2010-11; hence the State is likely to achieve the target of 100 by 2015. In urban areas proportion of people with sustainable access to an improved water sources is 95.3 (2012) and in rural areas it is 88.50. Target 7 and Target 8, which are of the trend reversal type, have also been realized as Karnataka has successfully halted the spread of HIV/AIDS and reversed the spread of HIV/AIDS. Karnataka has halted spread of Malaria and TB and has ensured reversal of spread of Malaria and TB.

In respect of some indicators, Karnataka 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 37 per 1000 live births in 2012. To meet the target Karnataka has to reduce it to 31 per 1000 live births by 2015. Keeping in mind the sharp decline in U5MR witnessed during the last few years (annual reduction by 3-5 percentage points during the last 3-4 years) Karnataka is expected to reach the target level of 31 by 2015. In the extremely crucial field of 'improving maternal health' between 1990 and 2015, Karnataka 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 144 per 100,000 live births in 2010-12. This is a substantial improvement from an estimated MMR level of 316 per 100000 live births in 1990-91. Though there is improvement, Karnataka is unlikely to reach the targeted level of 79 per 100000 live births by 2015.

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 Legislative Assembly and Legislative Council (indicator 12), proportion of population with access to improved sanitation, urban and rural (indicator 31), in respect of these indicators Karnataka is lagging behind by a huge margin.

The above four paragraphs briefly provide a summary of achievements under various MDGs in Karnataka. In subsequent chapters, a more elaborate analysis has been attempted emphasizing the strong points of various programmes and their expected impact for the benefit of target populations. While providing outlines of the various development plans which inter-alia envisioned achievement 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, they have been provided.

CHAPTER 2

HIGHLIGHTS

MDG 1: Eradicate extreme poverty and hunger

The Poverty Head Count Ratio (PHCR) has declined by 34.21 percentage points from 55.11% in 1990 to 20.9% in 2011-12. There has been significant decline in PHCR in both rural and urban areas during this period. The rural poverty head count ratio declined by 32.1 percentage points from 56.6% to 24.5% and urban poverty declining by 18.9 percentage points from 34.2% to 15.3% during this period. The percentage of people below the poverty line has already declined by more than half of its position in 1993-94, in 2011-12 itself, at the State level as well as in rural and urban areas, much ahead of the MDG target year of 2015. However, the challenge is that regional disparities in poverty levels across districts of the State still exist. The Rural–Urban gap in poverty ratio has come down from 22.4 percentage points in 1993-94 to 9.2 percentage points, in 2011-12 however; this continuing gap in Rural Urban Poverty Ratio is a matter of concern. Further incidence of poverty across social groups is a cause of concern.

During 2004-05 to 2011-12, the Poverty Gap Ratio [(PGR) 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 6.507 in 2004-05 to 3.26 in 2011-12, while in urban areas the decline was from 6.19 to 3.09 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 in Karnataka 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.

The proportion of underweight children below 3 years estimated at 48.28 in 1990, it is required to be reduced to 24.14% by 2015. The proportion of underweight children has declined by 5.3 percentage points during 1998-99 (NFHS -2) to 2005-06 (NFHS-3), from about 38.6% to about 33.3% and at this historical rate of decline, it is expected to come down to about 26% only by 2015, which is marginally higher than the target of 24.14%.

MDG 2: Achieve Universal Primary Education

By the measure of Net Enrolment Ratio (NER) Karnataka had crossed 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 data further shows the State has achieved 100% primary education for children in the primary schooling age of 6-10 years ahead of 2015 as the DISE data for 2010-11 shows NER of 99.85% in 2010-11. The results from DISE report 2011-12, shows marginal decreasing trend over the years in the estimate of the indicator 'ratio of enrolment of Grade V to Grade I' from 97.95 in 2009-10 to 97.43 in 2011-12.

According to the trend exhibited during the period 2001 to 2007-08, Youth (15 -24 years old) literacy increased from 80% to 89% and the trend shows Karnataka is likely to achieve 100% youth literacy by 2015. The youth literacy rate among urban persons was 89% in 2001 against 75% for rural persons in 2001. The youth literacy among males was 86% in 2001 against 74% for females. NSS 2007-08 showed male youth literacy as 93% and female youth literacy as 85%. The rural-urban gap in youth literacy also has significantly reduced from 14% in 2001 to 8% in 2007-08.

MDG 3: Promote Gender Equality and Empower Women

In primary education, the Gender Parity Index (GPI of GER) has increased from 0.93 in 2009-10 to 2.08 in 2012-13 indicating 123.7% increase, in secondary education the increase is from 0.73 in 2001-02 to 0.98 in 2010-11 thereby showing 25 % increase, and in higher education, it is increased from 0.69 in 2005-06 to 0.92 in 2010-11 registering an increase of 23%.

The literacy rate among males (15 -24 years old) was 86 in 2001 against 74 for females (15-24 years old) and NSS 2007-08 showed the literacy rates as 93 and 85 respectively. The ratio of Female literacy rate to Male literacy rate for 15-24 years increased from 0.86 in 2001 to 0.91 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 20.9% with the share in rural and urban areas as 17.3% and 23.3% 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 18.45 % by 2015.

Karnataka has only 6 women representatives out of 224 members in Legislative Assembly, while there are 5 women representatives out of 75 members in Legislative Council. Hence the proportion of seats held by women in State Legislative Assembly and Legislative Council is 3.7 %. There has been an increase in representation of women in PRIs during the period 2000 to 2010. In 2000, out of the total seats of 890 in ZPs 339 seats were held by women i.e. 38.1%, in 2010, out of 997 total seats 531 seats were held by women i.e. 53.3%. As regards TPs, in 2000 out of total seats

of 3255, 1375 were held by women, i.e. 42.2%, in 2010 out of total seats 3659, 2018 seats were held by women, i.e. 55.2%. However, as regards GPs, there has been a marginal decline. In 2000, out of 78349 total seats, 35064 were held by women, i.e. 44.8%, in 2010 out of total seats of 90643, 39025 were held by women, i.e. 43.1%.

MDG 4: Reduce Child Mortality

In Karnataka, Under Five Mortality Rate (U5MR) has declined from an estimated level of 94 per 1000 live births in 1990 to 37 in 2012. To reduce U5MR to 31 per thousand live births by 2015, Karnataka tends to reach 36 by 2015 as per the historical trend, missing the target by 5 percentage points. However, considering the continuance of the sharper annual rate of decline witnessed in the recent years, Karnataka is likely to achieve the target.

The Infant Mortality Rate (IMR) has reduced by nearly 32 percentage points during 1990-2012 and the present level is at 32. As per the historical trend, the IMR is likely to reach 31 deaths per 1000 live births, missing the MDG target of 23 by 8 percentage points. 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 state level coverage of the proportion of one-year old (12-23 months) children immunised against measles has registered an increase from 54.9% in 1992-93 to 89.9% in 2009 (UNICEF &GOI- Coverage Evaluation Survey 2009). At the historical rate of increase, Karnataka is expected cover about 100% children in the age group 12-23 months for immunisation against measles by 2015, thus reaching the MDG target.

MDG 5: Improve Maternal Health

From an estimated Maternal Mortality Ratio (MMR) level of 316 per 100,000 live births in 1990, Karnataka is required to reduce the MMR to 79 per 100,000 live births by 2015. At the historical pace of decrease, Karnataka tends to reach MMR of 129 per 100,000 live births by 2015, falling short by 50 points. However, the bright line in the trend is the sharper decline i.e. 19% during 2009-12, 16% during 2006-09 and 6.5% during 2004-06 and 14 % decline during 2001- 2003.

As per Coverage Evaluation Survey (CES), 2009, delivery attended by skilled personnel is 88.4% which was 46.6% in 1992-93. With the existing rate of increase in deliveries by skilled personnel, the likely achievement in 2015 is 97.81% which is very close to the target of 100%. As regards institutional delivery, as per DLHS -2 (2002-04) it was 58%, it has increased to 90.8% in 2012, as per SRS 2012.

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, it has declined from 1.57 % in 2005 to 0.60 % 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,) was only 1.7 % in Karnataka.

As per the 'Condom Promotion Impact Survey 2010', in Karnataka, the estimate for Condom use at last high-risk sex is 87%. According to Behavioural Surveillance Survey, the estimate for proportion of population aged 15-24 years with comprehensive correct Knowledge of HIV/AIDS (%) in 2006 was 23%. Trends of deaths due to AIDS in Karnataka have declined from 23,136 in 2008 to 13,514 in 2011, i.e. a decline by 41.6% in 4 years.

The malaria cases were brought down from 44,319 cases in 2010 to 16466 in 2012 and further to 12023 cases in 2013 (provisional). The annual incidence rate (cases of malaria/1000 population) of Malaria has come down from 0.63 per thousand in 2006 to 0.48 per thousand in 2010. The malaria death rate in Karnataka was 0.05 deaths per hundred Malaria cases in 2006 which has come down to 0.02 deaths per hundred Malaria cases in 2010. The prevalence rate of TB in Karnataka has come down from 116 per 100,000 populations in 2004 to 29.3 per 100, 000 population in 2010.

MDG 7: Ensure Environmental Sustainability

As per 2011 assessment, Karnataka has a forest cover of 36194 km^2 which is 18.87% of the State's geographical area. The trend in percentage of forest cover to total geographic area from 2001 to 2011 indicates that there has been a decline from 22.46% in 2001 to 18.87% in 2011.

A network of 38 Protected Areas (PAs) has been established (as on 16/7/13), extending over 8190.72 sq. kms comprising 5 National Parks, 25 Wildlife Sanctuaries, 7 Conservation Reserves and 1 Community Reserve (4.3 % 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 270.84 KWH in 1990-91 to 874.34 KWH in 2011-12. The annual increase in PEC from 2010-11 to 2011-12 was 12.26%.

A fair estimate of annual emissions has been prepared by Centre for Study of Science, Technology and Policy (CSTEP) in BCCI-K's 2011 report. It pegs annual emissions from Karnataka at 80.2 million tons of CO_2 equivalent, thus accounting for 4.6% to India's total GHG

emissions. This estimate considers three of the six GHGs: CO_2 with 44 million tons/annum, CH_4 with 0.9 million ton/annum and N_2O with 0.1 million ton/annum. In Karnataka, the per capita CO_2 emission (MT) increased steadily during 1980 to 2000 from 40 million tonnes in 1980 to 100 million tonnes in 1990 and further to 170 million tonnes in 2000.

Census 2011 revealed that 60% households in the state, 87% in rural areas and 22% in urban areas, use firewood /crop residue, cow dung cake/coal etc. for cooking. 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 100% 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 708 out of 1000 households (71%) in rural Karnataka and 90 out of 1000 households (9%) in urban Karnataka respectively had no latrine facilities, which is higher than the All India figures of 594 out of 1000 households (59%) in rural India and 88 out of 1000 households (8.8%) in urban India. As per the Census 2011 results 72% of the rural households and 15% of the urban households in the State are not having latrine facility.

Census 2011 reported that 14.2% of urban households, i.e. 32.91 lakh population in the State are located in slums, whereas in 2001, 7.8% of urban households, i.e. 14.02 lakh population in the State were located in slums. This indicates that there has been 127.6% increase in slum population in the State within a decade. As per NSS 2012, the number of slum households in the State is 5,58,235 and the number of slums is 1424 (including notified -716 and non-notified - 708).

MDG 8: Develop a Global Partnership for Development

Overall tele-density (number of telephones per 100 population), in the State has reached 92.44 as on June 2014. Urban tele-density is 170.38 and the rural tele-density is 43 as on March 2013. The overall tele-density in March 2010 was 67.81 with urban tele-density of 142.62 and rural tele-density of 24.08. This shows significant progress in the tele-density in Karnataka.

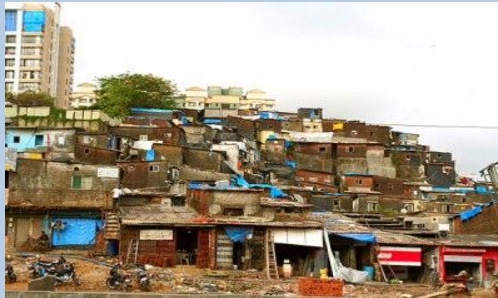
Total wire line subscribers in the State as on June 2014 is 22,74,839 as against 6,86,026 in June 2010 which indicates a significant increase of 232% in wire line subscribers in four years. Total wireless subscribers in the State as on June 2014 is 5,44,88,348 as against 1,29,57,747 in June 2010 which indicates a whopping increase of 321% in wireless subscribers in four years.

MDGS AND TARGETS –SUMMARY OF PROGRESS ACHIEVED BY KARNATAKA
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 **Have already achieved target**
TARGET 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger
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
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
MDG 4: REDUCE CHILD MORTALITY **TARGET 5 :** Reduce by two-thirds, between 1990 and 2015, the Under- Five Morality Rate
MDG 5: IMPROVE MATERNAL HEALTH **TARGET 6 :** Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio
MDG 6: COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES **TARGET 7 :** Have halted by 2015 and begun to reverse the spread of HIV/AIDS
TARGET 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases
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.
TARGET 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation
TARGET 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers
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

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 State 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 State poverty line)**

Faster decline in poverty….

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

Karnataka with a population of 6,10,95,297, retains the 9th rank as in 2001, in population size among all the States and Union Territories and accounts for 5.05% of Country's population of 1,21,05,69,573 in 2011. Poverty has always been a cause of great concern. However, as the Statistics reveals, over the years, the State has made significant progress in poverty reduction. In 1990 the percentage of poor in the State was 55.11, which declined to 49.5 in 1993-94 and declined further to 33.4 in 2004-05 and further to 23.6 in 2009-10 and 20.9 in 2011-12, which is much lower than the target of 27.55%. In absolute terms as well the number of poor has declined from 20.8 million in 1993-94 to 18.7 million in 2004-05 and further to 14.2 million in 2009-10 and 13 million in 2011-12.

Significant decline in poverty ratio has been observed in both rural and urban areas during this period. In the rural areas the percentage of poor has declined from 56.6% in 1993-94 to 37.5% in 2004-05, further to 26.1% in 2009-10 and to 24.5% in 2011-12. In the urban areas the percentage of poor has declined from 34.2% in 1993-94 to 25.9 % in 2004-05, further to 19.6 % in 2009-10 and to15.3 % in 2011-12. (The estimation is based on MRP of distribution of MPCE of the NSS).

Although there has been a decline in the poverty ratio in the State, regional disparities within the State still exist. District-wise poverty ratio is indicated in the Table below. The districts of Chitradurga, Bellary, Koppal, Raichur and Gulbarga are the bottom five districts, i.e. their poverty ratio is much higher than the poverty ratio at the State level. The districts of Bangalore, Kodagu, Dakshina Kannada, Chamarajanagar and Kolar are the top five districts, i.e. their poverty ratio is much lower than the poverty ratio at the State level. Further out of the 28 districts, 15 districts have higher poverty levels in urban areas.

Table 3.1 - Incidence of Poverty at District Level- 2011-12

Sl. No.	Districts	Incidence of Poverty 2011-12		
		Rural	Urban	Total
1	Belgaum	27.5	32.3	28.8
2	Bagalkot	32.1	45.0	35.8
3	Bijapur	21.4	28.5	23.1
4	Gulbarga	38.9	32.0	37.2
5	Bidar	32.5	45.9	35.1
6	Raichur	37.6	38.2	37.7
7	Koppal	42.0	34.6	40.7
8	Gadag	25.6	15.0	21.8
9	Dharwad	57.3	15.5	34.0
10	Uttara Kannada	19.3	20.1	19.6
11	Haveri	31.3	52.2	33.7

12	Bellary	33.1	53.0	40.8
13	Chitradurga	48.3	40.4	46.7
14	Davanagere	23.0	23.8	23.3
15	Shimoga	32.5	22.3	29.3
16	Udupi	22.7	21.4	22.4
17	Chikmagalur	10.4	24.6	14.7
18	Tumkur	14.4	5.9	13.0
19	Kolar	9.8	11.2	10.0
20	Bangalore	0.0	1.7	1.5
21	Bangalore Rural	19.0	0.0	15.7
22	Mandya	18.9	4.1	16.4
23	Hassan	11.3	13.9	11.6
24	Dakshina Kannada	1.5	1.9	1.6
25	Kodagu	1.2	2.8	1.5
26	Mysore	20.7	7.0	15.5
27	Chamarajanagar	1.3	4.1	1.6
28	Ramanagar	11.7	4.5	10.5

While considering the progress towards MDG target 1, the estimate of PHCR at the State level was at 55.11% in 1990 and the State is required to achieve a PHCR level of 27.55% by 2015 in order to meet the MDG target. With a faster decline in PHCR during 1990 to 2011-12, from 55.11% to 20.9%, the State has already achieved the MDG target, which is a notable achievement. However, the challenge is that regional disparities in poverty levels across districts still exists, as has been highlighted in the Table above.

As per Census 2011, in the State, 61.3% of its population is in rural areas, and thus majority of the poor people belongs to rural area of the State. The Census 2011 Population results and the latest poverty head count ratio (2011-12) points out that, out of the poor people of the State, 9.3 million are from rural Karnataka and 3.7 million are from urban Karnataka. The trend of decline in number of poor in the State is evident in both rural and urban areas. The number of poor in rural Karnataka has declined from 16.7 million in 1993-94 to 13.5 million in 2004-05 and further to 9.7 million in 2009-10 and to 9.3 million in 2011-12. The number of poor in urban Karnataka has declined from 4.1 million in 1993-94 to 3.7 million in 2011-12. With the decline in PHCR, the MDG target has already been achieved in both rural and urban areas as well.

Measuring depth of poverty…

Indicator- Poverty Gap ratio

The indicator of PGR reflects the degree to which mean consumption of the poor falls short of the established poverty line, indicating the depth of poverty. 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 Rural–Urban gap in poverty ratio in Karnataka has come down from 22.4 percentage points in 1993-94 to 9.2 percentage points, in 2011-12 however; this continuing gap in Rural Urban Poverty Ratio is a matter of concern. Further incidence of poverty across social groups is a cause of concern as can be seen in the Table below.

Table 3.2 - Region-wise Incidence of poverty across Social groups (%) in Karnataka

Rural					
2004-05					
	Coastal & Ghats	**Inland Eastern**	**Inland Southern**	**Inland Northern**	**Total**
ST	51.29	27.21	27.34	63.83	50.53
SC	56.11	36.23	45.78	65.99	57.37
OBC	33.41	16.21	24.74	54.06	35.85
Others	14.10	8.41	18.15	30.94	23.72
Total	**26.98**	**17.81**	**27.47**	**49.60**	**37.49**
2011-12					
ST	30.90	62.89	1.95	36.24	30.81
SC	47.62	13.14	15.06	50.93	37.06
OBC	6.97	19.26	11.30	30.38	20.75
Others	1.11	0.00	16.94	28.76	21.62
Total	**12.72**	**16.88**	**11.89**	**34.29**	**24.53**
Urban					
2004-05					
	Coastal & Ghats	**Inland Eastern**	**Inland Southern**	**Inland Northern**	**Total**
ST	0.00	20.92	24.98	81.96	55.70
SC	35.59	28.06	25.73	59.42	41.22
OBC	55.90	26.19	8.69	59.42	32.14
Others	22.08	8.94	2.12	33.28	14.31
Total	**38.16**	**20.49**	**7.91**	**49.47**	**25.88**
2011-12					
ST	0.00	0.00	2.26	52.58	33.69
SC	23.13	49.28	7.68	48.86	24.96
OBC	19.90	15.93	2.32	33.08	15.09
Others	0.60	14.50	0.12	23.81	8.77
Total	**10.45**	**20.21**	**2.45**	**33.89**	**15.29**

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 increased from 9.87 in 1993-94 to 10.93 in 2004-05 to 10.87 in 2009-10 based on (Uniform Reference Period – URP method) and NSS 2009-10 (Modified Reference period – MRP method) reported a slightly increased level i.e. 10.93%. In the urban areas the share of the poorest 20% population, declined from 8.28 in 1993-94 to 7.31 in 2004-05 and to 7.50 in

2009-10 and further 5.90 in 2011-12. This decrease in the share of consumption expenditure for the poorest quintile is indicative of growing inequities, particularly in the urban areas.

Challenges

While the State has taken multiple measures to reduce urban poverty, and numbers have significantly come down a lot needs to be done. One of the main causes of poverty is the rural-urban growth differential, and while measures are being put in place to address this, the task of the ULB is complicated by natural causes, drought, flood, crop failure, as well as systemic failure on the part of governance mechanisms.

The urbanisation of poverty in Karnataka is witnessed in the recent decade, with higher urban poverty growth rates than rural poverty growth rates. Urban poverty cannot be looked at from the perspective of rural poverty since it is more dynamic and complex, with issues in housing, health, sanitation, education, social security, and livelihoods, rising crime and exacerbating the vulnerability of groups such as children, women, the challenged and the aged.

Poor migrants are a vulnerable class. They are usually ineligible for social benefits which accrue to the long term residents, and usually do not have a sustaining social network. Children of migrants face barriers to education due to absence of documents and proof of residence, as well as due to the mobile nature of their parents' work. Where cities experience extreme population pressure and urban environments deteriorate, street crime increases.

There is also regional disparity in poverty levels as indicated in the Table. The districts of Gulbarga, Bellary, Raichur, Koppal, and Chitradurga have high poverty levels. Most of these districts are in Northern Karnataka. Further poverty across social/marginalized groups is also a challenge.

Schemes to address poverty alleviation

The Support to National Policy for Urban Poverty Reduction under MoHUPA is a program aimed at reducing urban poverty and strengthening local government capacity, specifically with reference to Jawaharlal Nehru National Urban Renewal Mission (JNNURM) and Rajiv Awas Yojana (RAY). This program also supports JNNURM cities in sustained reduction in Urban Poverty.

The National Urban Health Mission (NUHM) that has been launched should be implemented by following guidelines as prescribed in the NUHM framework. NUHM has a high focus on urban poor population living in listed and unlisted slums, vulnerable population such as

homeless, rag-pickers, street children, sex workers, temporary migrants. It also emphasizes on sanitation, clean drinking water and vector control and strengthening of public health capacity of urban local bodies. Other key steps for better implementation of scheme include the need to develop infrastructure to address urban health and recruitment of USHA (Urban Social Health Activist) workers on the lines of ASHA (Accredited Social Health Activist).

Strategies for reducing poverty level

Poverty alleviation requires integration of multiple agencies to remove both the push and pull factors of migration. Measures to address these include reducing the rural-urban growth differential (RUGD), providing infrastructure in rural areas, and increasing agricultural incomes by moving up the agricultural value chain, targeted subsidies, skill development, increasing formal financing measures. Providing urban amenities in rural areas (PURA) measures that provide urban infrastructure in rural areas will help in addressing/reducing in-migration to cities.

Sustainability of urban development should be placed in the context of basic lifeline services for informal settlements and for slums. This requires interventions in provision of basic services in terms of access, affordability and security. Financial, governance, and development reforms need to be undertaken jointly to address this segment. Apart from the segment with informal housing, such as in slums, the needs of the homeless and street children require urgent attention. Some interventions required in this respect are the identification of urban poor livelihoods for wage employment. Interventions in education and health provision are required so that even homeless people and slum dwellers, who do not have access to documentation, can avail of health services in PHC's, education in schools and medical insurance coverage.

There is a need to recognize the contribution of the urban poor in providing labour and treat migration as a desirable rather than as an undesirable consequence of urbanization. In a study on push and pull factors of rural-urban migration, the non-availability of non-farm sector jobs, the reducing returns in farm sector, income differential and lack of access to basic services were provided as the main reasons for migration. The push factors that lead to high migration should be addressed on a war footing by strengthening the MNREGA job guarantee scheme for the rural poor and through the Provision of Basic Urban Services in Rural Areas (PURA). To address the pull factors of migration, smaller towns need to be established near rural areas with good connectivity and provision of basic urban services. These towns should be well networked to larger urban centres nearby so that investments and industry can be attracted, and migrant labour

can be utilized close to the source. Satellite towns will not only help in channelizing migration into desired pockets but also help in decongesting the prime migrant centre of Bangalore and lead to more balanced growth across the region.

Contractors who work with migrants should be encouraged to observe laws relating to migrant labour and provide for temporary housing, access to education and health. Night shelter schemes have to be vigorously pursued and budgets enhanced substantially to address the issue of urban poverty and homelessness.

Investing in human capital and skill development of unemployed youth and of street children through targeted measures is the best insurance against street crime. Law enforcement mechanisms should also be strengthened to police such incidences. Another aspect of governance interventions in poverty alleviation is systemic improvements to address the needs of the urban poor, by reducing the complexity of documentation required in availing services, reducing inefficiencies and ensuring the subsidies reach the deserving beneficiaries, increasing community participation, increasing information dissemination to the target population.

The poverty lists that are compiled by various agencies have different beneficiaries listed in each list leading to duplication of effort and unnecessary subsidization. There needs to be one comprehensive list based on which the poorest of the poor can be targeted for poverty alleviation schemes. The Socio-Economic Caste Census that has been conducted by the Rural Development and Panchayati Raj Department is a first step in this single-list based identification of the poor. There is a proliferation of schemes at both the State and the Central level, leading to duplication of effort, non-convergence and sub-optimal results, diluting the effort on reduction in poverty. There is a need to draw on the synergies of the existing schemes and reduce them to a manageable number; and new schemes need to be eliminated of these drawbacks and a holistic approach to poverty alleviation must be made.

Nutrition Scenario in Karnataka

Better Nutrition for all….

The persisting low levels of indicators of nutrition in Karnataka, for both adults especially women 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. Although the per capita calorie intake per day has increased between 2004-05 and 2009-10 in both the rural areas and urban areas of the State

from 1845 to 1903 in rural areas and from 1944 to 1987 in urban areas, high incidence of anaemia among women (51.5%) and children (70%) still persist. This is a matter of concern.

Child Malnutrition - Combating Malnutrition among children

Indicator – Prevalence of underweight children under three years

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. All-India trend of the proportion of underweight (severe and moderate) children below 3 years of age shows India is showing a slow progress in eliminating the effect of malnourishment. In Karnataka, from estimated 48.28% in 1990, the proportion of underweight children below 3 years is required to be reduced to 24.14% by 2015. The proportion of underweight children has declined by 5.3 percentage points during 1998-99 (NFHS -2) to 2005-06 (NFHS-3), from about 38.6% to about 33.3% and at this historical rate of decline, it is expected to come down to about 26% only by 2015. The National average of severely malnourished children is 45.9%. Although the state average is 41.1% as per NFHS 3, the Districts like Koppal, Raichur, Gadag, Dharwad, Yadgir, and Bangalore Urban are having high percentage of severely malnourished children (Worst). The details are given in the Table below –

Table 3.3– Nutritional Status of 5 Districts with high percentage of severely malnourished children (Worst)

Sl. No.	District	Total						
		Normal		Moderately underweight		Severely underweight		Total children weighed
			%		%		%	
1.	Koppal	80080	62.07	45749	35.46	3177	2.46	129006
2.	Raichur	127763	60.36	80387	37.98	3510	1.66	211660
3.	Gadag	49513	62.29	28655	36.05	1316	1.66	79484
4.	Dharwad	80139	64.27	42555	34.13	1997	1.60	124691
5.	Yadgir	63891	66.49	30917	32.17	1286	1.34	96094
6.	Bangalore (U)	101492	83.19	19053	15.62	1461	1.20	122006

Table 3.4 - Nutritional Status of 5 Districts with low percentage of severely malnourished children (Best)

Sl. No.	District	Total						
		Normal		Moderately underweight		Severely underweight		Total children weighed
			%		%		%	
1.	Hassan	86817	83.35	17091	16.41	251	0.24	104159
2.	Mandya	107836	86.29	16726	13.38	409	0.33	124971

3.	Kolar	71077	75.26	22954	24.31	409	0.43	94440
4.	Bidar	89337	59.91	59077	39.63	651	0.44	149065
5.	Dakshina Kannada	95205	86.70	14104	12.84	502	0.46	109811

Table 3.5 – District wise nutritional status in Karnataka as on July, 2013

Sl. No.	District	Classification of Nutritional Status						
		Normal		Moderately Underweight		Severely Underweight		Total Children Weighed
		Total	%	Total	%	Total	%	
1	Bagalkot	101375	66.22	50612	33.06	1098	0.72	153085
2	Bangalore (U)	89270	81.98	18013	16.54	1610	1.48	108893
3	Bangalore ®	39983	81.36	8804	17.91	358	0.73	49145
4	Belgaum	266048	67.58	122768	31.19	4839	1.23	393655
5	Bellary	125540	59.91	80231	38.29	3789	**1.81**	209560
6	Bidar	87252	59.69	58011	39.68	920	**0.63**	146183
7	Bijapur	135534	65.25	70482	33.93	1696	0.82	207712
8	Chamarajanagar	47319	74.81	15393	24.34	540	0.85	63252
9	Chickballapura	64642	78.82	16783	20.47	582	0.71	82007
10	Chikmagalur	51953	81.14	11503	17.97	569	0.89	64025
11	Chitradurga	87581	71.90	32420	26.61	1814	1.49	121815
12	Dakshina Kannada	85596	85.63	13759	13.76	609	**0.61**	99964
13	Davanagere	85433	71.35	32675	27.29	1624	1.36	119732
14	Dharwad	72066	63.32	38973	34.24	2775	**2.44**	113814
15	Gadag	45557	58.92	29974	38.76	1795	**2.32**	77326
16	Gulbarga	150866	68.58	66307	30.14	2810	1.28	219983
17	Yadgir	59202	65.23	30084	33.15	1474	1.62	90760
18	Hassan	68577	81.46	15310	18.19	302	**0.36**	84189
19	Haveri	104631	67.45	48241	31.10	2244	1.45	155116
20	Kodagu	25137	81.39	5428	17.57	320	1.04	30885
21	Kolar	69792	74.01	23991	25.44	512	**0.54**	94295
22	Koppal	77264	59.55	48968	37.74	3524	**2.72**	129756
23	Mandya	96437	84.56	17029	14.93	577	**0.51**	114043
24	Mysore	121458	75.73	37878	23.62	1048	0.65	160384
25	Ramanagar	47117	86.00	7299	13.32	372	0.68	54788
26	Raichur	134700	60.88	81837	36.99	4712	**2.13**	221249
27	Shimoga	105411	82.54	21042	16.48	1260	0.99	127713
28	Tumkur	141159	83.47	26759	15.82	1195	0.71	169113
29	Udupi	64412	89.57	6984	9.71	515	0.72	71911
30	Uttara Kannada	78871	79.25	19748	19.84	900	0.90	99519
	Total	**2730183**	**71.21**	**1057306**	**27.58**	**46383**	**1.21**	**3833872**

As indicated in the table above, the districts which have high number of severely underweight children are Koppal, Dharwad, Gadag, Raichur and Bellary and the districts which

have the least number of severely underweight children are Hassan, Mandya, Kolar, Dakshina Kannada and Bidar.

Action taken by the State Government to improve malnourished children

1. Every severely malnourished child is provided with Rs.750 per year for medical expenses of severely malnutrition children scheme for medicines and Therapeutic food.
2. Severely malnourished children and tertiary care required children of 0-6 years are treated under "Balasanjeeveni" through 22 hospitals for 18 identified diseases. Under this scheme maximum of Rs.35000/- is given to treatment of tertiary care required child and Rs.50000/- to Neonatal care and treatment. Rs.100 per day for the Mother/Guardian who accompanies the child and actual travel cost are paid.
3. Severely malnourished children are provided with egg for 4 days and 200 ml milk for 2 days Children who do not consume eggs are provided with 6 days milk.
4. Moderately malnourished children of most backward districts of Koppal, Bidar, Gulbarga, Raichur and Yadgir are also provided with egg for 4 days and 200 ml milk for 2 days.
5. All Children of Anganwadis are provided with 3 days milk under "Ksheera Bhagya" scheme.
6. Health checkup is conducted in every 2 months in co-operation with Health Department.
7. Severely Malnourished children identified in the health checkup are admitted to Nutrition Rehabilitation Centres.
8. SNP of Rs.6/- is provided to all Anganwadi children.
9. Including 8 rollout districts and 4 high burden districts, severely malnourished children of 12 districts are provided with SNP of Rs.9.00 and in the remaining 18 districts are provided with SNP of Rs.6.90.
10. Awareness is created among public by organizing mother's meeting and Health and Nutrition camp.

11. Every month, 4 “Nutrition and Health Education” sessions will be conducted in Anganwadi centres to pregnant women, nursing mothers and adolescent girls regarding nutrition, health & hygiene.
12. Department has developed and distributed handbook and flip chart containing 48 subjects on health and nutrition aspects of mother and children to all AWWs & supervisors to improve health, nutrition and education.

Sneha Shivirs - Four to five AWCs in a cluster are selected and parents and care-givers of severely and moderately malnourished children in these centers are given training for 12 days in preparation of nutritious food, feeding practices and health and hygiene. Further, follow-up is undertaken for 18 days wherein, the training is implemented at their homes.

Multi-sectoral nutrition programme to address the Maternal and Child under-nutrition in high burden districts like Kolar, Bagalkot, Gulbarga and Bellary

Government of India has approved multi-sectoral nutrition programme to above 4 high burdened districts in the state to address the Maternal and Child under-nutrition. Under these IEC activities, capacity building, training and incentivizing, co-ordination meetings, workshops with other line departments and community mobilization programmes will be taken up. At the district level, District Nutrition Council headed by the District Commissioner will be constituted.

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 and the State Government has taken a number of initiatives towards eradicating poverty and hunger as poverty remains to be the major hurdle towards sustainable development.

Initiatives taken by Government of India

National Food Security Mission (NFSM) - The National Development Council (NDC) in its 53rd meeting held in May, 2007 had 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 objectives of NFSM are increasing production of rice, wheat and pulses through area expansion, productivity boost in the identified districts of the country, restoring soil fertility and productivity at the individual farm level, creation of employment opportunities, and augmenting farm level economy to restore confidence amongst farmers. Under NFSM, financial support will be available for research in : (i) Preservation of natural resources and their efficient use, (ii) Integrated nutrient management, disease, pest management and weed management, (iii) Modernization of farm machines/implements for different types of soil/cropping systems and sophistication of relay cropping systems (iv) Up-scaling of better crop varieties/hybrids and input use efficiency, (v) Nutrient management in acidic/alkaline/sodic soils, (vi) Crop-husbandry, (vii) Rain-water harvesting management, (viii) Agronomic practices for intercropping systems involving pulses, (ix) Value addition in case of coarse cereals and pulses, (x) Precision farming-nutrient manager and crop manager.

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 period. The main objectives of the scheme are: (i) to incentivise the States to increase public investment in agriculture and allied sectors, (ii) to provide flexibility and autonomy to States for planning and executing agriculture and allied sector schemes (iii) to ensure preparation of agriculture plans for districts and 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 farmers, (vii) to bring about quantifiable changes in production and productivity of various components of agriculture and allied sectors by addressing them in a holistic manner.

Mahatma Gandhi National Rural Employment Scheme (MGNREGS) - The mandate of the MGNREGS 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 MGNREGS are – (i) social protection for the most vulnerable people living in rural India by providing employment opportunities, (ii) livelihood security for the poor through creation of durable assets, improved water security, soil conservation and higher land productivity, (iii) drought-proofing and flood management in rural areas, (iv) empowerment of the socially disadvantaged, especially women, SCs and STs, through the processes of a rights-based legislation, (v) strengthening decentralised, participatory planning through convergence of various anti-poverty and livelihoods initiatives, (vi) deepening democracy at the grass-roots by strengthening PRIs, (vii) effecting greater transparency and accountability in governance.

Indira Awaas 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 comprises of the following components: (i) assistance for construction of a new house, (ii) up gradation of kutcha or dilapidated houses, (iii) provision of house sites. Ninety five per cent of the total budget would be utilized for the components relating to new houses, up-gradation 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 and 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 NRLM. The objective of the Mission is to reduce poverty among rural BPL by encouraging diversified and gainful self-employment and wage employment opportunities which would lead to a considerable increase in income on sustainable basis. In the long run, it will guarantee 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 principle of NRLM is that the poor have essential capabilities and a strong desire to come out of poverty. The challenge is to unleash their capabilities to create meaningful livelihoods so that they come out of poverty. The first step in this process is inspiring them to form their own institutions. They and their institutions need to be provided adequate capacities to access finance to develop their skills and expand assets and translate them into meaningful livelihoods.

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 flexibility 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. Further, the demand driven strategy of NRLM infers that the objective is the poor will drive the agenda, through participatory planning at grassroots level, implementation of their own plans, reviewing and creating further plans based on their experiences.

National Urban Livelihood Mission (NULM) – NULM is implemented by the Ministry of Housing and Urban Poverty Alleviation and it 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 strategy followed in NULM includes (i) building capacity of urban poor, their institutions and machinery involved in implementation of livelihoods development and poverty alleviation programmes; (ii) improving and increasing existing livelihoods options for the urban poor; (iii) developing skills to enable access to growing market-based job opportunities; (iv) training and support for the establishment of micro-enterprises by urban poor; (v) ensure availability and access for urban homeless population to permanent 24 hour shelters including basic infrastructural facilities like water supply, sanitation, safety and security; (vi) cater to the needs of especially vulnerable segments of the urban homeless like dependent children, aged, disabled, mentally ill, and recovering patients etc., by creating special sections within homeless and providing shelters and special service linkages for them; (vii) to create 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 social security pensions, PDS, ICDS, feeding programmes, drinking water, sanitation, identity, financial inclusion, school admission etc., and affordable housing; (viii) to address livelihood concerns of urban street vendors by enabling access to suitable spaces, institutional credit, social security and skills to them for accessing jobs in emerging market opportunities.

Rajiv Awas Yojana (RAY) - The Rajiv Awas Yojana envisions a “Slum Free India” with inclusive and equitable cities in which every citizen has access to basic civic infrastructure, social facilities and decent shelter.

The objectives of the programme are (i) improving and providing housing, basic civic infrastructure and social amenities in slums (ii) enabling a supportive environment for expanding institutional credit linkages for urban poor, (iii) Institutionalizing mechanisms for prevention of slums including creation of affordable housing stock, (iv) Strengthening institutional and human

resource capacities at the Municipal, City and State levels through comprehensive capacity building and strengthening of resource networks, (v) 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 ICDS Scheme, of the Ministry of Women and Child Development is a centrally sponsored Scheme. It is implemented by the State Governments/UT Administrations. The scheme targets fighting malnutrition among 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. 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 (i) Special focus on children under 3 years & pregnant and lactating mothers, (ii) Strengthening of services including, care and nutrition counselling services & care of severely underweight children, (iii) A provision for an additional Anganwadi Worker cum Nutrition Counsellor for focus on children under 3 years of age & to improve the family contact, care & nutrition counselling for P&L m others, besides having provision of link worker, 5% crèche cum Anganwadi centre, (iv) Focus on Early Childhood Care & Education (ECCE), (v) Forging strong institutional & program convergence particularly, at the district, block & village levels, improving SNP including cost revision among other components. The goals & targets of restructured & strengthened ICDS are (i) to prevent & reduce young child under nutrition by 10% points in 0-3 years & enhance early development & learning outcomes in all children below six years of age (ii) improved care & nutrition of girls & women & reduce anaemia prevalence in young children, girls & women by 1/5th and (iii) achieve time bound goals and outcomes with results based monitoring of indicators at different levels.

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. The Programmes being implemented to tackle the burden of poverty and hunger need to address the regional disparities and also the vulnerable categories of people in the State.

CHAPTER 4

ACHIEVING UNIVERSAL EDUCATION

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 education.

Indicators

- **Net enrolment ratio in primary education**
- **Proportion of pupils starting Grade I who reach Grade V**
- **Literacy rate of 15-24 year olds**

The human development paradigm recognizes the role of education in the expansion of choices for well-being, security and comfort. Therefore, the right to education is recognized as one of the fundamental human rights and, the drive towards universal elementary education aims at ensuring its delivery. With the objective of providing free and compulsory education to children in the age group of 6-14 years, the Indian Parliament enacted a legislation 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. The legislation has come into force from 1st April, 2010.

Universalization of Primary Education

Indicator – Net Enrolment Ratio

Net Enrolment Ratio (NER) in primary education is the major indicator to assess whether the State 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 reached 99.85% in 2010-11. As per statistics of the Ministry of Human Resource Development of Government of India, the GER (Gross Enrolment Ratio) for Grades I-V in Karnataka has already overshot the 100% mark and stands at 104.68 in 2010-11 with 104.12 for girls and 105.22 for boys. GER for Grades I-V unlike NER tends 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 98.61% in 2008-09 to 99.23% in 2009-10 and further to 99.85% in 2010-11. By the measure of NER the country had crossed in 2008-09 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 DISE10 data further shows Karnataka has achieved 100% primary education for children in the primary schooling age of 6-10 years ahead of 2015.

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

Universalization 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. Strengthening the school information system has been accorded top priority

from the very beginning of the Sarva Shiksha Abhiyan (SSA). The results from DISE report 2011-12, shows a marginal decreasing trend over the years in the estimate of the indicator 'ratio of enrolment of Grade V to Grade I' from 97.95 in 2009-10 to 97.43 in 2011-12. However it is much higher than the national level of 86.05 in 2011-12.

Indicator – Literacy rate of 15-24 year olds

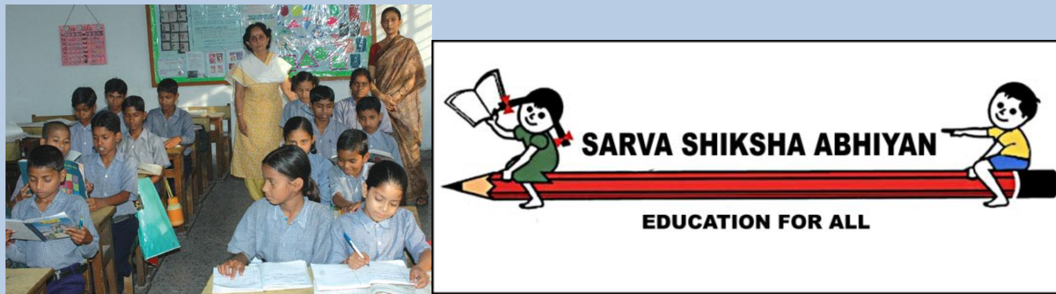
Literacy is vital for development in various fields. Apart from career development, where the importance of education is paramount, literacy can pave the way for reduction in population growth, child mortality and poverty and facilitate in attaining gender parity, sustainable and holistic growth. Literacy is all the more important for those sections of population, who have been 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 envisioned not only to improve reading and writing capabilities, but also to develop comprehensive life skills to access all developmental resources.

According to the trend exhibited during 2001 to 2007-08, youth literacy increased between 2001to 2007-08 from 80% to 89% and the trend shows Karnataka is likely to achieve 100% youth literacy by 2015. The youth literacy rate among urban persons was 89% in 2001 against 75% for rural persons. The youth literacy among males was 86% in 2001 against 74% for females. The youth literacy rate among urban persons was 95% in 2007-08 against 87% for rural persons. The youth literacy among males was 93% in 2007-08 against 85% for females. This indicates that Karnataka is on-track movement in 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. The Female: Male literacy rate has increased from 0.86 in 2001 to 0.91 in 2007-08.

Breaking all barriers…Education to all

The role of Universal Elementary Education (UEE) for strengthening 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 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 quality 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. SSA has a special focus on girl's education and children with special needs and 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 SSA framework of implementation and norms for interventions has 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 strengthened by introducing administrative and management reforms, curriculum renewal, teaching methodologies to evolve facilitating conditions for learner to remain in the school for eight years and not drop out.

Mid-Day Meal Scheme (MDMS) - 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. 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.

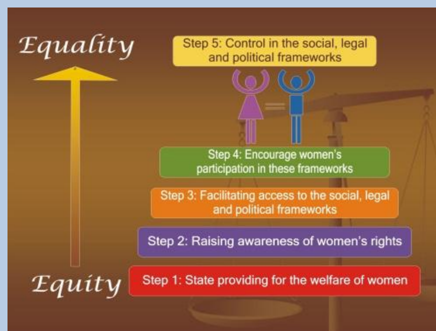
The Scheme was further extended in 2002 to cover not only children studying in Government, Government aided and local body schools, but also children studying in Education Guarantee Scheme (EGS) and Alternative & Innovative Education (AIE) centres. Over the years there has been revision in Central assistance for cooking cost, transport subsidy and nutritional norm. A provision for serving mid-day meal during summer vacation in drought affected areas was also made. 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 Educationally Backward 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 Scheme was extended to all areas across the country from 1.4.2008, including recognized as well as unrecognized Madrasas/Maqtabs supported under SSA. The Mid Day Meal is the world’s largest school feeding programme.

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

CHAPTER 5

TOWARDS GENDER EQUALITY AND EMPOWERMENT OF WOMEN

MDG 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 Legislative Assembly, Legislative Council, Zilla Panchayats, Taluk Panchayats and Gram Panchayats**

It is in the recent years that the issue of women’s empowerment as a development objective has moved centre stage. With this objective in mind, the Department of Women and Child Development, Government of Karnataka, has designed the following schemes that aims, not only on empowering women, but also for their well-being in various spheres.

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 an 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 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 unique 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.

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 State 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.

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.

The rate of change over time in Karnataka in respect of the share of women in wage employment in the non-agricultural sector is slow. As per NSS data, in 2004-05 the percentage share of females in wage employment in the non- agricultural sector was 20.9 (22.3 in rural areas and 20.1 in urban areas). In 2009-10 there was a marginal increase to 22.6 (25.2 in rural areas and 21.2 in urban areas). In 2011-12, the 68th round NSS results had estimated the percentage share of females in wage employment in the non-agricultural sector as 20.9 with the share in rural and urban areas as 17.3 and 23.3 respectively.

Indicator: Proportion of seats held by women in Legislative Assembly, Legislative Council and PRIs

Karnataka has only 6 women representatives out of 224 members in Legislative Assembly, while there are 5 women representatives out of 75 members in Legislative Council. Hence the proportion of seats held by women in State Legislative Assembly and Legislative Council is 3.7 %. There has been an increase in representation of women in PRIs during the period 2000 to 2010. In 2000, out of the total seats of 890 in ZPs 339 seats were held by women i.e. 38.1%, in 2010, out of 997 total seats 531 seats were held by women i.e. 53.3%. As regards TPs, in 2000 out of total seats of 3255, 1375 were held by women, i.e. 42.2%, in 2010 out of total seats 3659, 2018 seats were held by women, i.e. 55.2%. However, as

regards GPs, there has been a marginal decline. In 2000, out of 78349 total seats, 35064 were held by women, i.e. 44.8%, in 2010 out of total seats of 90643, 39025 were held by women, i.e. 43.1%.

Aiming at eradication of gender disparity in Education….

Education of girls has been a high priority of all Governments. 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 augment 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 (i) Free textbooks to all girls up to class VIII, (ii) Separate toilets for girls, (iii) Back to school camps for out-of-school girls, (iv) Bridge courses for older girls, (v) Recruitment of 50% women teachers, (vi) Early childhood care and Education centres in/near schools/convergence with ICDS programme etc. (vii) Teachers' sensitisation programmes to promote equitable learning opportunities, (viii) Gender-sensitive teaching-learning materials including textbooks, (ix) Intensive community mobilisation efforts, (x) '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 assure 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 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 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.

National Programme for Education of Girls at Elementary Level (NPEGEL) component (for educationally backward blocks) to support pre-school component of ICDS or an interim pre-school centre where ICDS does not exist but is needed. 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 enrolment 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 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 (NPAG) 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. SABLA scheme aims at empowering the target group of Adolescent girls in many ways with special emphasis on the education of this group.

The objectives of the scheme are to – (i) Enable self-development and empowerment of AGs; **(ii)** Improve their nutrition and health status; (iii) Spread awareness among them about health, hygiene, nutrition; (iv) Assisted Reproductive and Sexual Health (ARSH), and family and child care; (v) Upgrade their home-based skills, life skills and vocational skills; (vi) Mainstream out-of-school AGs into formal/non formal-education; and (vii) Inform and guide them about existing public services, such as PHC, CHC, Post Office, Bank, Police Station, etc.

The **Mahatma Gandhi National Rural Employment Guarantee Act** (MGNREGA) which is a landmark initiative of 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 $1/3^{rd}$ of the beneficiaries shall be women who have registered and requested for work under the Scheme.

Initiatives taken up by the State Government to promote women empowerment

A. Stree Shakthi

The programme was launched in 2000-01 and is implemented throughout the State. The focus of this scheme is to empower rural women and make them self-reliant. Stree Shakthi Groups are formed at the village level to inculcate the habit of savings and thrift among its members, so that women are economically empowered. Each group comprises of about 15 to 20 women members who come from

below the poverty line families. Women belonging to families who are landless or agricultural labourers, and largely SC/ST women who have come together to form 1.30 lakhs Stree Shakthi Groups.

At present there are 1.40 lakh self-help groups, comprising 20 lakh women members. Groups conduct regular weekly meetings and save a minimum of Rs.10/-. These savings are used to do internal lending among the members helping them to utilize the money for their day to day needs and also to start small Income Generating Activities. Each Stree Shakthi Groups is given a Revolving Fund of Rs. 5,000/- and kit material of Rs.600/- which includes 9 books and zinc metallic trunk.

To encourage women's groups to involve in saving activities and take-up income generating activities, the State has offered financial incentives of Rs.5000/- to each group. It has been decided to enhance the ceiling limit of revolving fund from Rs. 5000/- to 25000/- in a phased manner starting from 2014-15 to 2017-18 at the rate of Rs. 5000/- per year. Further, the State also offers financial incentives of Rs.15,000/- to the groups who have saved between Rs.75,000/- to Rs.1 lakh and an incentive of Rs.20,000/- to the groups who have saved above Rs.1 lakh.

A subsidized loan at an interest of 6% is given to those groups who take up loans ranging from Rs.25,000/- to Rs.1 lakh, a budget provision of Rs.20 lakh provided for 500 groups. They are also provided financial assistance to conduct exhibitions & melas at district & taluk level. The purpose of this is to facilitate the marketing of products produced by these groups. Skill Development Training is imparted to the members of the Stree Shakthi Groups based on their interest. Mobile van scheme for marketing products produced by the groups is introduced in 20 districts to encourage marketing at the village level and co-ordinate with the group.

B. Santhwana

Santhwana is a scheme aimed at rehabilitation of women who have been subjected to atrocities like rape, domestic violence, dowry, sexual harassment, etc. In addition to provision of legal assistance, support is also provided in the form of financial aid, temporary shelter and protection and training/education to equip them with skills needed to get back into the normal course of life. The State has sanctioned 167 Santhwana Centres, which are run with assistance from various NGOs.

Karnataka State Women's Development Corporation (KSWDC)

Karnataka Women's Development Corporation was established in 1987 for socio-economic upliftment of women and has, since then, been implementing various schemes benefitting women.

(i) Udyogini

Udyogini is designed to promote income generating activities by women and the same is encouraged through loans from banks and subsidies from KSWDC. For special category women, a subsidy of 30% of the project cost subject to a maximum of Rs. 10,000/- and for general category women, a subsidy of 20% of the project cost subject to a maximum of Rs. 7500 is provided. An evaluation of the scheme by the Institute for Social & Economic Change has revealed that the scheme has been highly useful to women across different castes, classes, regions and demographic backgrounds, especially for women who were deserted by their husbands or for widows and, physically handicapped women, by providing them a source of independent livelihood.

(ii) Women Training Programme

Under this scheme, various job oriented and skill training programmes are provided to women aiding their self-employment, with a special focus on widows, physically handicapped and the destitute. The training programmes are organized through Central Government, State Government, and bank sponsored organizations.

(iii) Devadasi Rehabilitation Programme

This scheme is being implemented in 14 districts of North Karnataka. Under this scheme, Devadasis are provided with financial assistance by way of 50% subsidy from the Corporation and 50% loan from the banks, for taking up income generating activities with a unit cost of Rs. 20,000/-. In addition, awareness campaigns against this evil system, formation of self-help groups providing

microcredit to the groups at 6% p.a. interest and, health camps are also being implemented. The Corporation also runs schemes that provide pension and housing support to devadasis. Devadasis above the age of 45 are given a pension of Rs.500/- per month. Houses are constructed through the Rajiv Gandhi Rural Housing Corporation for those devadasis who own sites.

(iv) Marketing Assistance Scheme

This scheme provides a marketing platform to sell products produced by women entrepreneurs and Stree Shakthi Groups.

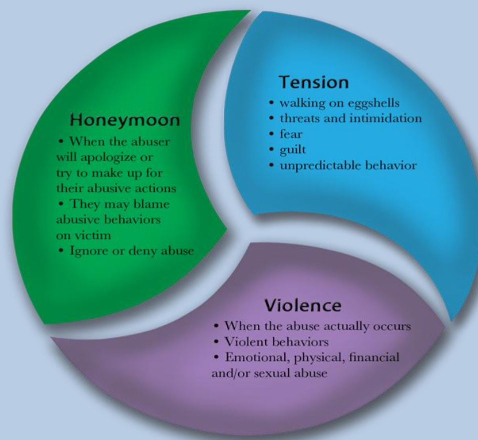
(v) State Resource Centre - Under this scheme, KSWDC has established 30 Women's self-employment counselling centres in Karnataka, to provide information/counselling about self-employment, training, market assistance and economic activities etc.to women.

(vi) Micro Credit Scheme - This scheme was introduced in 2011-12 which provides loans to members of SHGs to improve their economic status. Loans of Rs 5000/- to Rs 10000/- are being sanctioned to each member subject to a maximum of Rs 1 lakh to each SHG at the rate of 6% per annum.

(vii) Rehabilitation of Sex Workers - This scheme was introduced in 2012-13, the situation of the sex worker are in miserable condition, in order to ensure that they can lead an honourable life in the society the Government has introduced this scheme. Those who are willing to come out from their profession, the Corporation provides self-employment training programme and also loan facilities through Nationalized Banks/Co-operative Banks up to unit cost of Rs.1 lakh, from the Corporation subsidy of Rs.10,000/- maximum is being extended.

Protection of Women from Domestic Violence

The State implemented the Protection of Women from Domestic Violence Act in 2007. This is especially with the objective of checking violence against women, a step towards achieving gender equality and saving women from oppression. To provide shelter and counselling to victims of domestic violence, 116 Service Providers have been notified. In addition to this, 34 Swadhar Centres, 30 Short Stay Homes and 164 Santhwana Centres have been notified as Shelter Homes in the State. Free legal aid is provided to the victims. In each taluk a Protection Officer has been appointed for the implementation of this legislation.



Satellite Training Programme was organised under the Protection of Women from Domestic Violence Act 2005 & Rules 2006 for all the stake holders such as officers from the Departments of Law, Police, Education and Health & Family Welfare. The training programme was broadcasted in 185 taluk BRC Centre simultaneously to create awareness. Approximately 10,000 participants participated in this programme.

Education being one of the most vital transforming factors in nation building, focused initiatives to overcome various hurdles are of utmost importance for bringing infrastructure and quality improvements and thereby eradicating all kinds of inequality in education, including gender disparity. The power of education is in its efficacy to break mental, social and economic hurdles in due course of time, thereby bringing societal changes and empowerment of women in various walks of life. Initiatives inspiring 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.

CHAPTER 6

REDUCING CHILD MORTALITY

MDG 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 immunized against measles**

Infancy and childhood periods of human life are often threatened by major potential risks to survival due to a number of reasons. There are 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, Karnataka 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 across the districts of the State.

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 Karnataka, Under Five Mortality Rate (U5MR) has declined from an estimated level of 94 per 1000 live births in 1990 to 37 in 2012. To reduce U5MR to 31 per thousand live births by 2015, Karnataka tends to reach 36 by 2015 as per the historical trend, missing the target by 5 percentage points. However, considering the continuance of the sharper annual rate of decline witnessed in the recent years, Karnataka is likely to achieve the target. In 2012, the U5MR for females is 36 and for males is 32, it is much lower than the national average of 56 and 49 respectively. As per SRS 2012, U5MR is higher in rural areas (40) than urban areas (31) in the State, which is lower than the national level of 56 in rural areas and 32 in urban areas.

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 Karnataka, the IMR has reduced by nearly 54% from 70 in 1990 to 32 in 2012. The MDG target is 23 and as per the historical trend, the IMR is likely to reach 31 deaths per 1000 live births, missing the MDG target of 23 by 8 points. 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. In 2012, in Karnataka, female–male gap in IMR is 4 points (female- 33, male - 29), however it is lower than the national level of (female - 44, male - 41). In 2012, in Karnataka, the Rural–Urban gap in IMR is 10 points (Rural - 35, Urban – 25), which is again lower than the national level where the Rural–Urban gap in IMR is 18 points (Rural–46, Urban - 28).

Immunisation - gap persists ….

Indicator: Proportion of one year old children immunised against measles

The state level coverage of the proportion of one-year old (12-23 months) children immunised

against measles has registered an increase from 54.9% in 1992-93 to 89.9% in 2009 (UNICEF &GOI-Coverage Evaluation Survey 2009). At the historical rate of increase, Karnataka is expected cover about 100% children in the age group 12-23 months for immunisation against measles by 2015, thus reaching the MDG target. According to DLHS-3 for 2007-08, State coverage of immunisation of one year olds has reached 85.1%.

Addressing issues of child mortality….

Government of India has adopted a new National Policy for Children, 2013 with effect from 26th April, 2013. The Policy reaffirms the Government's commitment to the realization of the rights of all children in the country. It 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 mother has an important bearing on the health of the child. Thus interventions for improvement of maternal health are critical for improving survival of new-born and are deemed to be intervention for both maternal and child health. Under 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 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 new-born 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 new-born 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 equipment, 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.

ii) New-born Stabilization Units (NBSUs) are being established a 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 new-borns.

iii) New-born 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 new-born care. The services include resuscitation, provision of warmth, and prevention of infection and cord care and early initiation of breast-feeding. The equipment at new-born care corners includes Weighing scale, radiant warmer, suction machine and mucus sucker.

c) Home Based New Born Care (HBNC): Home based new-born care through ASHA 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 new-borns 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 (i) recording of weight of the new-born in MCP card, (ii) ensuring BCG, 1st dose of OPV and DPT vaccination, (iii) both mother and new-born are safe till 42 days of the delivery, and (iv) registration of birth has been done. Karnataka is in the process of implementing Home Based New Born Care.

d) Capacity building of health care providers - Various trainings is being conducted under NRHM to train doctors, nurses and ANM for early diagnosis and case management of common ailments of children. These trainings are (i) Integrated Management of Neonatal and Child Illness (IMNCI) which 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 new-born and child health services to address major neonatal and child hood illnesses.

e) **Navjat Shishu Suraksha Karyakram (NSSK):** Basic New-born 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 New-born Resuscitation. New-born 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 new-born care and resuscitation at every delivery.

f) **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. Nutritional Rehabilitation Centres have been established for management of 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.

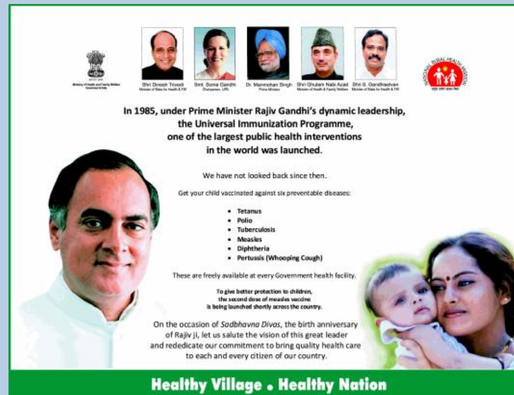
g) **Reduction in morbidity and mortality due to Acute Respiratory Infections (ARI) and Diarrhoeal Diseases**: Childhood Diarrhoea - Promotion of zinc and ORS supplies is ensured. In order to control Diarrhoeal diseases Government of India has adopted the WHO guidelines on Diarrhoea

management. India has introduced the low osmolality Oral Rehydration Solution (ORS), as recommended by WHO for the management of diarrhoea. Zinc has been approved as an adjunct to ORS for the management of diarrhoea. 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.

Acute Respiratory Infections - ARIs 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.

h) Supplementation with micronutrients through supplies of Vitamin A & iron supplements - Vitamin – A - The policy has been revised with the objective of decreasing the incidence 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. 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.

i) 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 programmes 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 Chalmette Guerin) 1 dose at Birth (up to 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 16-24 months 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 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. 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 also been introduced. 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. 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 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).

j) 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 new-borns 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.

k) **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 64518 approved AWCs and 204 ICDS Projects in the State. 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 217450 beneficiaries (6 months -3 years children), 1785151 beneficiaries (3-6 years children) and 990758 beneficiaries (P&L mothers) who availed the services as on 31.3.2013.

In order to address various management and institutional gaps and to meet administrative and operational challenges Government has restructured the ICDS programme in September 2012 in order to strengthen it. 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, pregnant and lactating mothers (b) strengthening of services including, care and nutrition counselling services and care of severely underweight children (c) a provision for an additional Anganwadi Worker cum Nutrition Counsellor for focus on children under 3 years of age and to improve the family contact, care and nutrition counselling for P&L (d) focus on Early Childhood Care and Education (ECCE) (e) shaping 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 Annual State Programme Implementation Plan (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 1/5th and (iii) achieve time bound goals and outcomes with results based monitoring of indicators at different levels.

Supportive Services given by Department of Women and Child Development in reducing IMR

Among the ICDS services, the immunization programme, Nutrition & Health Education programme for women in the age group 15-45 years, health check-up (of ICDS beneficiaries by medical officers) and referral service, requires continued support from the Health Department. The ICDS functionaries and health personnel at all levels especially grass root levels ensure that immunization services to combat 6 killer diseases are provided to all children in their respective areas. Deworming of children and supply of IFA tablets is carried out on regular basis. Once in 3 months the Medical Officers from the nearest PHC/ visit Anganwadi centers to carry out health checkup of beneficiaries and specialized care is given to those referred through the ICDS network. The new **WHO Child Growth Standards** are already adopted in the state. Growth monitoring of 0-5 years children is carried out in AWC by plotting the growth curves in growth charts, where the criteria is age vs weight.

Initiatives Taken to Reduce IMR

- Integrated Management of Neonatal and Childhood Illnesses (IMNCI) is implemented in fourteen Districts of Gulbarga and Belgaum division and the Tribal Districts of Kodagu and Chamarajnagar.
- Nine hundred and ninety four 24X7 PHCs are functioning as New-born Care Corners (NBCC).
- New Born Stabilization Units (NBSUs) have been established in one hundred and eighty eight Taluka Hospitals and Community Health Centres.
- Special Neo-natal Care Units (SNCUs) have been established in thirty three District Level Hospitals.
- Ten Bedded Nutritional Rehabilitation Centres (NRCs) are functioning in Gulbarga and Bijapur District Hospitals.
- Modified Nutritional Rehabilitation Centres (MNRCs) have been established at sixteen Taluk Hospitals.
- Screening and Treatment of Retinopathy of Prematurity (ROP) in Premature and Low-birth weight babies is taken up in the six 'C' Category Districts.
- Janani Shishu Suraksha Karyakram (JSSK) is implemented in all Government hospitals. Screening, Investigations and Treatment are free of cost for the new born for up to thirty days.
- Home Based Neonatal Care (HBNC) -Health Workers and ASHA Workers visit at least for a minimum of six times, identify the ill health common among the new born and guide them to the hospitals in time and in advise the mother in detail the importance of Breast feeding.
- Infant Death Audit (IDA) review meeting is taken up in all Districts every month in the presence of DC and sort out the problems arising there will be sorted out for implementation of the programme successfully.

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

CHAPTER 7

IMPROVING MATERNAL HEALTH

MDG 5: Improve Maternal Health

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

Indicators

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

Deaths due to pregnancy and child birth are likely 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 5: Improve Maternal Health gets greater importance in this context.

Maternal Mortality Ratio is declining ….

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.

As per SRS data, Karnataka has recorded a decline in MMR from 316 in 1990 to 144 in 2010-12. The decline in MMR from 1990 to 2012 is 54.43%. This can be attributed to the increase in awareness and the intensive efforts being taken by the State in improving healthcare especially that of pregnant women and mothers.

From an estimated MMR level of 316 per 100,000 live births in 1990, Karnataka is required to reduce the MMR to 79 per 100,000 live births by 2015. At the historical pace of decrease, Karnataka tends to reach MMR of 129 per 100,000 live births by 2015, falling short by 50 points. However, the bright line in the trend is the sharper decline i.e. 19% during 2009-12, 16% during 2006-09 and 6.5% during 2004-06 and 14 % decline during 2001- 2003.

In addition to Maternal Mortality Ratio (MMR), the Maternal Mortality Rate (MMR - 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. The maternal mortality rate in Karnataka has come down from 14 in 2004-06 to 8.1 in 2010 -12. In Karnataka, lifetime risk declined from 0.5 in 2004-06 to 0.3 2010-12.

Initiatives Taken to Reduce MMR

- On confirmation that the woman is pregnant, ANC card is given through Auxillary Nurse Midwife of the said locality and registered in MCTs.
- Ante Natal Care check-up is a must.
- Supply of 100 IFA Tablets is compulsory.
- Two TT injections are given compulsorily during pregnancy.
- If the pregnant woman is found to be anaemic (7gm) an addition 100 IFA tablets are given.

- If the pregnant woman is suffering from severe anaemic (<7gm) then she is referred to the upgraded hospital for injection iron sucrose.
- Cash benefit of Rs.1000/- is given under Prasuthi Araike programme for supplementing nutrition.
- The pregnant woman is advised to have food with more iron content and nutrition and is advised to have institutional delivery.
- After delivery, 100 IFA tablets are given to the mother to prevent anaemia both in mother and the new born.
- In order to give 24 hours health services, 24x7 facilities are given in selected Primary Health Centres.
- As soon it is found that it is a complicated pregnancy and to give additional facilities 192 upgraded hospitals have been identified in the State.
- Advised to stay compulsorily in the health Institution for 48 hours after delivery.
- From the stage of pregnancy till the delivery, free delivery, drugs, diet, blood and transport arrangements are made free of cost under Janani Suraksha Yojane.
- Before the mother leaves from hospital to home Government facilities like Madilu, Prasuti Araike and Janani Suraksha Yojane are given to BPL/SC/ST beneficiaries.
- The mother is advised on family planning before leaving the hospital for home.

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 institutional deliveries in Karnataka increased from 58% in 2002-04(District level Household Survey) to 86.4% in 2009 (Coverage Evaluation Survey 2009). As per SRS (2012) institutional deliveries in Karnataka is 90.8%. As regards delivery attended by skilled personnel in 1992-93 it was 46.6%, which has increased to 88.4% in 2009. With the existing rate of increase in deliveries by skilled personnel, the likely achievement for 2015 is 97.81%, which is marginally short of the targeted universal coverage.

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 anaemia in mothers, and management and referral of high-risk pregnancies and natal care. In Karnataka, mothers who had received at least one ANC as per DLHS -2, 2002-04 was 91.5% which has increased to 97.5% in 2009 as per CES 2009. As regards mothers who had received three or more ANC has increased from 80% to 91.3% during the same period.

Addressing issues related to maternal health - Interventions & Strategies under NRHM

1) **Janani Suraksha Yojana (JSY):** It is 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 are provided. Health and nutrition education to promote dietary diversification, inclusion of iron and folate rich food as well as food items that promote iron absorption is also provided.

The Mother and Child Protection Card have 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 hours stay in hospital during childbirth and through subsequent home visits on 3rd , 7th and 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) **Operationalization 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 “delivery points” for providing comprehensive and quality Reproductive Maternal New-born and Child Health (RMNCH) Services at these health facilities which are performing deliveries/ C- sections above a certain benchmark. States have been provided funds for strengthening and up gradation of these centres 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/equipment 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 (i) 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, (ii) 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 programme for MBBS doctors in LSAS for Emergency Obstetric Care (EmOC) at FRU. (iii) 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 Gynaecological Society of India (FOGSI). This 6 week training programme is being implemented at the level of Medical Colleges and District Hospitals. (iv)Training of MBBS Doctors in Basic Emergency Obstetric Care (BEmOC): A 10 day training for Medical Officers in BEmOC is being conducted at identified training centres of the States and UTs.

6) Referral Services at both Community and Institutional level: Under NRHM, states are provided financial assistance for establishing emergency response services and patient transport ambulances. Government of India has a thrust on creating 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: (i) linking with a centralized 24x7 call centre having an universal toll free number either district-wise or state-wise as per the situation, (ii) Vehicles are being GPS fitted for equitable geographical distribution and effective network and utilization, (iii) A prudent mix of basic level ambulances and emergency response vehicles are being established with focus on adequate coverage by Basic level ambulances, (iv) 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, (v) 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 increase safe abortion services in peripheral health care facilities in rural areas. These include facility for providing drugs and equipment for Electric 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 under NRHM.

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.

New initiatives

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 Karyakram (JSSK): This scheme has been launched by Government of India in 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 new-borns accessing public health institutions for treatment till 30 days after birth.

13) Maternal Death Review (MDR): Maternal Death Review (MDR) is one of the important interventions under the RCH Programme to fast-track 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 circulated to the states and UTs for guiding them in rolling out and monitoring the MDR Process. All the States & UTs are currently reporting on the MDR process through monthly reports to MOHFW.

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.

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 P&L women both prior to and after delivery of child. 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.

Under the "The National Food Security Act", every pregnant women and lactating mother will be allowed 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 across the country, increasing the number of beneficiaries and increase in amount to be transferred per beneficiary from present Rs. 4000/- to Rs. 6000/- across the country is being issued.

In order to improve maternal health and to reduce maternal mortality, the programmes are to focus on all concerned fronts including awareness generation, better accessible heath care facilities, financial benefits, etc. which would ensure safe motherhood.

CHAPTER 8

FIGHT AGAINST DEADLY DISEASE

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

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

Indicators

- 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 reverse the incidence of Malaria and other major diseases

Indicators

- 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, since they have the potential to undermine the 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, makes HIV and AIDS a likely development threat worldwide.

Sustaining the declining trend in prevalence of HIV/AIDs …

The HIV epidemic in Karnataka continues to decline at the State level with an overall reduction in adult HIV prevalence, HIV incidence (new infections) and AIDS- related mortality. The latest HIV estimates provide sound evidence on the current trend of the epidemic. The adult (15–49 years) HIV prevalence has decreased from 0.69 % in 2005-06 to 0.53% in 2012-13. Karnataka has demonstrated an overall reduction of 18.6% in estimated annual new HIV infections among adult population from 37,997 in 2007-08 to 30,916 in 2013-14. The trend of annual AIDS deaths is also showing a steady decline in the State. Trends of deaths due to AIDS in Karnataka have declined from 23,136 in 2008 to 13,514 in 2011, i.e. a decline by 41.6% in 3 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 the state, divided by the total adult (15–49 years) population within a particular time period, expressed as percentage. Total adults (15–49 years) with HIV prevalence in the State is estimated at 0.69% in 2005-06 and 0.53% in 2012-13. Adult HIV prevalence among males and females is estimated at 0.86% and 0.54% respectively in 2005-06 and 0.62% and 0.43% respectively in 2010-11.

HIV prevalence among the total young population (15–24 years) in Karnataka has declined from 0.25% in 2005-06 to 0.19% in 2010-11. 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 Karnataka in 2013-14 was 2,43,349 compared to the estimated 47,841 in 2007-08. A comparison between 2007-08 and 2013-14 estimates reflects an approximate 408% increase in total number of PLHIV in the past six years. Karnataka is one of the four high prevalence states of India having 2.43 lakh HIV infected population.

HIV estimates for the number of annual new HIV infections is a key indicator providing information on the level and spread of new infections. Karnataka has demonstrated an overall decline in the estimated annual new HIV infections (in all age-groups) from 37,997 in 2007-08 to

30,916 in 2013-14. Total number of annual AIDS related deaths in Karnataka has increased from 14.77% in 2007 to 21.94% in 2013-14, which is a matter of concern.

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 1.57% in 2005 to 0.60% in 2010-11.

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) was only 1.7 % in Karnataka.

Indicator: Condom use at last high-risk sex

The Behavioural Surveillance Survey (BSS) conducted to monitor the changes in knowledge and behaviour 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 2006 and 2009, the 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 5.9 % increase from 81.1% in 2006 to 87% in 2009.

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

According to Behavioural Surveillance Survey, the estimate for proportion of population aged 15-24 years with comprehensive correct Knowledge of HIV/AIDS (%) in 2006 was 23% which has declined to 10% in 2009.

Government Interventions

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

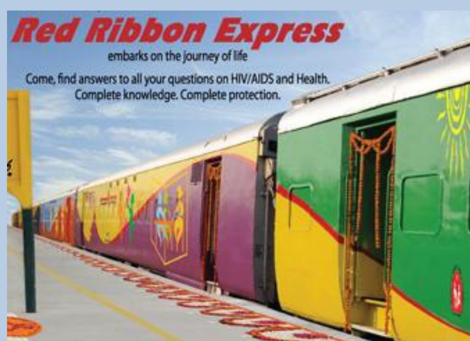
The package of services provided under NACP includes:

(i) **Prevention Services -** (a) 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), (b) Needle-Syringe Exchange Programme (NSEP) and Opioid Substitution Therapy (OST) for IDUs, (c) Prevention Interventions for Migrant population at source, transit and destinations, (d) Link Worker Scheme (LWS) for HRGs and vulnerable population in rural areas, (e) Prevention & Control of Sexually Transmitted Infections/Reproductive Tract Infections (STI/RTI), (f) Blood safety, (g) Counselling & Testing Services, (h) Prevention of Parent to Child Transmission, Condom promotion, (i) 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., (j) Social Mobilization, Youth Interventions and Adolescence Education Programme, (k) Mainstreaming HIV/AIDS response and (l) Work Place Interventions.

(ii) **Care, Support & Treatment Services** – (a) 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 immune phenotyping of cells) Testing and other investigations, (b) Free First line & second line Anti-Retroviral Treatment (ART) through ART centres and Link ART Centres (LACs), Centres of Excellence (COE) & ART plus centres, (c) Paediatric ART for children, (d) Early Infant Diagnosis for HIV exposed infants and children below 18 months, (e) Nutritional and Psycho-social support through Community Care Centres, (f) HIV-TB Coordination (Cross-referral, detection and treatment of co-infections), (g) Treatment of Opportunistic Infections and (h) Drop-in Centres for People Living with HIV (PLHIV) networks.

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.



Karnataka State AIDS Prevention Society

The State's commitment to tackle HIV and AIDS dates to 1992 when KSAPS was established as a cell in the Directorate of Health and Family Welfare Services and registered as a society in 1997. It has implemented HIV prevention, care and support programs within the framework of NACP-I, II and III with support from NACO. KSAPS built strong partnerships with the government health infrastructure, NGOs and collaborative projects such as the Indo-Canadian Collaborative HIV/AIDS Project (ICHAP), which operated from 2000-2005.

The objectives of the Karnataka State AIDS Prevention Society are: (i) To prevent HIV transmission and to control its spread, (ii) To reduce morbidity and mortality associated with HIV infection, (iii) To reduce the adverse social and economic impact resulting from HIV infection, (iv)To co-ordinate and strengthen STD/HIV/AIDS surveillance, (v) To provide technical support in HIV/AIDS prevention and control to Government and Non-Governmental Organizations, (vi)To enhance the community awareness, specifically knowledge, attitude and practice of high risk groups, (vii) To develop Health Education materials for distribution and adoption by agencies working in AIDS prevention, (viii)To channelize and integrate the activities of Non –Governmental Organisations in AIDS prevention and control, (ix) To promote safety of Blood and Blood products and encourage Voluntary Blood Donation movement, (x) To provide facilities and to strengthen services relating to Sexually Transmitted Diseases in Government and Private Medical Institutions and Practitioners, (xi) To provide Counselling services, (xii) To organize social support for management of HIV infected and AIDS patients, (xiii) To utilize the incomes and funds collected and donations if any received, by the society solely towards the objects of the society, (xiv) To carry on the activities without the intention of making any profit, (xv) To carry out its activities within India for the benefit of the people, (xvi) The aim of the Society is also to extend the medical facilities to all citizens irrespective of caste, religion, sex etc.

Karnataka Health Promotion Trust

Karnataka Health Promotion Trust (KHPT) was set up as a partnership between Karnataka State AIDS prevention Society (KSAPS) and the University of Manitoba, Canada in the year 2003. KHPT focuses on supporting and implementing initiatives related to HIV/AIDS and reproductive health. KSAPS is the state government body implementing Karnataka's AIDS control programme under the National AIDS Control organization (NACO). The University of Manitoba is a Canadian University with a successful track record of implementing HIV and AIDS prevention and control programmes in India and in many other countries.

KHPT works towards reducing the risk and vulnerability to HIV among high risk groups and building an enabling environment for HIV prevention work. It also engages in generating awareness on issues concerning HIV/AIDS among general population and has built mechanisms to improve the availability and access to treatment, care and support services for those affected and infected by HIV. KHPT works in all the 30 districts of Karnataka and is implementing 18 projects.

Samastha - Samastha interventions are implemented through a multifaceted combination of CBOs and networks, NGOs and academic and training institutions. Its goal is to reduce the transmission and mitigate the impact of HIV in selected districts of Karnataka with a special focus on rural areas. Over the years, the project through comprehensive rural prevention, care and support interventions reached more than 250,000 vulnerable men and women and regularly reached about 15,000 rural female sex workers, using the link worker model. Samastha has thus contributed significantly to strengthening the health system response to HIV/AIDS in Karnataka by enhancing the capacity of the government's AIDS control programmes - the State AIDS Control Societies [SACS] and the District AIDS Prevention and Control Units [DAPCU].

Sankalp - Sankalp was launched in December 2003 to 2013 as the first scaled up targeted intervention project for sex workers, MSM and Transgender populations in Karnataka. The project is funded by Bill and Melinda Gates Foundation and aims to reduce STI, transmission of HIV and

increase condom use among sex workers and MSM T. The project is being implemented in partnership with NGOs and CBOs in 20 districts of Karnataka. The first phase of Sankalp (2003-2009) included scaling up interventions in the state. The second phase (2009-2013) prepares local communities and the government to assume management of these initiatives in 2014. To bolster solidarity within and enhance the agency of affected groups, Sankalp facilitates the formation of community groups of sex workers, MSM and transgenders at the district level.

Significant accomplishments of this project included – (i) Establishment of a strong technical team, where a talented and committed core team with strengths in program development and implementation, program management, STI services, monitoring and evaluation, and finance and administration was formed. The core team also brought extensive experience in HIV program implementation that quickened the pace of start-up. (ii) Strong implementing partners were selected such as NGOs which had strong community development experiences in the districts and strong management systems. Each NGO partner covered at least one full district. (iii) Mapping and initiation of programs and services. More than 180 urban towns/cities and 53 zones were mapped in Bangalore. The mapping methodology provided lists and profiles of locations where there was a high concentration of high-risk sexual networks and other high risk activity. (iv) The project has succeeded in initiating outreach programs and services in over 120 urban centres. By the end of March 2012, the project covered 1,65,808 FSWs and 72,655 MSM-T in Karnataka.

Corridors Project : This project is being implemented by KHPT since 2006 and covers the geographical areas of Bagalkot, Belgaum and Bijapur (3 B) in Karnataka and Sangli, Satara and Solapur (3 S) in Maharashtra through the support of Bill and Melinda Gates Foundation (BMGF).This cross-border/inter-state project was conceived as there was a strong body of evidence suggesting movement of a large number of sex workers back and forth along this “corridor” from parts of rural northern Karnataka to urban southern Maharashtra and onwards to Pune and Mumbai.

The project has four main objectives - to reduce the transmission of HIV and STIs in the context of female sex work in Bijapur, Bagalkot and Belgaum Districts; to reduce the transmission of HIV and STIs in the context of female sex work in Sangli, Sholapur and Satara districts; to reduce the migration-related vulnerability of migrant rural female sex workers from northern Karnataka at both the migration source and destination locations; and to reduce the transmission of HIV and STIs among high risk men who have sex with men (MSM) in all six “Corridor” districts. There are three major strategies for the programs i.e. risk reduction, vulnerability reduction and preparation for

potential migrants. While risk reduction and vulnerability reduction will happen at the destination points (DP) as well as points of origin (PO), preparation for migration will take place only at PO.

Clinical services were established through a network of static clinics and outreach clinics which provided clinical services. Along with clinical services advocacy, creating enabling environment, awareness and campaigns about rights of FSW/MSM/TG were also taken up during these years. The hallmark of this programme is that all leadership positions have been community based since the inception with non- community members sourced only for technical and documentary support.

About SHOPS project (1st April 2013- 30th Sept 2014) - The Strengthening Health Outcomes through the Private Sector (SHOPS) project is United State Agency for International Development (USAID) flagship initiative in private sector health. SHOPS work to involve Non-Governmental Organizations (NGOs) and for-profit entities to address the many health needs of people in developing countries. SHOPS focuses on increasing availability, improving quality, and expanding coverage of essential health products and services in family planning and reproductive health, maternal and child health, HIV/AIDS, tuberculosis and other areas through the private sector. Karnataka Health Promotion Trust (KHPT) is the implementing agency in Karnataka.

SHOPS-TB Prevention and Care Initiative - The Tuberculosis (TB) Prevention and Care model in Karnataka under SHOPS plans to adopt the successful strategies from the comprehensive Market Based Partnership for Health (MBPH) model that was implemented in 2011-12 by Abt Associates and develop them further. Also, to implement innovative new concepts aimed at establishing sustainable participation of the private sector in TB control. The goal of the SHOPS-TB model is to enable universal access to people affected by tuberculosis, through engagement of the private health sector and community participation.

The objectives of the model are four-fold – (i) Understand triggers and barriers influencing (a) adoption of national TB management guidelines by Private Health Care Providers, and (b) acceptance of these guidelines by consumers, (ii) Improve adoption of national standards and guidelines on TB care by private healthcare providers (PHCP), (iii) Reduce patient and private healthcare system delays in TB diagnosis and initiation of treatment, (iv) Facilitate adoption of the model, or its components, by RNTCP.

Under the SHOPS-TB initiative, KHPT will carry forward the MBPH project learning in Karnataka, improve or add new components that potentially provide answers to questions on viability, cost-

effectiveness and replicability of private sector engagement by Revised National Tuberculosis Program (RNTCP). KHPT as an interface agency will work as a catalyst between the public and private sectors, the private provider and his/her patient, and between the public sector and target community. The key results expected from the initiative include increase in TB notification, high levels of treatment compliance among TB patients treated by private providers and decrease in private provider and health systems delays in TB diagnosis and initiation of treatment.

CHARME Project – This Project is funded by a 7 year grant from the Bill & Melinda Gates Foundation (BMGF), to monitor and evaluate its Avahan HIV/AIDS programme in India. The Project is managed by the Centre Hospitalier Affilié universitaire de Quebec (CHA), Canada. The major goal of the project is to study HIV transmission dynamics among and between core, bridge and general population groups and to assess the impact of HIV preventive interventions, using a combination of mathematical modelling and empirical data. In addition, the CHARME Project has a component to assess the cost-effectiveness of interventions in the four southern states of India covered by Avahan.

In order to facilitate the mathematical modelling, the CHARME Project collects data on sexual behaviour through serial cross-sectional surveys of general populations (GPS). In these surveys, respondents are asked to respond to a face-to-face interview and to provide blood and urine samples for STI and HIV testing. In addition, and as part of the GPS, the Project conducts polling booth surveys (PBS) of a sample of randomly selected people in the same district to validate the findings of the face-to-face interviews. The Project also undertakes quantitative and qualitative research in special behavioural surveys (SBS) of vulnerable populations such as FSWs, MSM and their clients. In India, the project is housed in KHPT office and has an agreement with KHPT to provide administrative and logistical support to the project. In Karnataka, CHARME works closely with the University of Manitoba, the KSAPS and with the KHPT, who are the key implementers of HIV/AIDS prevention and care programming in the state.

The main outputs of the project will include the availability of a centralised VPN-based data repository of validated relevant M&E and population health research data, the improvement in routine data collection systems, the production and dissemination of a report on the state of the epidemic and assessment of the collective impact of HIV preventive interventions twice during the course of the project, the development and dissemination of a user-friendly model for impact assessment of HIV preventive interventions adapted to the Indian context, presentations in scientific conferences and peer-reviewed publications with involvement of Indian partners, development of a capacity building program targeted at Indian academic and research institutions that will allow increasing involvement of these partners institutions in the analytical work over the course of the project, and development of another capacity building program targeted at national, state and district-level AIDS control organizations in order to ensure evidence-based HIV strategic planning and programming.

Spruha - During the period prior to the National AIDS Control Programme- III, i.e. before 2007, several HIV care homes were being run in the country independently. The basic objective of these centres was to serve as hospices, to provide shelter and terminal care to PLHIV. Many of the inmates had been deserted by their families, due to HIV. These centres were stand-alone centres and served as long stay homes for PLHIV. With the introduction of Antiretroviral Therapy (ART), PLHIVs are able to regain their health and live a normal life while taking ART, lifelong. However, adhering to ART was a challenge and non-adherence became a major reason for treatment failures and recurrent illness in PLHIV.

In this experiment, it was realized that if people were provided with appropriate and intense counselling at the initiation of ART, the likelihood of them being adherent was much higher. This meant that more people could lead a healthy life and be a part of India's productive force. It also meant that fewer PLHIV would feel the need for second line ART which was 10 times more expensive than First Line ART, thus having a direct impact on the financial burden for the HIV programme.

Goal of the Project is that an increased number of PLHIV have access to better quality of life and reduced vulnerability through improved clinical and care services, linking with relevant social services and community responses. The objectives of the project are (i) to expand the coverage of and access to services for PLHIV, (ii) to expand the scope of services provided to PLHIV, (iii) to ensure PLHIV receive various services in an environment without stigma, discrimination and denial.

Focus of the project is (i) Ensuring availability and accessibility of quality services by PLHIV, (ii) Ensuring psychological care, social interventions and nutrition is provided to PLHIV along with medical services, (iii) Ensuring ART adherence and bringing down the defaulter cases, (iv) Establishing linkages and co-ordination systems between project services and relevant government or private services to ensure a continuum of care, (v) Developing of standard operating procedures, modules, manuals and materials for quality HIV care, (vi) Ensuring that the Community Care Centre (CCC) team provides the range of medical & psychosocial services either directly or through strong linkages with relevant identified service providers such as ART centre, ICTC, DOTS, TI programs, Tertiary level hospitals, orphanages, destitute homes, vocational rehabilitations centres, legal support centres in the respective districts.(vii) Supportive supervision and monitoring of services to PLHIV.

Services available at the CCC – (i) OPD and IPD services for clients, (ii) Nursing care for 24 hours for clients, (iii) Medicines on OPD and IPD basis for clients, (iv) Basic routine laboratory diagnostic services, (v) Counselling services for clients and care givers, (vi) Transport for clients and care givers, (vii) Accompanied referrals from ART centre, (viii) Accompanied referrals to ART centre or any other tertiary care unit or social services, (ix) Accommodation for care givers during client's IP days, (x)Food for clients during IP days. As on 1st April 2012, under Spruha project, 27 CCCs are functional in Karnataka effectively.

Sampoorna - It has been clearly brought out in the NACP III Operational Guidelines that a comparison of urban-rural data reveals that rural areas account for 59% of the total HIV infection and there is growing evidence that HIV is no longer restricted to urban areas. Considering the evidence of rural risks and vulnerabilities to HIV and the overburdened rural health functionaries, NACP III has designed the Link Worker Scheme (LWS) to provide HIV prevention, referral and follow up services to HRGs and vulnerable groups in rural areas. NACO, SACS, KHPT, DAPCU and the implementing NGOs at the districts will be closely involved in LWS. LWS will be implemented with a strong management and technical support structure from village to national level. KHPT has been selected by NACO as the lead agency to implement the Link Worker Scheme in 8 districts of Karnataka viz., Uttar Kannada, Gadag, Haveri, Shimoga, Kolar, Chitradurga, Dakshin Kannada and Bangalore Rural. The LWS under the gambit of KHPT has been named Sampoorna. Specific activities under different phases will be carried out in the span of 3 years. 100 villages have been shortlisted and selected for implementation of Sampoorna in each district. The project also envisages the facilitation of community members to develop ownership and sustain the scheme beyond the life of the programme through formation of youth groups, red ribbon

clubs and involvement of about 1000 volunteers per district. This program is covering 800 villages working closely HRGs, Vulnerable Populations, and People living with HIV and AIDS (PLHIVs) and Orphan and Vulnerable children (OVCs).

Specific objective of Sampoorna is to reach out to HRGs and vulnerable men and women in rural areas with information, knowledge, skills on STI/HIV prevention and risk reduction. This entails – (i) increasing the availability and use of condoms among HRGs and other vulnerable men and women, (ii) establishing referral and follow up linkages for various series including treatment for STIs, testing and treatment for TB, ICTC, PPTCT services, HIV care and support services including ART, (iii) creating an enabling environment for PLHA and their families, reducing stigma and discrimination against them through interactions with existing community structures/groups eg., VHSCs, SHGs and Panchayati Raj Institutions.

Program Progress – (i) In Sampoorna program there are 310 trained community resource persons called link workers, (ii) The project has managed to reach all 95% of estimated (SNA) HRGs, VPs, PLHIVs and OVCs in the villages, (iii) Till March 2012, the project has reached 5166 HRGs and 70159 vulnerable populations. 100% of HRGs and IPs have been referred to ICTC testing in the program. Nearly 69% among HRGs and 50% among VPs have undergone ICTC testing at least once since inception of the program, (iv) The project has developed good working relationship with DAPCU in all the districts garnering good support for all the health services related activities, (v) The program also focuses on community structures in the villages and conducted many capacity building program for them, (vi) Totally 2,524 groups were participated in CSSP with 25,922 individuals from 8 districts of Karnataka. These groups are rural based social groups encompassing caste based groups, occupational groups, self-help groups, volunteers, youth associations, peasants associations and NGOs. The project also established RRCs in all the villages. (vii) Till March 2012, 1439 RRCs have been formed and the members have undergone training. Promotion of volunteerism is another critical component in the program. Till March 2012, 18881 village volunteers were identified and trained in the program. Among them 14045 volunteers are in place and helping in carrying out village level program activities like awareness programs and health camps. (viii) 1091 Village information centres were established. 1645 condom outlet boxes have been established.

Strive, Tackling Structural Drivers of HIV Epidemic, Research Programme Consortium - The project is for the duration of 2011 – 2017 and is supported by DFID through London School of Hygiene and Tropical Medicine. The research program consortium aims to promote rigorous research into what works to tackle the structural determinants of HIV and will maximize learning

from interventions that have effectively influenced policy and taken such approaches to scale. The Research program consortium concentrates on four interlocking structural drivers – (i) gender roles and inequalities, (ii) stigmatization, discrimination and criminalization, (iii) poor livelihood opportunities, (iv) unrestricted alcohol availability and drinking norms. The consortium is comprised of six partners with London school of Hygiene and Tropical Medicine as the lead institution. Besides KHPT, other partners include International Centre for Research on Women (Asia and Washington), The Mwanza Intervention Trials Unit (Tanzania) and Reproductive Health Research Institute (South Africa).

Project to improve the quality of life of HIV positive female sex workers by addressing the stigma: This project is being implemented in 6 Targeted Interventions (TI) of Belgaum and Bagalkot districts. Project in one TI is funded by International Centre for Research on Women and in remaining by Sankalp project. The female sex workers with positive diagnosis of HIV may suffer from multiple stigmas in the society where sex work is considered as immoral and illegal. Positive Sex workers are particularly vulnerable to human rights violations, including violence. In many instances it was observed that they try to permanently move out from their places. This may affect their children where they drop out from the formal school education. They may suffer stigma and discrimination on multiple fronts due to their gender, caste, occupation and infection, which furthermore excludes them from realizing their rights and entitlements. Poor self-worth or esteem causes these positive sex workers a great amount of mental blockage and negative attitude towards their life. Internalized stigma may undermine positive sex workers confidence to access care. Those suffering from depression are reluctant to avail post-test care facilities.

Hence, the fear of disclosure linked to stigma and discrimination is a real problem for positive sex workers. They prefer to hide their HIV status from family members, permanent partner, other sex workers, neighbourhood and sex work community for fear of social ostracism. The quality of life of positive sex workers is compromised in the absence of disclosure, or instances of denial, since they consequently have poor access to health care, psycho-social services, and social entitlements through government schemes.

The objectives of the Project are – (i) to improve understanding of forms, manifestation of stigma and discrimination against positive sex workers, (ii) to reduce anticipated and apparent stigma among sex workers and their families, (iii) to reduce internalized stigma among positive sex workers and improve their resilience to cope with stigma.

Strategies of the project - There is evidence to show that there is an increase in the number of positive people accessing services as also in the quantum of decentralized services available. But access to care and support is still a challenge for the female sex workers due to prevailing stigma. There are still lot of knowledge gap on various forms of stigma that exists, drivers and facilitators and manifestation of stigma on self, families and communities. Hence, one the strategy of the project is community engagement in unbundling the issues around stigma through a community based participatory process of exploration. This process will also help the various stakeholders (peers and family) in the community in owning the problem, finding joint solutions and developing a vision of future with reduced stigma.

The sex workers indicated that most of these experiences are fuelled by the attitude and practices that prevail in the society and community in which they live. It is sometimes the self-stigma and the stigma perceived by the sex worker that may affect her. There is a need to work with sex workers, their community and families of sex workers to reduce stigma. Hence, the strategy of individual and group based education and reflection process will be adopted to reduce anticipated and perceived stigma among sex workers and their families. In addition the strategy of development of champions from the community and non-community to advocate the rights of the positive sex workers will be used.

The positive sex workers experience both physical and social isolation. They internalize these experiences and consecutively feel guilty, ashamed and lose hope. This project provides support, individual counselling and safe space to discuss coping with stigma, building self-esteem, disclosure of the HIV status to family, rights and responsibilities, assertiveness, future planning and death and dying. As the sex workers are anxious for their children, some sessions may include children so that the sex workers can plan for the future along with their children.

Another key strategy is capacity building that include capacity building of project staff and implementing NGO/ CBOs to understand issues of stigma and discrimination and on methods and process of conducting facilitated discussion and sessions with community stakeholders, family members and HIV positive sex workers.

Vihaan Project (1st April 2013-31st March 2016) - Vihaan means ‘Dawn’s First Light’ in Sanskrit. The Global Fund project with Alliance as the Principal Recipient works towards complementing the national government’s program of Care, Support and Treatment (CST) services for persons living with HIV (PLHIV). Care and Support Centres (CSCs) are being set up across the

country in 31 states. KHPT is the sub recipient for the state of Karnataka, where the project is implemented in all 30 districts, through 27 CSCs and 3 Help Desks. Sub-Sub Recipients (SSR) include district level networks of positive people, and few non-government organizations.

Objectives and activities – (i) Early linkage of PLHIV to Care, Support and Treatment services: The CSC will support newly detected PLHIV to enhance enrolment and retention in care i.e., pre-ART registration and timely initiation of ART, (ii) Improved treatment, education and adherence for PLHIV: Special focus will be paid to increasing adherence through interpersonal communication, and to minimize lost to follow up, (iii) Expanded positive prevention activities: PLHIV will be counselled and linked to services for positive prevention including condom use, screening and treatment of STI, & reproductive health and family planning, (iv) Improved social protection and wellbeing of PLHIV: 'Vihaan' will assess, leverage and link PLHIV to address psychological, physical and social needs including counselling, education, nutrition, livelihood options, pension & housing schemes, insurance & legal services, with special focus on women and children, (v) Strengthened community systems and reduced stigma and discrimination: Crisis response systems will be established to document and redress crisis as a result of stigma & discrimination to protect rights to health, education and employment.

Expected Outputs and Outcomes – (i) Reach 130,000 persons living with HIV with care and support services, (ii) Reduced lost to follow up among those initiated on ART, (iii) Reduced stigma and discrimination towards PLHIV.

MAC AIDS Fund (01-July-2013 onwards) - MAC AIDS Fund supports KHPT and Sneha Charitable Trust to create platforms for learning alongside children for an effective AIDS response. The program aims to enhance the quality of life of children living with HIV (CLHIV) in institutional and community settings.

Objectives and activities – (i) To identify and collectively address challenges which arise during routine child care adopting a multi-dimensional inclusive approach with full involvement of the child, the care giver and the extended family, (ii) To coordinate and implement interventions that address the growing-up issues that adolescent children encounter with themselves, their care-givers, family members and the larger world, (iii) To support child development through organizing sports and arts competitive events, exposure and experience sharing forums and leadership training camps for children, (iv) To enable continued care of the children (vocational training and job placement,

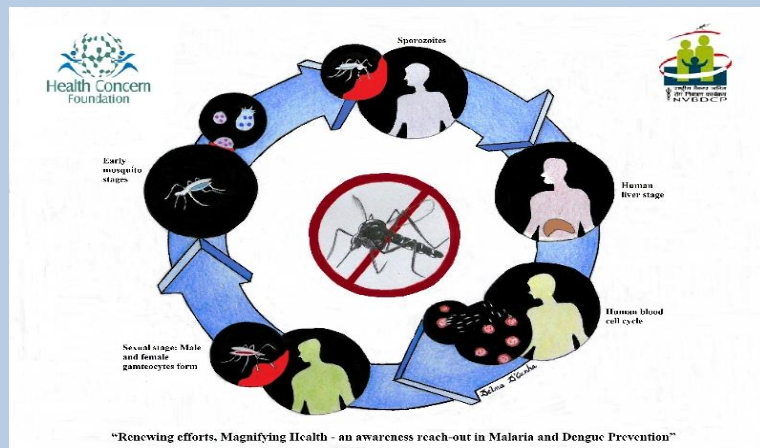
etc.) as they move into adulthood by developing linkages and using social media and data systems to track their progress.

Expected Outputs and Outcomes – (i) Standardize care protocols for children living within institutions, (ii) Cover at least 1000 children orphaned by HIV, (iii) Influence state and national policies for children living with HIV.

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 resulted in escalation of incidence of 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.



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 State started halting and sustaining reversal of cases for last one decade. The malaria cases were brought down from 36,859 cases in 2009 to 10,170 cases in 2013, indicating a decrease of 72% over four years. The annual incidence rate (cases of malaria/1000 population) of Malaria has come down from 0.63 per thousand in 2006, to 0.48 cases per 1000 population in 2010. Deaths per 100 malaria cases was 0.05 in 2006, it has come down to 0.02 in 2010.

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.

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 Prophylactic 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 bed nets treated with insecticide, Wearing clothes that cover maximum surface area of the body.

3. 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.

4. **Environmental Management & Source Reduction Methods** - Source reduction i.e. filling of the breeding places, proper covering of stored water, Channelization of breeding source.

5. 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.

Combating TB

Indicator: Incidence, prevalence and Death rates associated with TB

Controlling TB is a tremendous challenge. The TB burden is still staggering. The disease is a major barrier to social and economic development.

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. As a result of rapid expansion in diagnostic facilities, the proportion of sputum-positive cases confirmed in the laboratory is 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.

Initiatives towards addressing the burden of TB…..

Revised National Tuberculosis Control Programme (RNTCP) - The programme focuses on (a) 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.

Total Patients registered and deaths reported and mortality rate in Karnataka under RNTCP are as follows –

2005			2006			2007			2008			2009			2010		2011
Total Patients Regd.	Total Died	Mortality Rate	Total Patients Regd.	Total Died	Mortality Rate	Total Patients Regd.	Total Died	Mortality Rate	Total Patients Regd.	Total Died	Mortality Rate	Total Patients Regd.	Total Died	Mortality Rate	Total Patients Regd.	Total Died	Total Patients Regd.
68695	4436	0.06	64842	4304	0.07	67630	4849	0.07	66159	4708	0.07	67744	4881	0.07	68655	2589	35281

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 Expert 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 Centre 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.

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 modelling studies indicate that 15-20% of all TB also suffer from DM and that diabetes worsens TB treatment outcomes- increased death, failure and relapse rates. Epidemiological models using 2000 data have shown that DM accounts for 20% of smear-positive pulmonary TB and studies indicates that the increase in DM prevalence has been an important obstacle to reducing TB incidence. In 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 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 Karnataka, 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 and initiatives with focus on vulnerable areas/target population are being taken to overcome the challenge.

CHAPTER 9

PROTECTING THE ENVIRONMENT

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

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 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 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

Indicator

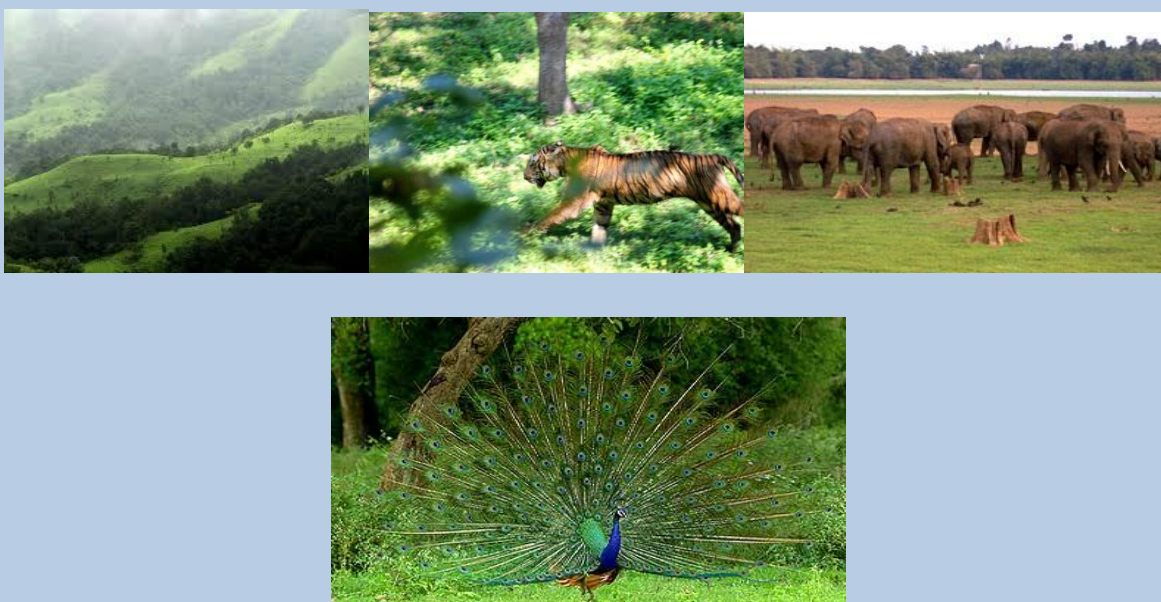
- Slum population as percentage of urban population

Proportion of land area covered by forest

The geographical area of Karnataka is 191,791 km^2 of which 43,356 km^2 (22.6%) is forest area. Notified forests measure 33,238 km^2 (17.3%) which include reserved, protected, village and private forests.

Ratio of area protected to maintain biological diversity to surface area

Karnataka is endowed with most magnificent forests in the country ranging from majestic evergreen forests of the Western Ghats to the scrub jungles of the plains. The Western Ghats of Karnataka are one of the 25 global priority hotspots for conservation and one of the two on the Indian subcontinent. Several economically important species such as Sandalwood, Rosewood, Teak, White Cedar grow naturally in these forests. Karnataka's forest is endowed with rich wildlife, harbours 25% of the elephant population of India and 10% of the tiger population. The State has 5 National parks and 25 sanctuaries comprising about 17.3% of total forest area as protected area for wildlife and biodiversity.



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

There are six recognised Green House Gases (GHGs) – (i) carbon dioxide (CO_2), (ii) methane (CH_4), (iii) nitrous oxide (N_2O), (iv) hydroflourocarbons (HFCs), (v) perflourocarbons (PFCs) and (vi) sulphur hexafluoride (SF_6). Each has a different global warming potential (GWP). Although CO_2 has the lowest GWP (defined as 1.0), it is globally the most significant greenhouse gas because of the quantities in which it is emitted. Although other GHGs are released in lesser quantities their contribution is significant because of their greater GWP. Methane for instance has a GWP of 21 and thus 21 times greater than that of CO_2, while that of SF_6 has been assessed as 23,900. For ease of

accounting, GHG emissions are generally shown as “CO_2 equivalent” by converting GHGs of gases other than CO_2 into an amount of CO_2 having the same global warming potential.

A detailed inventory of GHG emissions of Karnataka is not available as yet. However, a fair estimate has been prepared by Centre for Study of Science, Technology and Policy (CSTEP) in BCCI-K’s 2011 report. It pegs annual emissions from Karnataka at 80.2 million tons of CO_2 equivalent, thus accounting for 4.6% to India’s total GHG emissions. This estimate considers three of the six GHGs: CO_2 with 44 million tons/annum, CH_4 with 0.9 million ton /annum and N_2O with 0.1 million ton/annum.

Proportion of Households using solid fuels

Census 2011 revealed that 60% households in the state, 87% in rural areas and 22% in urban areas, use firewood /crop residue, cow dung cake/coal etc. for cooking. Only 33% of households in the state, 12% in villages and 65% in urban areas, use LPG/PNG/electricity/biogas for cooking. However, use of LPG for cooking purposes has seen a rise by 14% across households in the state-rural households have seen 6% rise and urban households 12% increase from the 2001 figures. The details of Census-2011 information on fuel for cooking in the urban areas of the State are given in the Figure below.

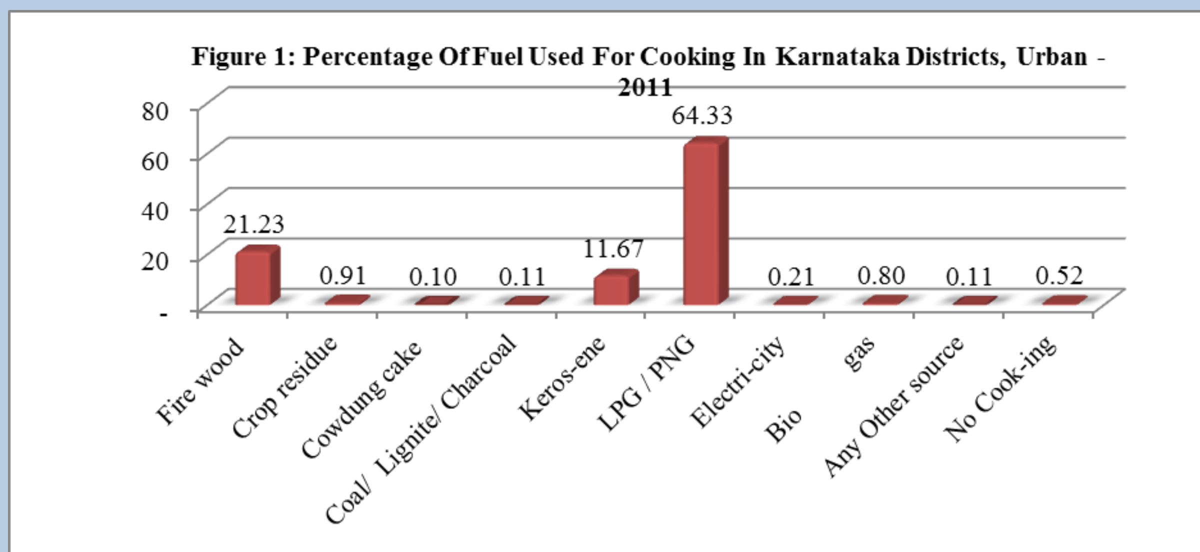


Figure 1: Percentage Of Fuel Used For Cooking In Karnataka Districts, Urban - 2011

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

The demand for water continues to escalate, 75% of the cropped area in the State depends on low and uncertain rainfall. The State receives an average rainfall of 1138 mm ranging from 569 mm in the eastern part of the State to 4029 mm in the western part of the State. There has been deficit rainfall in most parts of the State since the past three years, emphasizing the need to focus on activities for harnessing rain water and recharge of ground water.

Inequalities and inefficiencies in the distribution system lead to water supply falling short of the demand in both urban and rural areas for all sectors. Sixty four percent of the rural habitations and

forty seven percent in the urban areas receives receive less than the State stipulated water supply norm of 55 and 135 litres per capita per day for rural and urban areas respectively.

Fourteen districts of the State have more than admissible limits of 1.5 microgram per millilitre of fluoride, affecting 10% to 67% of the habitations of these districts. Also, 13 districts are affected by brackishness; there is excess nitrate in 8 districts and excess iron in 12 districts. These problems related to water quality are not mutually exclusive and overall affect 37% of the habitations in the State.

Proportion of population with access to improved sanitation, urban and rural

Municipal sewage treatment facilities wherever they exist in the State do not remove the presence of heavy metals before discharging the effluents into the rivers. Over extraction of water for irrigation and urban consumption has led to drying up of several water sources. By 2001, only 15% of the rural areas in the State were covered with some form of sanitation system. Such inadequate coverage leads to open air defecation resulting in contamination of soil and water. There is also a problem of mis-utilisation of the constructed toilets. In the urban areas also, only 36 of the 226 local bodies, excluding Bangalore, have been connected with underground drainage system. Slums with inadequate or non-existent sanitation facilities are further cause of environmental degradation. The Government programmes of Swachcha Grama Yojana, Nirmal Grama Yojana and Swajaldhara focus on participatory management. There is need to have increased greater sanitation coverage in the rural areas.

Rural Drinking Water

According to MDG report; on Households with suitable access to improved water source to Rural Karnataka, during the year 1990, Households with sustainable access to an improved water source stood as 58.94% of the rural Households. MDG Target for 2015 was fixed at 79.47% of the rural Households. But as per the MDG's latest report during 2012, 88.5% of the rural Households were provided with sustainable access to an improved water source at the National level. But as per the details available for Karnataka in IMIS (software under NRDWP for monitoring RWS) under DDWS, GOI, are as follows –

Period	Up to 2012 (cumulative)	Up to 2013 (cumulative)	Up to Feb 2014 (cumulative)	Target 13-14 (cumulative)	Target 14-15 (cumulative)
Households with sustainable access to an improved water source	49,30,650	53,18,910	59,03,617	63,57,325	-
%of Households with sustainable access to improved water source	62.05%	66.93%	74.29%	80.00%	100%

NRDWP Programme (National Rural Drinking Water Programme)

The main objective of this programme is to provide every rural person with adequate safe water for drinking, cooking and other domestic needs on a sustainable basis. It is programmed to provide 55 litres of drinking water to each person per day (as per the NRDWP guidlines-2013) Potable drinking water is being supplied to rural areas through the following schemes – (i) Bore wells fitted with hand pump, (ii) Mini water supply scheme, (iii) Piped water supply scheme, (iv) Multi village water supply scheme.

As per the NRDWP guidelines-2013, a habitation where 55 LPCD safe drinking water is being supplied to each person is considered as fully covered habitation. The status of habitations having provided safe drinking water to different levels as on 01-04-2013 is as follows. Annual updating of source details as on 01-04-2014 of all habitations is under progress.

Category	0% covered	>0%≤ 25%	>25%≤ 50%	>50%≤ 75%	>75%≤ 100%	100%	Total
Habitation	0	5927	17704	20429	10112	5581	59753

- In Karnataka all the 59753 habitations are provided with at least one source of drinking water. Hence there are no 0% covered habitations in Karnataka.
- Habitations coming under the coverage status of up to 50% are called priority habitations. These habitations will be provided with suitable schemes so as to cater 55LPCD to the habitation population during the year 2014-15.
- To reduce/lessen dependency on underground water for drinking purposes and wherever water quality is affected by contaminations, surface water is provided by implementing multi village water supply schemes.
- Total no of 440 multi village scheme covering 6899 habitations are being undertaken and are in different stages of progress with 157 schemes covering 1078 habitations have been completed.

By 2015 it is planned to achieve 100% in providing household sustainable access to improved water source by implementing suitable water supply schemes at a cost of approximately Rs 2500 crores during the year 2014-15 under NRDW Programme.

Urban Slums

The population living in urban slums in Karnataka has increased from 14.02 lakh (2001) to 32.91 lakh (2011) in a decade. This is a rise from 7.8% of the total urban population of the State being slum-dwellers according to the 2001 Census to 14.2% as per Census 2011. Bangalore district has 21.5% of the total slum population, and every fifth person in the Bruhat Bangalore Mahanagara Palike (BBMP) limits lives in a slum. An analysis of the 2011 Census data shows that Bangalore is followed by Bellary and Dharwad, which have 6.1% and 6% share of the total urban population in slums, respectively. Udupi, Dakshina Kannada and Kodagu reported less than 1% of the population in slums. Out of 220 statutory towns in Karnataka, 206 (94%) reported slums.

There are some surprises when it comes to sex ratio (number of females per 1,000 males) in slums. When all age groups are considered, sex ratio in the slums of Karnataka is an impressive 1,015, against 973 in Karnataka on the whole. While the overall child sex ratio (0 to 6 age group) in the State is 948, it is significantly higher in slums at 964. Udupi district, which has child sex ratio of over 1,000 when the whole district is taken into account, is at the bottom at 883 when only its slum population is considered. The literacy rate in urban slums has risen from 67.5% in 2001 to 75.6% in 2011, with Gulbarga at the bottom (57.1%) and Udupi at the top (81.1%).

The KSDB is implementing schemes for improving the environmental conditions of slums and provides basic amenities like drinking water, toilets, drains, roads, streetlights, etc. The Board has identified 2796 slums having a population of 40.50 lakhs covering 6.18 lakhs households. The Board is implementing the centrally sponsored scheme of Basic Services to the Urban Poor (BSUP) in both Bangalore and Mysore cities to construct houses for slum dwellers and Integrated Housing and Slum Development Programme (IHSDP) with the intention to provide housing to slum dwellers and also improve the environmental conditions of the slums. The Board is implementing the following schemes -

(a) Slum Improvement Programme – The basic objective of the Programme is to improve the living conditions of slum dwellers by providing basic amenities such as proper sanitation facilities, drinking water supply, street lights, roads, drains, community bathroom, storm water drain and community halls wherever possible, so that slum dwellers live in hygienic condition.

(b) Basic Services to the Urban Poor (BSUP) - This programme was launched to assist cities & towns in taking up housing and infrastructural facilities for the urban poor. Among 65 cities in the country, Bangalore and Mysore cities from Karnataka State have been selected under this programme. For BSUP programme, Karnataka Urban Infrastructure Development & Finance Corporation (KUIDFC) has been made as the nodal agency for monitoring of the scheme and KSDB as the implementing agency in the state. The main objective of this programme is to provide basic services to urban poor including

security of tenure at affordable prices, improved housing, water supply, sanitation and ensuring delivery of other already existing universal services of the Government for education, health and social security.

The Central Sanctioning and Monitoring Committee (CSMC) of Ministry of Housing and Urban Poverty Alleviation (MoHUPA) has sanctioned to construct 18180 houses including infrastructure in 3 phases in the selected slums of Bangalore city, and 6328 houses in Mysore city. The funding pattern between GOI and GOK for Bangalore city is 50:50. The state share includes beneficiary contribution of 10% for SC/ST and for others is 12%. For Mysore city GOI share is 80% and the remaining 20% is to be borne by GOK. For the first time in the country, KSDB has adopted Cost effective and Fast Track Construction Technology called “Foam Technology” for ground floor houses and for G+3 houses Monolithic Shear wall Technology on pilot basis for construction of dwelling units with infrastructure works under JNNURM-BSUP. This technology is eco-friendly, results in reduction in construction cost by 10% and time by 25%, more stable and long lasting, user friendly and conventional bricks and cement blocks are totally avoided. Since inception of BSUP programme, out of 24508 houses 19996 houses are completed and 2607 houses are at various stages of construction.

(c) Integrated Housing & Slum Development Programme (IHSDP)

For taking up Housing and Slum up gradation programme in Non-BSUP cities, IHSDP was launched along with BSUP in December 2005. This programme combines the existing schemes of Valmiki Ambedkar Awas Yojana (VAMBAY) & National Slum Development Programme (NSDP) with an objective of integrated approach in ameliorating the conditions of the slum dwellers who do not possess adequate shelter and basic facilities, to strive for slum less cities with a healthy living and good environment and enhance public and private investment in housing and infrastructure development in urban areas.

The CSMC of MoHUPA has sanctioned 34 projects for Karnataka in 2 phases for constructing 17237 houses of which the central share is 80% and State share 20%. Out of the state share, beneficiary contribution is 10%. A total of 16280 houses have been completed up to end of October 2013 since inception of the programme and the remaining 743 houses are at various stages of construction.

(d) New Projects

Government of India has introduced a new scheme called "Rajiv Awas Yojana" on the lines of Indira Awas Yojana in 2009-10 budget to make the country slum free by providing infrastructure facilities to the slum dwellers. Under this programme Karnataka has been selected to make slum-free State by 2017. This project was launched during 2009-10. Directorate of Municipal Administration (DMA) is appointed as Nodal Agency for the survey work. DMA has already started the survey work. In the first phase, total 10 City/Towns has been sanctioned; the preparation of detailed project reports (DPR) is in progress.

In the first phase cities having population more than 3 lakhs covered under CMC like Bangalore, Mysore, Mangalore, Tumkur, Shimoga, Davanagere, Hubli-Dharwad, Belgaum, Gulbarga and Bellary are selected providing housing and basic amenities. It has been intended to provide housing and basic amenities under this project to these slum dwellers. At present 5 projects have been sanctioned by the Central Government to construct 5549 houses including basic amenities in Bangalore, Tumkur, Hubli-Dharwad, and Gulbarga of the State. Apart from this, 13 other DPRs have been approved by State Level Empowered Committee to construct 13029 houses. The same has been submitted to Govt. of India for approval.

The objectives of the programme are (1) Conducting socio-economic survey and GIS mapping. (2) Creating conditions of living that are dignified, healthy and productive for all. (3) Seriously addressing the target of affordable housing for all in urban areas. (4) Adopting sustainable strategies that endurably redress the shortage of urban land, amenities and shelter that lead to the creation of slums. (5) Providing housing on Public Private Partnership. (6) Conducting the IEC activities to create awareness for health, education, sanitation and training, capacity building and environmental to slum dwellers.

Urban Infrastructure

Provision of infrastructure services is fundamental to economic growth and urban development. Urban infrastructure covers the following - Water supply (for drinking, industrial, commercial and public usages), Sanitation (including Sewerage and Drainage), Domestic Energy, Road Infrastructure and Urban Transport.

Water Supply

Government of Karnataka came out with an Urban Drinking Water and Sanitation Policy (UDWSP) in 2002. The main objectives of the policy are to ensure demand based universal coverage of water supply, commercial and economical sustainability of the operations and a minimum level of service to all citizens. The policy statement is yet to be followed up by implementation.

A number of water supply projects have been taken up to augment water supply but deficiencies continue in the form of inability to provide water as per the prescribed norms, inefficiency in distribution systems, serious water losses, commercially non-viable water supply systems and lack of coordination between different agencies. The average number of hours of water supply per day has actually declined- from 9 hours in 2003 to 7 hours in 2006 in Municipal Corporations, (excluding Bangalore) and from 10 to 7 hours in Town Panchayats.

Water is an essential resource and will simply be the most limiting factor, if not made available in right quantity, for urban development. Considering the existing shortage of water supply to the urban areas in the state and the enormous cost and problems associated with the augmentation of water supply, the following issues become relevant: (i) Conservation of the water resources of the State, (ii) Adoption

of alternative methods of augmenting supply, (iii) Reducing water losses/UFW, (iv) Pricing of water, (v) Scope for private sector participation, (vi) Institutional framework.

Conservation of water resources is an area that needs to be coordinated with the Water Resources Departments and Zilla Panchayats who have a major role to play in protection and rejuvenation of tanks and other surface water sources. The KUWSDB was constituted by an Act of Legislature in 1974 and is functioning from August 1975. KUWSDB is responsible for providing drinking water and underground drainage facilities to 213 urban cities of Karnataka except Bruhat Bengaluru Mahanagara Palike (BBMP). The Board has commissioned 502 water supply and 51 underground drainage scheme since inception of Board up to March 2013.

(a) Water supply schemes

The State Government has approved the funding pattern for water supply scheme in July 2011 for City Corporation, City Municipal Council, Town Municipal Council and Town Panchayat. The funding pattern is through Government Grant, loan from Financial Institutions and ULB share. In 2013-14 there are 41 on-going water supply schemes and 47 new schemes are proposed for approval and it is proposed to commission 9 schemes. 3 Schemes have been commissioned by October 2013 and remaining schemes are in progress.

The BWSSB is committed to providing drinking water of unquestionable quality in sufficient quantity and to treat the sewage generated to the required parameters. BWSSB is recognized as an effective instrument of change through adopting state-of-the-art technologies for improving the quality of its services to the general public. Construction of Ground level reservoirs under DC works of BDA, providing water supply and UGD lines in BDA layouts, providing water supply lines and house service connections under GBWASP in the former 7 CMC and 1 TMC are being taken up. Its responsibility is providing UGD facilities with house service connection, lateral sewers, trunk sewers under KMRP and JNNURM in 7 CMCs & 1 TMC areas, providing and laying water supply and UGD pipelines to 110 villages of BBMP areas and providing individual toilet facilities in slums under Slum Development Component of KMRP.

(b) KUIDFC Water Supply

KUIDFC, a Government Company registered under the Companies Act, 1956, acts as a Nodal Agency for implementation of various Urban Infrastructure Projects of the State Government and Government of India. Apart from the budgetary support received from the Government, the Company raises financial and other technical resources through multilateral lending agencies such as World Bank and Asian Development Bank and their Subsidiary Agencies/Associates for the successful implementation of the Projects. Following are the important Projects/Schemes being implemented by

KUIDFC through Bruhat Bengaluru Mahanagara Palike (BBMP), 7 City Corporations and other Urban Local Bodies in the State of Karnataka. On-Going Projects/Schemes are Karnataka Urban Water Sector Improvement Project (KWASIP), Karnataka Urban Water Supply Modernization Project (KUWSMP), Karnataka Integrated Urban Water Management Investment Programme (KISWRMIP), implementation of Water Supply and Under Ground Drainage Programme in 16 ULBs.

Sanitation (including Sewerage and Drainage)

Traditionally, sanitation refers to the waste management of human excreta but in a broader sense, it is associated with public health and environmental impacts. It, therefore, includes waste management– solid waste, industrial and hazardous waste, drainage and the management of drinking water supply. The Ministry of Urban Development, GOI brought out a National Sanitation Policy in 2008. The vision for urban sanitation in India is set forth thus: "All Indian cities and towns become totally sanitized, healthy and habitable and ensure and sustain good public health and environmental outcomes for all their citizens with a special focus on hygienic and affordable sanitation facilities for the urban poor and women". City Sanitation Plan (CSP) preparation envisaged under NUSP-2008 by GoI includes (i) 6 City Corporations and 2 CMCs - Mysore, Belgaum, Shimoga, Gulbarga, Hubli-Dharwad, Mangalore, Tumkur and Bellary, (ii) State Sanitation Policy (draft) proposed by the State Government, (iii) Final CSP reports of all the 8 towns submitted to GoI, (iv) CSP reports submitted by SIUD Mysore for 7 Towns viz., Davangere, Chitradurga, Bidar, Raichur, Harihar and Yadgir is submitted to GoI for funding support for implementation, (v) SIUD is preparing CSP reports for 13 towns through All India Institute of Local Self-Government (AIILSG)

(a) Under Ground Drainage (UGD) Schemes

The State Government has approved the funding pattern for UGD schemes in July 2011 which is through loan from Financial Institutions (50%), Government loans (30%) and Local Body contribution (20%) for Corporations, City Municipal Council, Town Municipal Council and Town Panchayat. The KUWSDB is responsible for providing water supply and sewerage schemes in 213 urban areas of Karnataka except BBMP. The Board has implemented assured safe drinking water to 193 urban areas by implementing 11 schemes for shifting the source of water from ground water to assured surface source of water. All these schemes would be completed by the year 2014.

By the year 2014 only 9 urban areas are left with sub-surface water as source. Most of the urban areas are provided with surface water as source. At present 43 urban areas are provided with UGD facilities. In most of the urban areas the sewerage system is covered in core areas. The newly developed areas are not provided with Sewerage system. The Board has prepared a plan for providing UGD scheme to all the urban areas in Karnataka. The Board aims to provide UGD facilities to all urban areas in a phased manner depending upon the availability of funds.

The KUIDFC has come out with a proposal to set up a State Urban Water Supply Council (SUWSC), which would oversee the water supply and sewerage operations of the ULBs, provide technical assistance to ULBs and act as an advisor to the Government. It is also envisaged that the Council will play a coordinating role between ULBs and the Water Boards and also perform regulatory functions.

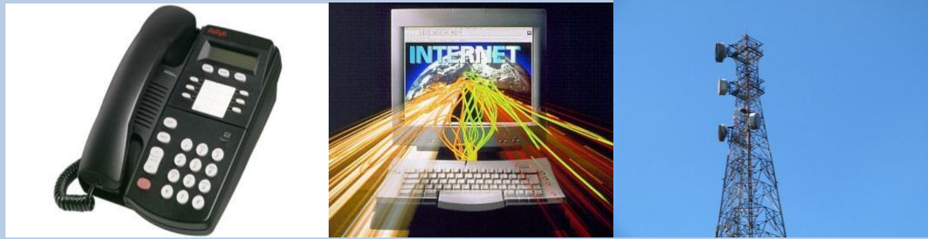
The KUWSDB should be equipped with sufficient technical capacity to guide the ULBs. The question of private sector participation must be approached with caution. There are hesitations in the minds of the people about the role of the private sector in the management of public water supply systems. The World Bank aided project under implementation in the cities of Belgaum, Gulbarga and Hubli-Dharwad, experimenting with private sector participation on a pilot basis should be carefully studied and further steps taken in involving the private sector. People must be made aware of the distinction between privatization and private sector participation where the ULB will continue as the owner of the project and carries the responsibility to provide water supply. The overall objective must be to improve the efficiency of the supply and distribution systems, reduce water losses and aim for 24/7 supply in the long run.

Karnataka has made major progress in developing drinking water infrastructure & has met MDG in drinking water target. However, challenges remain including the need for rapid development and sustainability of supply to meet an increasing population against variable resource distribution. Further, to ensure sanitation facility in the State, focused initiatives need to be taken up along with dedicated follow up to sustain the same. Improved management of drinking water supply & better sanitation are keys to health of people along with social and economic progress. Improving drinking water supply and quality, eradicating open defecation and the taking on 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 slums & slum population growing in numbers and improving the living conditions of slum dwellers are major challenges that the State is facing today.

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 of a country. It is a support service which is essential for rapid growth and modernization of various sectors of the economy. The telecommunication sector in the country has undergone major transformation through important policy reforms. The National Telecom Policy (NTP) was announced in 1994, which was later carried forward under NTP 1999 and 2012. The NTP 2012 addresses the vision, strategic direction and the medium and long term issues of the Telecom sector. The primary objective of NTP 2012 is to make available affordable, reliable and secure telecommunications and broadband services. As a result of various policy initiatives the telecom sector has perceived a transformation in the last decade.

Tele-density, which provides the number of telephones per 100 population is an important indicator of telecom penetration. Overall tele-density in Karnataka is 91.24 as on March 2013. Urban tele-density is 170.38 and the rural tele-density is 43 as on March 2013. The overall tele-density in March 2010 was 67.81 with urban tele-density of 142.62 and rural tele-density of 24.08. This shows significant progress in the tele-density in Karnataka.

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 tele-density.

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 13.518. 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.

Improving connectivity…..

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 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 foster 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 enables 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 development 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, and was 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 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 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.

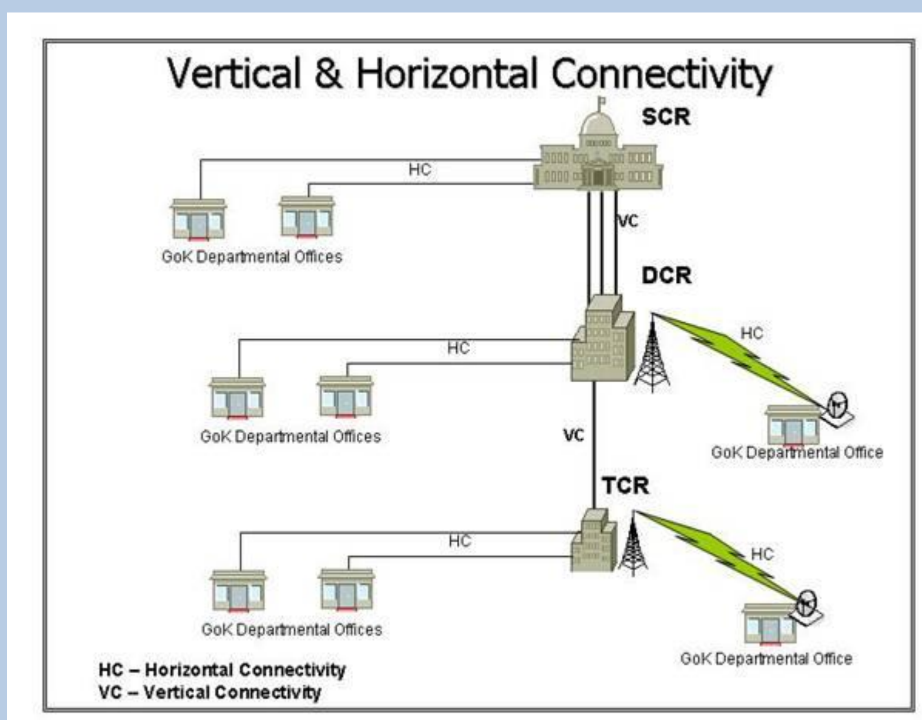
National E -Governance Plan - The National e –Governance Plan (NeGP) was approved on 16th May, 2006 with the vision to make all government services accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency and reliability of such services 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) - 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.

Karnataka State Wide Area Network (KSWAN) – KSWAN is a part of National E-Governance Plan. It is supported by Department of Information and Technology, Govt. of India. It is a Public–Private Partnership between Government of Karnataka and United Telecom Limited for Network Set up, Operation and Maintenance. Connectivity is provided by BSNL and KPMG is the third party auditor. The objectives of KSWAN are – (i) Creation of the "State Information Highway", (ii) Provide "Data", "Voice" and 'Video" services across the State, (iii) High performance network and (iv) Availability and Scalability to improve access to computing facilities. Infrastructure facilities under KSWAN – There are Centralized Common Facilities at the State, District and Taluk level. There are Departmental Remote Offices at the State, District, Taluk level and below.

KSWAN Architecture



State HQ – Facilities – There is a State Control Room which has a Network Operational Centre (NOC) – HEART of KSWAN at Vikasa Soudha, Bangalore. There are Aggregation Nodes having 14 Office Complexes with Connectivity of 2 mbps Leased Line.

Facilities at District Level - The facilities are located in the Deputy Commissioner Offices having District Control Room with a Hub of network. There is a IT Server Room with secure, controlled environment for Servers. Government Business Centres with IT infrastructure such as computers,

printers, scanners and internet connectivity are provided for the use of Government officials. Video Conferencing Studio has also been provided for studio based video conference.

Facilities at Taluka Level – It is located in Tehsildar Offices. There is a taluka control room which is a Hub of network. There is an IT Server Room with secure, controlled environment for Servers. Government Business Centres with IT infrastructure such as computers, printers, scanners and internet connectivity are provided for the use of Government officials.

Key Services & Features of KSWAN – Through KSWAN data services are provided to the Department users. Further there are Voice Services and Video Services, Computing facilities in all District and Taluka locations. Infrastructure Management Services which comprises of Managed Security Services and Help Desk Services are also provided.

Decision Support System (DSS) - Government of Karnataka through the various departments implements welfare and development schemes for the public. These schemes are planned and monitored by the Department of Planning, Programme Monitoring and Statistics (PD). The department interacts with other departments to collect information on the progress of the schemes. It has various divisions to perform different activities involved in the planning, monitoring and reporting of the schemes.

In 2008, the Planning Department had formulated a detailed process for planning and monitoring of schemes, and prescribed that every line department must prepare a Monthly Programme Implementation Calendar (MPIC) for each scheme, setting out the details of steps to be taken at the state, district and taluk levels, for effective implementation of every scheme right from the beginning of the financial year. In order to facilitate the adoption of MPIC by all departments, the Finance department has evolved detailed formats and guidelines for the same. Currently, the data for every scheme is captured in a Monthly Program Implementation Calendar (MPIC) format in a hardcopy or in an Excel sheet.

The progress achieved in the implementation of the schemes is reported in MPIC format by taluk, district and state authorities. At each level, the progress reported at lower levels is consolidated into one MPIC report for review and for reporting to the next higher level. The review of MPIC reports takes place in the Monthly Multilevel Review (MMR) meeting as per the current practice.

The Planning department has evolved a method to capture the information on the progress of schemes so that consolidated department-wise progress is presented before the Karnataka Development Programme (KDP) committee for review.

The Plan Monitoring and Information (PMI) division of the department is responsible for collecting the information on the progress of implementation and analysing whether the schemes are meeting their desired and planned outcomes. The progress is measured on two parameters namely financial and physical progress. The financial progress gives the details of the amount of money which has been spent till date by the departments as against the outlay for the schemes. The physical progress quantifies the actual benefit with respect to the corresponding financial expenditure incurred.

In view of the number of departments, resources, time and effort involved in the collection of the data in physical hardcopy form, an online MPIC system (called as Decision Support System) for planning and monitoring the progress of implementation of all the programmes of GoK was proposed by the Planning department in the year 2011, in coordination with the Centre for e-Governance department.

This web-based Decision Support System (DSS) will allow the departments to plan and monitor all the schemes in the same way as is being done with the paper based MPIC process – the difference being that the plan as well as the progress can be captured online, through a web-based interface.

The Decision Support System (DSS) application allows a department to define the detailed plan for each scheme, at all levels right from the head, to the state officers, to the district and taluk. Through the system, the head of department can set the outcomes for a scheme and define the monthly set of activities which will be applicable across the state. Further, the head of department can perform the annual budget allocations to the next level officers. Each officer can in turn log into the system, using his/her individual user-id, and perform further allocations to taluk level officers, and set the monthly targets for financial as well as physical activities. Thus the system allows the department to put in their action-plan for every scheme in a top-down fashion.

Once the action plan is entered into the system, the progress against this plan can be captured on every scheme implemented across the state, directly at the data generation points i.e. the implementing officers (or taluk officers). This information will serve as input to obtain the implementing level officer MPIC report and the system will automatically consolidate the information at the next higher reporting levels and up to the department level, and display the MPIC at all levels of hierarchy. Such a system thus ensures a timely, transparent and consistent gathering of information, cleaner consolidation of data, and accountability of work at all levels within the department. Besides the MPIC report, the system is also capable of generating many other reports such as list of users, scheme allocations, district-wise breakup etc.

The **Objectives** of the DSS are to (i) Monitor the performances of the existing schemes in the current financial year, (ii) Report the progress of the schemes to the Chief Secretary and the other

stakeholders, (iii) Ensure complete utilization of the funds allocated to line departments, (iv) Complete allocation of scheduled schemes and timely disclosure to the progress of each scheme, (v) Evaluate the reasons for under-utilization of funds.

Benefits to stakeholders through DSS –

(a) **Department of Planning, Programme Monitoring and Statistics** – (i) Increased Efficiency in undertaking the monitoring and reviewing activities, (ii) Elimination of redundancy in data entry, (iii) Point in time reports, (iv) Clear view of the utilization of funds at every unit of administrative structure, (v) Better analysis of schemes which are being implemented, (vi) Centralised source of data.

(b) **Line Departments** - (i) Single system for monitoring the progress of schemes, (ii) Centralized Allocation for all Schemes, (iii) Financial and Physical Targets are assigned from the Head Quarter, (iv) Faster access to data across the levels, (v) Elimination of redundancy in data entry, (vi) Centralised Database for all the users, (vii) Effective analysis of performance

(c) **Employees of the Planning Department** – (i) Reduced administrative burden for data entry, (ii) Elimination of the requirement to provide the same information multiple times, (iii) Update only the Progress against the Targets set by Head Quarter.

System Summary - The system is operated by different user groups like State level users, District Level Users, Taluk Level users, Administrative Users and also there are common activities across all levels and each type of users have a defined type of role(s) and activities to be performed. The system allows setting both the financial targets and physical targets right up to the implementing officer and also tracks the progress, right from the ground level.

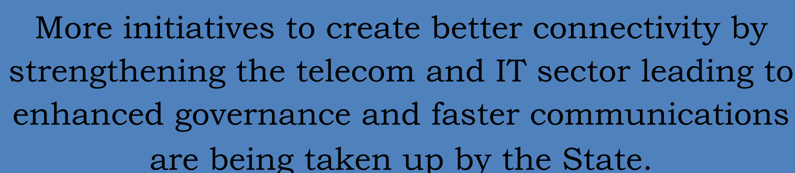
Going forward

The system currently handles planned state-sector schemes. It is intended to extend this to Non-planned schemes, as well as ZP sector schemes. Many other forms of consolidated and summary reports are being planned for multiple stakeholders. At a later stage, a Business Intelligence tool could be used to present the data captured in various views and dimensions. This will help the Government get real time and consistent information on implementation of the schemes and also provide insights into the data collected and aid decision making for the various line departments of the Government. Apart from this, the system will also be integrated with Khajane-2 so that actual expenditure can be accepted from this system directly. Similarly, integration with other systems such as Asset Management System may also be considered in the future.

Karnataka's new IT policy looks beyond Bangalore

In a bid to decongest India's grid-locked tech hub, Karnataka's new IT policy, focuses on attracting investments in the knowledge sector in cities and towns across the state, and not only the state capital. The objective is to attract prospective investors and entrepreneurs to look beyond Bangalore and replicate its IT success in cities and towns across the state to ensure Karnataka retains its numero uno status. The new policy, offers incentives and exemptions to facilitate existing and new firms to set up software or hardware development centres in tier-2 and tier-3 cities in the state, with a potential to create a million jobs over the next seven years. Besides a single-window agency for expeditious approvals, the policy provides stamp duty exemption, concession in power tariff and extends exemption from the state labour laws under the Industrial Employment Act for another five years.

The extension will enable hundreds of IT and back office services firms in the state from complying with outdated labour laws that were made essentially for the manufacturing sector. As the country's preferred IT destination, the policy aims to achieve a whopping Rs.4 lakh crore (Rs.4 trillion) software exports from the state by 2020 from Rs.1.65 trillion (Rs.1.65 lakh crore) in 2012-13, accounting for over 40% of the country's total exports. The stamp duty exemption will be 100% for investments and concession on power tariff will be Rs.2 per unit for units that will be set up in tier-two and tier-three cities such as Belgaum, Gulbarga, Hubli, Mangalore and Mysore. The single-window agency is headed by the IT minister and will meet every month to monitor the status of the clearances and address grievances of investors for speedy implementation of their projects. Projects up to Rs.100 crore will be cleared by the agency while the state high-level committee, headed by the Hon'ble Chief Minister will evaluate investments above Rs.100 crore for approval.



APPENDIX

Appendix 1

MDGs and Targets –Summary of Progress achieved in Karnataka					
Indicator		Year 1990 Actual/est. value	MDG target 2015	Likely achievement 2015	Latest status
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 **On track**					
Proportion of population below poverty line (%)[19]		55.11	27.55	Already achieved	20.9 (2011-12)
Poverty Gap Ratio	Rural	No base year targets			3.26 (2011-12)
	Urban				3.09 (2011-12)
Share of poorest quintile in national consumption (MRP method)	Rural	No base year targets			10.93 (2009-10)
	Urban				7.50 (2009-10)
TARGET 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger **Marginally Off track**					
Proportion of under-weight Children below 3 years (%)		48.28	24.14	26	33.3 (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 in Karnataka				
Indicator	Year 1990 Actual/est. value	MDG target 2015	Likely achievement 2015	Latest status
Net Enrolment Ratio in primary grade (%)		100	99.9 (Almost achieving the target)	93.96 (2013-14)
Proportion of pupils starting grade 1 who reach grade 5	Absolute targets for 2015	100	96.5 (Marginally off track)	93.56 (2013-14)
Literacy rate of 15-24 year olds	80% (2001)	100	Likely to achieve the target	89% (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				
Ratio of girls to boys in primary education (Gender Parity Index of GER)	0.76	1.00	Likely to achieve the target	0.93 (2013-14)
Ratio of girls to boys in secondary education (Gender Parity Index of GER)	0.60	1.00	Have already achieved the target	1.02 (2013-14)
Ratio of girls to boys in tertiary education (Gender Parity Index of GER)	0.81 (2004-05)	1.00	Likely to achieve the target	0.92 (2010-11)
Female: Male literacy rate of 15-24 year olds	0.86 (2001)	1.00	Likely to cross the target	0.91 (2007-08)
Share of women in wage employment in the non-agricultural sector (%)	20.9 (2004-05) 22.3 (Rural areas) and 20.1 (Urban areas)		Total share of women in wage employment in the non agricultural sector has remained the same, the share has declined in the rural areas and increased in the urban areas	20.9 (2011-12) 17.3 (Rural areas) and 23.3 (Urban areas)
Proportion of seats held by women in Legislative Assembly and Legislative Council (%)	Absolute Target for 2015	50	Off track	3.7 (2013)

MDGs and Targets –Summary of Progress achieved in Karnataka

Indicator	Year 1990 Actual/est. value	MDG target 2015	Likely achievement 2015	Latest status
MDG 4: REDUCE CHILD MORTALITY TARGET 5 : Reduce by two-thirds, between 1990 and 2015, the Under- Five Morality Rate				
Under five mortality rate (per 1000 live births)	94	31	36 (Off track)	37 (2012)
Infant Mortality rate (per 1000 live births)	70	23	31 (Off track)	32 (2012)
Proportion of 1 year-old children immunized against measles Proportion of 1 year-old children immunized against measles	54.9 (1992-93)	100	100 (Likely to achieve target)	89.9 (2009)
MDG5 5: IMPROVE MATERNAL HEALTH TARGET 6 : Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio				
Maternal mortality ratio (per 100,000 live births)	316	79	129 (Off track)	144 (2010-12)
Proportion of births attended by skilled health personnel (%)	46.6 (1992-93)	100	97.81 (Marginally off track)	88.4 (2009)
MDG 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 (%)	1.41 (2004) Target is trend reversal and not based on base year value			0.60 (2010-11)

MDGs and Targets –Summary of Progress achieved in Karnataka				
Indicator	Year 1990 Actual/est. value	MDG target 2015	Likely achievement 2015	Latest status
Condom use rate of the contraceptive prevalence rate[20] (%)	1.2 (1992-93) Target is trend reversal and not based on base year value			1.7 (2005-06)
Condom use at last high-risk sex[21](%)				
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				
Annual parasite incidence (API) rate (Malaria)				
Prevalence of TB (including HIV) per 100,000 population				
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				

[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 in Karnataka

<table>
<tr><th colspan="2">Indicator</th><th>Year 1990
Actual/est. value</th><th>MDG target
2015</th><th>Likely achievement 2015</th><th>Latest status</th></tr>
<tr><td colspan="6">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.</td></tr>
<tr><td colspan="2">Area covered under forests as percentage of geographical area</td><td rowspan="6">Target is trend reversal and not based on base year value</td><td>33%</td><td>30%</td><td>22.60%</td></tr>
<tr><td colspan="2">Ratio of area protected to maintain biological diversity to surface area (%)</td><td>25% of total forest area</td><td>20% of total forest area</td><td>17.3% of total forest area</td></tr>
<tr><td colspan="2">Energy use per GDP (Rupee)</td><td colspan="3">Data not available</td></tr>
<tr><td colspan="2">Carbon dioxide emissions per capita</td><td>650 kg per annum</td><td>1000 kg per annum</td><td>1300 kg per annum</td></tr>
<tr><td colspan="2">Consumption of ozone-depleting CFCs (ODP tons)</td><td colspan="3">Data not available</td></tr>
<tr><td colspan="2">Proportion of population using solid fuels (%)</td><td>10% of urban households and 50% of rural households</td><td></td><td>60%
(2011)</td></tr>
<tr><td colspan="6">TARGET 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation Achieved target in urban and rural areas</td></tr>
<tr><td rowspan="3">Households with sustainable access to an improved water source, (%)</td><td>Urban</td><td>87.12</td><td>93.56</td><td>97.5</td><td>95.3 (2012)</td></tr>
<tr><td>Rural</td><td>58.94</td><td>79.47</td><td>96.3</td><td>88.50 (2012)</td></tr>
<tr><td>Total</td><td></td><td></td><td>100</td><td></td></tr>
<tr><td rowspan="2">Households without access to sanitation (%)</td><td>Urban</td><td></td><td></td><td></td><td>12.30
(2012)</td></tr>
<tr><td>Rural</td><td></td><td></td><td></td><td>71.60
(2012)</td></tr>
</table>

MDGs and Targets –Summary of Progress achieved in Karnataka

Indicator		Year 1990 Actual/est. value	MDG target 2015	Likely achievement 2015	Latest status
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**					
Slum population as percentage of urban population					13.9 (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					
Telephone per 100 population					92.44 (June 2014)
Internet subscribers per 100 Population (Target is increasing trend and not based on base year value)	(accessing internet only through wireline broadband connection)	6,86,026 (Total wire line subscribers as on June 2010			22,74,839 (Total wire line subscribers as on June 2014)
	Including wireless	1,29,57,747 (Total wireless subscribers as on June 2010)			5,44,88,348 (Total wireless subscribers as on June 2014)
Personal computers per 100 population					Data not available

Appendix 2

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 State 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 Legislative Assembly, Legislative Council, in ZPs, TPs and GPs	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 Madhyamik 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% of rural population has access to 40 lpcd piped drinking water supply, and 50%	• 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	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% by the end of Twelfth Five Year Plan.	• National E Governance and Action Plan

Appendix 3

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
MDG 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
MDG 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	

ABBREVIATIONS

ACSM - Advocacy Communication and Social Mobilization

AIE - Alternative & Innovative Education

AIILSG - All India Institute of Local Self-Government

ANC - Ante Natal Care

ANM - Auxiliary Nursing Midwifery

API - Annual Parasite Incidence

APIP - Annual Programme Implementation Plan

ARI -Acute Respiratory Infections

ARSH -Assisted Reproductive and Sexual Health

ART - Anti Retroviral Treatment

ARWSP - Accelerated Rural Water Supply Programme

ASHA - Accredited Social Health Activist

AWC - Anganwadi Centres

BBMP - Bruhat Bengaluru Mahanagara Palike

BCC -Behaviour Change Communication

BCCI-K - Bangalore Climate Change Initiative-Karnataka

BDA – Bangalore Development Authority

BeMOC - Basic Emergency Obstetric Care

BMGF -Bill and Melinda Gates Foundation

BPL - Below Poverty Line

BSS - Behavioural Surveillance Survey

BSUP - Basic Services to the Urban Poor

BWSSB - Bangalore Water Supply and Sewerage Board

CCC- Community Care Centre CST

CEmOC - Comprehensive Emergency Obstetric Care

CES -Coverage Evaluation Survey

CFC - Chloro Fluoro Carbons

CHC - Community Health Centre

CMIS - Computerized Management Information System

CO_2 – Carbon Dioxide

COE - Centres of Excellence

CRSP - Central Rural Sanitation Programme

CSC - Community Sanitary Complexes

CSMC - Central Sanctioning and Monitoring Committee

CSP - City Sanitation Plan

CSSP - Community Structures Strengthening Programme

CST- Care, Support and Treatment

CSTEP- Centre for Study of Science, Technology and Policy

DAPCU - District AIDS Prevention and Control Units

DBT - Direct Benefit Transfer

DDCs - Drug Distribution Centres

DDT- Dichlorodiphenyltrichloroethane

DDWS- Department of Drinking Water Supply

DGHS - Director General of Health Services

DISE - District Information System on Education

DLCs - District Level Committees

DLHS - District Level Household Survey

DM - Diabetes Mellitus

DMA - Directorate of Municipal Administration

DOTS - Directly Observed Treatment, Short Course

DP - Destination Points

DPT - Diphtheria, Pertussis and Tetanus Toxoid

DSS – Decision Support System

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

EVA - Electric Vacuum Aspiration

EWS - Economically Weaker Sections

FDA - Forest Development Agency

FDI - Foreign Direct Investment

FOGSI - Federation of Obstetric and Gynaecological Society of India

FRU - First Referral Units

FSW - Female Sex Workers

FTDs - Fever Treatment Depots

FYP - Five year Plans

GBWASP - Greater Bangalore Water and Sanitation Project

GDP - Gross Domestic Product

GER - Gross Enrolment Ratio

GHG – Green House Gas

GIM - Green India Mission

GoI - Government of India

GoK- Government of Karnataka

GP – Gram Panchayat

GPI- Gender Parity Index

GPS - Global Positioning System

GWP - Global Warming Potential

HBNC - Home Based New Born Care

HFCs - Hydroflourocarbons

HRG - High Risk Groups

IAY - Indira Awaas Yojana

ICDS - Integrated Child Development Services

ICMR- Indian Council for Medical Research

ICTC - Integrated Counselling and Testing Centre

IDA - Infant Death Audit

IDU - Injecting Drug Users

IEC - Information, Education & Communication

IGMSY - Indira Gandhi Matritva Sahyog Yojana

IHSDP - Integrated Housing and Slum Development Programme

IMR - Infant Mortality Rate

IMNCI - Integrated Management of Neonatal and Child Illness

IPD- In-Patient Department

IPU -Inter Parliamentary Union

IRS - Indoor Residual Spray

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

KDP - Karnataka Development Programme

KHPT- Karnataka Health Promotion Trust

KISWRMIP - Karnataka Integrated Urban Water Management Investment Programme

KMRP - Karnataka Municipal Reforms Project

KSDB – Karnataka Slum Development Board

KSWAN - Karnataka State Wide Area Network

KSWDC - Karnataka State Women's Development Corporation

KSY - Kishori Shakti Yojana

KUIDFC - Karnataka Urban Infrastructure Development & Finance Corporation

KUWSDB – Karnataka Urban Water Supply and Drainage Board

KUWSMP - Karnataka Urban Water Supply Modernization Project

KWASIP - Karnataka Urban Water Sector Improvement Project

LACs - Link ART Centres

LHV - Lady Health Worker

LIG - Lower Income Group

LPCD- Litres Per Capita Per Day

LSAS - Life Saving Anaesthetic Skills

LWS - Link Worker Scheme

MBPH - Market Based Partnership for Health

MCTS - Mother Child Tracking System

MDG - Millennium Development Goals

MDMS - Mid Day Meal Scheme

MDR - Maternal Death Review

MDR TB - Multi Drug Resistant TB

MGNREGS - Mahatma Gandhi National Rural Employment Guarantee Scheme

MHRD - Ministry of Human Resource Development

MIS - Management Information System

MMA - Medical Methods of Abortion

MMP - Mission Mode Projects

MMR - Maternal Mortality Ratio

MNP - Mobile Number Portability

MNRCs - Modified Nutritional Rehabilitation Centres

MPIC - Monthly Programme Implementation Calendar

MPO - Modified Plan of Operation

MRP - Mixed Reference period

MSM - Men having Sex with Men

MTP - Medical Termination of Pregnancy

MVA - Manual Vacuum Aspiration

NAAT - Nucleic Acid Amplification Test

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 – New Born Baby Care Corners

NBSU – New Born Stabilization Units

NCD - Non Communicable Disease

NDC - National Development Council

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

N_2O – Nitrous oxide

NPAG - Nutrition Programme for Adolescent Girls

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

NRCs - Nutritional Rehabilitation Centres

NRDWP - National Rural Drinking Water Programme

NRHM - National Rural Health Mission

NRLM - National Rural Livelihood Mission

NSDP - National Slum Development Programme

NSEP - Needle-Syringe Exchange Programme

NSS - National Sample Survey

NSSK - Navjat Shishu Suraksha Karyakram

NTFP - Non -Timber Forest Product

NTP - National Telecom Policy

NULM - National Urban livelihood Mission

NUSP - National Urban Sanitation Policy

NVBDCP - National Vector Borne

Disease Control Programme

O/o RGI - Office of Registrar General of India

ODP - Ozone Depleting Potential

ODS - Ozone Depleting Substances

OPD- Out-Patient Department

ORS - Oral Rehydration Solution

OST - Opioid Substitution Therapy

OVCs- Orphan and Vulnerable Children

PA - Protected Areas

PBS - Polling Booth Surveys

PDS - Public Distribution System

PEC - Per-capita Energy Consumption

PFCs - Perflourocarbons

PGR - Poverty Gap Ratio

PHC - Primary Health Centre

PHCR - Poverty Head Count Ratio

P&L- Pregnant & Lactating

PLHA- People Living with HIV/AIDS

PLHIV - People Living with HIV

PMDT - Programmatic Management of Drug Resistant TB

PMI - Plan Monitoring and Information

PO- Point of Origin

PPTCT - Prevention of Parent to Child Transmission

PRI - Panchayati Raj Institution

PURA - Provision of Basic Urban Services in Rural Areas

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

ROP - Retinopathy of Prematurity

RRC- Red Ribbon Club

RRE - Red Ribbon Express

RTE - Right to Education

RTI - Reproductive & Tract Infections

RUGD - Rural-Urban Growth Differential

RWS - Rural Drinking Water Schemes

SACs- State AIDS Control Societies

SBA - Skilled Attendance at Birth

SBS -Special Behavioural Surveys

SF_6 - Sulphur Hexafluoride

SGSY - Swarnjayanti Gram Swarojgar Yojana

SHGs – Self Help Groups

SHOPS - Strengthening Health Outcomes through the Private Sector

SIUD - State Institute for Urban Development

SLWM - Solid and Liquid Waste Management

SN - Staff Nurse

SNCU - Special New Born Care Unit

SRS- Sample Registration System

SSA - Sarva Shiksha Abhiyan

SSR - Sub-Sub Recipients

STI - Sexually Transmitted Infections

SUWSC - State Urban Water Supply Council

SWAN - State Wide Area Networks

TDR TB - Total Drug Resistant TB

TI - Targeted Interventions

TP – Taluk Panchayat

TRAI - Telecom Regulatory Authority of India

TSC - Total Sanitation Campaign

TTO - Telecommunication Tariff Order

U5MR - Under Five Mortality Rate

UA - Urban Area

UGD - Under Ground Drainage

UDWSP - Urban Drinking Water and Sanitation Policy

UEE - Universal Elementary Education

UFW - Unaccounted For Water

ULB – Urban Local Bodies

UMS - Urban Malaria Scheme

UNDB - United Nations Decade on Biodiversity

UNDG - United Nations Development Group

UNICEF – United Nations Children’s Fund

URP - Uniform Reference Period

USAID - United State Agency for International Development

UT - Union Territory

VAMBAY - Valmiki Ambedkar Awas Yojana

VHND - Village Health and Nutrition Day

VPN- Virtual Private Network

VWSC - Village Water and Sanitation Committee

ZP – Zilla Panchayat

Appendix 5

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