

## **The Progress of the Millennium Development Goals in Gujarat**

Tejal L. Solanki

Doctoral Scholar

Department of Rural Economics

Gujarat Vidyapith, Ahmedabad

### ***Abstract***

Fifteen years have passed since the United Nations Millennium Declaration was signed by world leaders. India have been witnessed a substantial progress in MDGs with a regional variation. This paper is an attempt in that regard, to analyze the progress and prospects of MDGs in Gujarat. A brief of the performance of Gujarat State in achieving the MDGs is shown here. Further, for every indicator a comparison of Gujarat performance has been made against the national performance.

The methodology is kept simple for the ease of understanding for the masses. Most of the data has been procured from various reliable government sources. Use of data available from different sources, however, raises the issue of data compatibility as definitions used in different surveys are generally not uniform. Data generated through the surveys such as the NSSO, NFHS, DLHS and Census 2011.

The Declaration was the result of the collective commitment of 189 countries to overcome the poverty and therealization that business as usual would not be enough to combat poverty. The State has made significant progress towards reducing poverty and universalization of primary education but progress has been slower than expected in reducing child mortality, improving maternal health and promoting gender equality. The State has progressed satisfactorily in terms of reduction in poverty, universal primary education, gender equity and in the provision of safe drinking water. A major challenge to achieving the MDGs in Gujarat is reducing and ultimately eliminating social class and rural-urban disparities in different dimensions of human development.

***Key words:*** MDGs, Poverty, Education, Health, Sanitation, Environment

## 1. Introduction

Fourteen years have passed since the UN Millennium Declaration enunciated a bold vision and established concrete targets by placing before the World the Millennium Development Goals, which are aimed at saving and improving the lives of many around the globe. In India, there has been considerable emphasis on all the MDGs and the nation has witnessed significant progress towards the MDGs, with some targets already having been met well ahead of the 2015 deadline.

The Millennium Development Goals (MDGs) have helped in bringing out a much needed focus and pressure on basic development issues, which in turn led the governments at national and sub national levels to do better planning and implement more intensive policies and Programmes. The MDGs originated from the Millennium Declaration adopted by the General Assembly of the United Nations in September 2000. The MDGs consists of eight goals, and these eight goals address myriad development issues. The eight (8) Goals are as under

The MDGs emphasized three areas: human capital, infrastructure and human rights (social, economic and political), with the intent of increasing living standards. Human capital objectives include nutrition, healthcare (including child mortality, HIV/AIDS, tuberculosis and malaria, and reproductive health) and education. Infrastructure objectives include access to safe drinking water, energy and modern information/communication technology; increased farm outputs using sustainable practices; transportation; and environment. Human rights objectives include empowering women, reducing violence, increasing political voice, ensuring equal access to public services and increasing security of property rights. The goals were intended to increase an individual's human capabilities and "advance the means to a productive life". The MDGs emphasize that each nation's policies should be tailored to that country's needs; therefore most policy suggestions are general.

India has been witnessed a substantial progress in MDGs. The country has made significant progress towards reducing poverty and universalization of primary education but progress has been slower than expected in reducing child mortality, improving maternal health and promoting gender equality. The analysis also reveals that within the country, region or across states, disparity in progress towards achieving MDGs has been quite substantial and appears to have persisted over time. It is argued that reducing inter-state disparity in achieving progress may go a long way in accelerating India's progress towards MDGs. There is therefore a need to analyses regional or state-specific progress.

The framework for measuring the progress of the Millennium Development Agenda comprises eight Millennium Development Goals (MDGs) which were to be achieved by the year 2015. To monitor these goals 18 targets have been set and 48 monitoring indicators identified. The list of monitoring indicators has since been expanded to 53. These goals, targets and monitoring indicators was globally accepted as a yardstick for measuring and monitoring nations' progress and analysing the impact of social and economic development processes in terms of improvements made in the quality of life of people across and within countries and environmental sustainability.

This study is an attempt to analyses the progress and prospects of MDGs in Gujarat, one of the constituent States of India.

## **2. Research Methodology**

India's MDGs framework is based on the 2003 United Nations Development Goals (UNDGs) guideline on concepts, definitions and methodology of MDGs indicators. The methodology is kept simple for the ease of understanding for the masses. Most of the data has been procured from various reliable government sources. Use of data available from different sources, however, raises the issue of data compatibility as definitions used in different surveys are generally not uniform. Data generated through the surveys such as the NSSO, NFHS, DLHS and Census data. Have been taken for the study.

## **3. Objective of Study**

1. Comparing India and Gujarat to review MDGs.
2. To assess the magnitude of MDGs through knowing its snags and glitches.
3. By assessing the published statistical information through scrapping its progress and analysing the goals.

## **4.Importance of study**

MDG's is a global campaign which is listed to prevailing the view of human society and its events. Many large amount of citizens of India face issues in there economic and social life, hence to implement the goals becomes important. The country India is having various states and all are progressing on different contexts, hence it becomes important to know there indispensable study and development.

## **5. Progress of the MDGs in Gujarat**

### **5.1 Poverty and Hunger**

People living in poverty are often socially excluded and marginalized. Their right to effectively participate in public affairs is frequently ignored and thus elimination of poverty is much more than a humanitarian issue, as it is more of a human rights issue. Thus eradication of poverty and hunger being the basis of all development process, the Millennium Development Goals have given foremost priority to it and the first Goal among the 8 Developmental Goals is on targeting elimination of extreme poverty and hunger.

#### **Poverty Headcount Ratio:**

**Definition:** *Poverty Headcount Ratio is the proportion of the national population, whose incomes are below the official threshold (or thresholds) set by the national government. It could be also stated as the Poverty Head count ratio (HCR) is the proportion of a population that exists, or lives, below the 'poverty line'. The Poverty headcount ratio at national poverty line (% of population) in India.*

UN has adopted the poverty line prescribed by the World Bank for its MDGs Plan which is at \$1.25 a day. However, it accepts national poverty lines, which are usually set for households of various compositions to allow for different family sizes. For India, we will use the national poverty line marked at \$1 a day.

India uses the Tendulkar Committee method for estimating poverty since 2009. In this method the consumption pattern of a certain bundle of goods and services is used to build the poverty line based on the Mixed Reference Period (MRP). The same consumption bundle is used for rural and urban areas but corrections are made for the urban-rural price differentials. Thus, the poverty line varies for all states depending on their inter-state price differentials. For 2011-12, for rural areas the national poverty line using the Tendulkar methodology is estimated at Rs. 816 per capita per month and Rs. 1,000 per capita per month in urban areas. As per the Planning Commission Report 2011-12 on poverty estimates, 25.7% of the population in rural areas, 13.7 % of the population in the urban areas, and a combined of 21.9% of the population falls below the poverty line (BPL).

Poverty line for Gujarat for the year 2011-12 was Rs. 932 for the rural areas and Rs. 1152 for the urban areas. A total of 16.63 % (102.23 lakhs) of the total population of Gujarat lives below the poverty line. This constitutes a total of 21.54 % (75.35 lakhs) of the rural population and 10.14 % (26.88 lakhs) of the urban population.

<b>Table : 1      Poverty in Gujarat (PHCR, Tendulkar Methodology)</b>			
<b>Sr. No.</b>	<b>Year</b>	<b>Poverty Headcount Ratio (PHCR) %</b>	
		<b>Gujarat</b>	<b>India</b>
1	1990 estimated	39.62	47.8
2	1993-94	37.80	45.30
3	2004-05	31.80	37.20
4	2011-12	16.63	21.92
5	Likely Achievement in 2015	15.98	20.74
6	Target 2015	19.81	23.90
Source (1) Planning Commission (Now renamed as NITI Aayog) (2) MDGs India Country Report-2015			

The Poverty Headcount Ratio target for India and Gujarat for the year 2015 is 23.90 and 19.81, respectively. It is evident from Figure 2.1 that India as a whole has already met the target estimated for the year 2015. Similarly, Gujarat also has met its target way in advance which was at 19.81 per cent by 2015. By 2012, Gujarat had achieved this goal with 16.63 per cent of the population falling below the poverty line. It can therefore be concluded that the State's progress in achieving the MDG of halving the number of people below the National Poverty line is satisfactory.

### **Nutritional status of children**

Malnutrition among its citizen is a very severe social problem, faced by any Country, as it affects productivity in many ways. The problem of malnutrition is especially critical in case of women and children. A women's nutritional status has important implications for her health as well as the health of her children because a malnourished woman is very likely to give birth to a malnourished child vulnerable to disease and infection. Under nutrition not only retards a child's growth but also affects their future productivity and capabilities thus adequate nutrition is critical to a child's development. First 60 months after birth is extremely important because at this delicate age, children are vulnerable to growth retardation, micronutrient deficiencies, and common childhood illness. The National Family Health Survey (NFHS) collected data on underweight children's.

**Table: 2 Underweight Children below 3 Years (*Weight for age*)%**

Trends in nutritional status	Gujarat	India
NFHS I (1992-93)	42.7	51.5
NFHS II(1998-99)	41.6	42.7
NFHS III(2005-06)	41.1	40.4
Source: National Family Health Survey, MH&FW		

The NFHS shows that, the proportion of under-weight children below 3 year declined Gujarat from 42.7 % in 1992-93 to 41.1 % in 2005-06. India's target was 26 per cent and Gujarat's target was 21.40 for the year 2015. Thus, it is unlikely that Gujarat will be able to achieve its desired target. Under nutrition is much more common for children of mothers whose body mass index is below 18.5 than for children whose mothers are not underweight. Also, under -nutrition decreases steadily with increase in the wealth index of the household.

## 5.2 Universal Primary Education

Education is a unique investment in the present, bearing invaluable benefits in the future. An all-round development of our citizens can be achieved by building strong foundations in education. The essence of Human Resource Development is education, which plays a significant and remedial role in balancing the socioeconomic fabric of the society. Emphasising this aspect, the Goal 2 of the Millennium Development Goals is aiming at achieving universal primary education.

### Net Enrolment Ratio:

*Definition: Net primary enrolment ratio is the ratio of the number of children of official school age (as defined by the national education system) who are enrolled in primary school to the total population of children of official school age.*

<b>Table: 3 Net Enrolment Ratio in Gujarat (NER)-2014-15</b>			
<b>Level of Education</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
I-V	82.32	84.43	83.29
VI-VIII	71.17	71.58	71.36
I-VIII	86.13	87.58	86.89
IX-X	51.73	42.99	47.73
XI-XII	30.78	27.89	29.44
Source : School Education in India-2014-15,Flash Statistics, DISE, Page no 64 (NUEPA)			

This is defined as the number of pupils (of any age) who are enrolled in primary education as a percentage of the total children of official school age population. According to the MDGs by 2015, the target was to achieve 100 % NER. The primary education in year 2014-15 is 86.89 %. (DISE)

### Youth Literacy Rate

**Definition:** Literacy rate of 15–24 year-olds, or the youth literacy rate, is the percentage of the population ages 15–24 years-old who can both read and write with understanding a short simple statement on everyday life. The definition of literacy sometimes extends to basic arithmetic and other life skills

<b>Table: 4 Youth (15-24) Literacy Rate-2011</b>		
	<i>Gujarat</i>	<i>India</i>
<i>Total</i>	89.17	86.14
<i>Male</i>	92.84	90.04
<i>Female</i>	85.00	81.85
<i>Rural</i>	86.78	83.67
<i>Urban</i>	92.22	91.40
Source: Office of Registrar General of India, Census 2011		

The indicator of literacy rate shows that the goal of 100 percent literacy is still not achieved, there is a possibility that with some additional efforts, the state will also be able to achieve universal literacy among population aged 15-24 years.

### **5.3 Gender Equality and Empowerment of Women**

Gender equality is a human right, which entitles all persons irrespective of their gender to live with dignity and with freedom. Gender equality is also a precondition for all round development and reducing poverty. Empowered women make invaluable contribution to the improvement of health conditions and educational status and productivity of whole families and communities, which in turn improve prospects for the next generation.

The Millennium Development Goal-3 puts emphasis on gender equality and empowerment of women to highlight these aspects only. Gender equality will be achieved only when women and men enjoy the same opportunities, rights and obligations in all spheres of life. This means sharing equally, power and influence, and having equal opportunities in economic and social spheres. Equal claim on education and career forecasts will enable women to realize their personal determinations. The Gender Parity Index (GPI) is the ratio of the number of female students enrolled at primary, secondary and tertiary levels of education to the corresponding number of male students in each level.

The indicator 'Share of Women in Wage Employment in the Non-Agricultural Sector' is defined as the segment of female workers in the non-agricultural sector which is articulated as a percentage of total employment in the sector. This measures the degree to which labour markets are open to women in industry and the service sectors, which affects not only equal employment opportunity for women but also economic competence through flexibility in the labour market and reflect economic factors in social empowerment of women.

In 2011-12, women working in non-agricultural sector of the state is 16.8%, for the rural sector, the percentage is 13.4. (NSS 68<sup>th</sup> round).

### **5.4 Maternal and Child Health**

#### **Child Mortality**

Healthy children become healthy adults: people who create better lives for themselves, their communities and their countries. Children are vital to the nation's present and its future. Most deaths among children aged one to five years are due to diseases that can be prevented, but that can also be easily treated at home or in health care centres. For most of the deadly childhood diseases, such as measles, vaccines are available and timely completion of immunization protects a child from this diseases and death.



A child's life is highly vulnerable to various diseases and substantial numbers of children lose their lives every day all around the world. In many cases, the child mortality happens due to causes which are preventable with adequate attention and care. The Millennium Development Goal 4 highlights the urgent need for reducing child mortality. Children are the most valuable assets for every country.

### Under-Five Mortality Rate:

**Definition:** *The under-five mortality rate is the probability (expressed as a rate per 1,000 live births) of a child born in a specified year dying before reaching the age of five if subject to current age-specific mortality rates.*

In India, the Office of the Registrar General of India (ORGI) regularly releases reliable estimates of fertility and mortality using data collected through Sample Registration System (SRS).

<b>Table: 5Trend in Under Five Mortality (U5 MR, per 1000 Live birth)</b>			
<b>Sr. No.</b>	<b>Year</b>	<b>Gujarat</b>	<b>India</b>
1	1990 estimated	115	125
2	2005	60.9	74.3
3	2010	56	59
4	2012	48	52
5	2013	45	49
Source: (1) Office of Registrar General of India, SRS (2) MDGs India Country Report-2015			

Under Five Mortality Ratio (U5MR) India was estimated at 125 deaths per 1000 live births in 1990. In order to achieve the Target 5, the U5MR is to be reduced to 42 deaths per 1000 live births by 2015. Gujarat's U5MR was estimated at 115 deaths per 1000 live births in 1990. To achieve the U5 MR it must-be is be reduced to 38 deaths per live births by 2015. Its performance was far better than the national average which is 49 in 2013. For this indicator, the long term trend is showing a continuous decreasing trend for Gujarat as well as India while Gujarat's performance is marginally better than the national average over the years. Registering a faster decline in the recent past, and if this rate of reduction is sustained, the achievement by

2015 is likely to be very close to the target by 2015. U5MR of Gujarat & India, Gujarat has performed better than National average during 2013 in all rural, urban, female & male.

The indicators such as IMR for Gujarat improved over time, but the relative standing among other states (9<sup>th</sup> among 17 major states) have remained low. Maternal Mortality Ratio has reduced significantly from 202 in 1999-2001 to 112 per 1 lakh in 2011- 13. Currently Gujarat is 5<sup>th</sup> in state ranking with lower MMR among 19 major states. Infant Mortality Rate has reduced from 54 infant deaths per 1000 live births in 2005 to 35 in 2014. (12<sup>th</sup> among 22 major states)

### **Maternal Health**

A woman's chance of dying or becoming disabled during pregnancy and childbirth is closely connected to her social and economic status, the norms and values of her culture, and the geographic remoteness of her home. Generally speaking, the poorer and more marginalized a woman is, the greater her risk of death. In fact, maternal mortality rates reflect disparities between wealthy and poor countries more than any other measure of health.

The major direct causes of maternal morbidity and mortality include haemorrhage, infection, high blood pressure, unsafe abortion, and obstructed labour. These complications may arise unexpectedly. Investing in health systems - especially in training midwives and in making emergency obstetric care available round-the-clock - is key to reducing maternal mortality.

Addressing the barriers to use of care and creating an environment within households and community that support women in seeking the needed care is also key. Prenatal care is an important part of basic maternal health care. The perinatal period commences at 22 completed weeks (154 days) of gestation and ends seven completed days after birth. Perinatal and maternal health are closely linked.

### **Maternal Mortality Ratio (MMR)**

**Definition:** *The maternal mortality ratio 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.*

<b>Table: 6Maternal Mortality Ratio (MMR,100,000 Live Birth) Gujarat and India</b>			
<b>Sr. No.</b>	<b>Year</b>	<b>Gujarat</b>	<b>India</b>
1	1990 estimated	308	437
2	1999-01	202	327
3	2004-06	160	254
4	2010-12	122	178
5	2011-13	112	167
Source: Sample Registration System(SRS), Office of Registrar General of India			

Indicates that, MMR of Gujarat state has been reduced to 112 in the year of 2013 from 122 in 2010-12, a total of 10 points decline, while for the same period the MMR at national level has reduced by 11 points, reduced from 178 to 167. As per 2013 data, Gujarat is 35 points away from the MDG target of 77 MMR. Currently Gujarat is 5 among the bigger states with lower MMR (Kerala, Tamil Nadu, Maharashtra and AndhraPradesh have lower MMR than Gujarat.

### 5.5 Environmental Sustainability

Impacts of Environment are immense as they act at various level influencing the quality of human life. The development activities undertaken to improve the living standard of people, at large, sometimes affect the natural environment adversely in many ways and cause severe threats to bio diversity. The MDG - 7 addresses the concern for sustainable development to reverse environment degradation and loss with focus on improving/ monitoring indicators associated with it.

Green technology is generally differentiated from sustainable development in that green development prioritizes environment, social environment and economic sustainability. Environmental and sustainable development aims at natural resources and eco-friendly technology to meet human needs while preserving and conserving there, water and soil environment and maintaining the ecological balance for productive biodiversity.

Gujarat Forest Department manage a “Social Forestry Programme” for planting trees on non-forest lands and became a pioneer to improve Green Cover of the state. The objectives were to increase the number of trees in Gujarat, promoting the participation of people and institutions to grow trees, make use of

unproductive land to productive use apart from many other areas that called for attention towards sustainable growth.

As per assessment in 2013, the total forest cover of the country is 697898 sq. km, which is 21.23% of the geographic area of the country. The Forest area of Gujarat is approximately 14,653 sq.km. In the year 2013, which is about 7.48 per cent of total geographical area of the State. The proportion of land covered by forest in Gujarat is much lower than the national average. Mizoram with 90.38% has the highest forest area.

### Drinking Water

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

**Table: 7 Percentage Of Households Having 'Improved Source' of Drinking Water**

area	during 2008-2009 (NSS 65th round)		during 2012 (NSS 69th round)	
	Gujarat	India	Gujarat	India
Rural	91.4	90.4	86.4	86.9
Urban	95.6	93.9	92.6	90.1
Rural+ Urban	93.1	91.4	89.6	87.8
Source: (i) For year 2008-09: NSS Report No. 535: Housing Condition and Amenities in India: July, 2008-June, 2009. (ii) For the year 2012: NSS Report No. 556: drinking water, Sanitation, Hygiene and Housing Condition in India.				

As per NSS 65<sup>th</sup> round (July, 2008-June 2009) the source of drinking water 'tap', 'tube well/hand pump', 'protected well' and 'harvested rain water', have been taken as improved sources. whereas as per NSS 69<sup>th</sup> round (July- Dec 2012), The sources of drinking water, 'piped water into dwelling', 'piped water to yard/plot', 'public tap/ standpipe', 'tube well/ borehole', 'protected well', 'protected spring', and 'rain water collection'

have been taken as improved source. The above table shows that irrespective of sources Gujarat's performance in access to improved source of drinking water is always better than the national average.

## Sanitation

*Proportion of the population with access to improved sanitation refers to the percentage of the population with access to facilities that hygienically separate human excreta from human, animal and insect contact. Facilities such as sewers or septic tanks, pour-flush latrines and simple pit or ventilated improved pit latrines are assumed to be adequate, provided that they are not public, according to the WHO and UNICE.*

<b>Table: 8 Percentage of households without access to sanitation</b>				
<b>area</b>	<b>during 2008-2009 (NSS 65th round)</b>		<b>during 2012 (NSS 69th round)</b>	
	Gujarat	India	Gujarat	India
Rural	67.3	65.2	58.7	59.4
Urban	7.3	11.3	6.2	8.8
Rural+ Urban	43.6	49.2	34.4	43.4
Source : (I)NSS Report No. 535 : (2008 09), (II) NSS Report No. 556: 2012				

The sanitation facility available to the households is having a huge impact on the living conditions and it is closely related to the health and hygiene of the members of households depicts the trend of proportion of households having access to improved source of sanitation facilities for Gujarat as well as India. The trend shows that although Gujarat performance is not much satisfactory, still its performance is always better than State average.

Census 2011 data also revealed that 42.7 per cent households of Gujarat are not having latrine facilities within the premises whereas for India it is more than 50 per cent (53.1 per cent). Again, among them around 40 per cent households of Gujarat State go for open defecation as against around 50 percent of India.

## 6. Conclusion

- In terms of all the poverty related indicators, Gujarat's performance is better than National average.
- The proportion of children aged 0-3 years who have low weight for age has been a serious cause for concern and a major development challenge for the State as well India.
- Promoting gender equality and empowering women, the State progress appears to be mixed. Only percentage share of women in wage employment in the non-agriculture sector is unsatisfactory and hence their need more attention and accordingly related government initiatives to turn this favourable for females.
- The progress of the State in terms of reduction in maternal and child mortality is satisfactory as compare to the national average, although, it is also true that the State is not be able to achieve the target of 2015 in U5 MR, IMR and MMR. The various efforts towards improving maternal health is reflected in reducing the gap between the required rate and the actual rate in the maternal mortality ratio.

The state has progressed satisfactory in terms of reduction in poverty, universal primary education, gender equity and in the provision of safe drinking water. The state has made significant progress towards reducing poverty and universalization of primary education but progress has been slower than expected in reducing child mortality, improving maternal health and promoting gender equality.

If the various targets are checked for MDG's like malnutrition, education, health, sanitation etc. it would be noted that the target is not yet achieved. The gender equality goals in the context of state of Gujarat is still awaiting.

## References:

- *Compendium of Environment Statistics (2010) India State of Forest Report, 2011, 2013, M/oEnvironment, Forests and Claimant Change, Govt. of India*
- *District Level Household and Facility Survey (DLHS-III) Fact Sheet Gujarat (M/O MH&FW)International Institute for Population sciences, Mumbai*
- *GSIDS (2014-15) Social Development is the Human Development – Gujarat, Gujarat socialInfrastructure Development Society, Govt. of Gujarat Gandhinagar*
- *India State of Forest Report 2011, 2013, Ministry of Environment, Forest and Climate Change, Govt. of India*

- Jayant Kumar And Bhatiya (2008) "Human Development Goals For Gujarat" VOL.33 NO.2 VISHLESHAN Surat
- MOSPI (2015) Millennium Development Goals India country Report-2015, Ministry of Statistics And programme Implementation, Govt. of India
- National Family Health Survey (1992-93) NFHS-II, India, International Institute for Population Sciences Mumbai
- National Family Health Survey (1998-99) NFHS-II, India, International Institute for Population Sciences Mumbai
- National Family Health Survey (2005-06) NFHS-III India VOLUME-II, International Institute For Population sciences Mumbai
- NUEPA (2014) Education for All Towards quality and Equity, National University of Education Planning and Administration, Govt. of India, New Delhi M/o Ministry of Human Resources Development
- NUEPA (2014-15) School Education in India-(P), U-DISE, National University of Education Planning and Administration, Ministry of Human Resources Development, New Delhi
- NSSO (2008-09): NSS Report No. 535: Housing Condition and Amenities in India: July, 2008-June, 2009. Ministry of Statistics and programme Implementation, Govt. of India
- NSSO (2012) NSS Report No. 556: drinking water, Sanitation, Hygiene and Housing Condition In India, Ministry of Statistics and programme Implementation, Govt. of India
- NSSO 68<sup>th</sup>, round on Employment and unemployment 2004-05, 2009-10, 2011-12, Ministry of Statistics and programme Implementation, Govt. of India
- ORGI (2014) Sample Registration System, SRS Bulletin-2014, Office of Registrar General of India
- ORGI (2011) Census 2001 and 2011, Office of the Registrar General & Census Commissioner Of India
- Tendulkar Committee (2011-12) Method for estimating poverty, Planning Commission (Now renamed as NITI Aayog), Govt. of India, New Delhi
- UNO (2015) THE MILLENNIUM DEVELOPMENT GOALS REPORT-2015