

Research Paper Impact Factor :**3.029** 

## POVERTY & DEPRIVATION IN ODISHA: A DISTRICT LEVEL ANALYSIS

### Dr Sadhana Satapathy

Reader in Economics, B.J.B. (Autonomous) College, Bhubaneswar, India.

#### Abstract

Poverty and deprivation are not new to India in general and Odisha in particular but the state figures cannot give a clear picture regarding the inter-district disparity of the level of deprivation. Measurement of absolute poverty and decline in it do not reflect the correct scenario. The present paper attempts to look at the problem of deprivation from district perspectives particularly KBK plus districts. It finds that the situation has not improved for most of these districts though they have some positive sides. Pumping of central funds for so many years has done little to these disadvantaged districts. Proper planning and implementation of schemes would go a long way to help these districts.

### Key Words: Deprivation, KBK Districts, Literacy, IMR.

### **I.INTRODUCTION**

**1.1. Poverty Measurements:** The measurement of poverty has been a controversial one particularly after the Tendulkar committee suggestions. Many economists find the different measures not without flaws. Poverty line is a loose concept and procedures totally depending on expenditure data is artificial bearing little relation to the different dimensions of poverty ( krishnaji, 2012)<sup>1</sup>. This is echoed by other economists as well. The major limitations of the new poverty line is its acceptance of 25.75 percent urban HCR (Head Count Ratio) based on the earlier methodology as the benchmark and use of the same poverty line basket for both urban and rural(Manna, 2012)<sup>2</sup>.

The all-India HCR has declined by 7.3 percentage points from 37.2% in 2004-05 to 29.8% in 2009-10, with rural poverty declining by 8.0 percentage points from 41.8% to 33.8% and urban poverty declining by 4.8 percentage points from 25.7% to 20.9%. Among the BIMARU states, only Rajasthan has managed to do better than the national average with the share of BPL in its population estimated at 14.7% in 2011-12, compared to 34.4% in 2004-05.

However, the proportion of poor in the Indian state of Odisha has always remained higher than the national average. According to the poverty measure of Planning Commission for the year 2011-12, about 21.92% of people in India are suffering from poverty and the figure is 32.59% for Odisha. According to this report, poverty has declined by 24.61 percentage points for Odisha i.e. from 57.2 to 32.59 from 2004-05 to 2011-12.

The Multidimensional Poverty Index (MPI), published for the first time in the 2010 Human Development Report complements money-based measures by considering multiple deprivations and their overlap. The index identifies deprivations across the same three dimensions as the HDI and shows the number of people who are multidimensional poor (suffering deprivations in 33% of weighted indicators). It can be deconstructed by region, ethnicity and other groupings as well as by dimension, making it an apt tool for policymakers.<sup>3</sup> This index shows that position of Odisha vis-à-vis other states is very low.

Poverty essentially implies deprivation of any kind be it literacy/access to education, access to health facilities and sanitation, and access to infrastructures etc in addition to material or income poverty. In this respect the state of Odisha is much behind the other states. There is wide inter district disparity within the state, especially the erstwhile KBK districts (Koraput,

Malkangiri,Nabarangapur, Rayagada, Kalahandi, Nuapada Bolangir and Subarnapur). These districts have been given enough attention/incentives for the last two decades to come out of acute deprivation. Several special schemes have been earmarked for these districts. The question is whether they have come out of these traps?

<sup>3</sup> Human Development Report 2010- The Real Wealth of Nations: Pathways to Human Development.

<sup>&</sup>lt;sup>1</sup> Krishnaji, N.(2012), "Abolish the Poverty Line", Economic & Political Weekly, Vol XLVII, No. 15, April 14, 2012.

<sup>&</sup>lt;sup>2</sup> Manna, G.C.,(2012), "On Some Contentious Issues of the New Poverty Line", Economic and political Weekly, Vol. XLVII,No. 15, April 14,2012.



**1.2. Objectives, Methodology and Data Analysis:** Objective and focus of the present paper is to analyse the performance of bottom ten districts of Odisha (a majority of it are KBK districts) in terms of various parameters of deprivations rather than material poverty. For the analysis, we have looked at the literacy rate, health facilities and health conditions, drinking water facilities, sanitation and access to infrastructure facilities as dimensions of deprivation/poverty for the bottom ten districts of Odisha. The ranking is done and then the bottom ten districts are chosen. For literacy rate, two census periods i.e. 2001 and 2011 are considered for the districts. The districts have been ranked on the basis of basic sanitation facilities available per thousand population of each district. The status of health has been gauged on the basis of data on total number of available government health institutions in the districts. NHFS data 2010-11 and 2012-13 has been used to look at the health situation in terms of IMR, neo natal Mortality rate and post neo natal mortality rate. The data on access to health is on the basis of government medical facilities. For access to drinking water census 2011 data has been used.

The paper is divided into four sections including the present section of Introduction. Section II discusses the extent of poverty of Odisha vis a vis India based on various measures. In section III performance of the bottom ten districts of Odisha has been analysed. Finally, major findings and conclusion of the paper are discussed in section IV.

## **II.POVERTY IN ODISHA**

**2.1. Poverty in Odisha on the basis of Different Measures:** According to the Tendulkar Committee Report 2009, the poverty headcount ratio of Odisha, at 57.2 percent, is the worst among all Indian states and way above the national average of 37.2 percent. If factors beyond income are considered (Multidimensional Poverty Index)<sup>4</sup>, about 63.2 percent of the people in Odisha live below the poverty line. Rural poverty, at 60.8 percent, is also significantly higher than the urban poverty, which is 37.6 percent, and the worst in India. Further, the extent of poverty is not evenly distributed in all the regions and among all social groups of Odisha. The Scheduled Castes and Scheduled Tribes of the state also have a high incidence of poverty as compared to the SCs and STs in the country as a whole. In terms of other human development indicators such as health, the state faces several challenges. The percentage of women in Odisha with Body Mass Index less than 18.5 is 41.1- higher than the national average of 35.6 percent- and the state's under-five mortality rate of 90.6 per thousand is also among the bottom five. Table 1 below gives the percentage of poor based on different methodologies for the period between 1987-88 and 2011-12.It shows that the poverty percentage for Odisha has declined.

Table1:	Table1:Poverty head Count Ratio(Percent) for Odisha and India,1987-88 to   2011-12									
Odisha(%) India(%)										
	Reference Period	Rural	Urban	Total	Rural	Urban	Total			
	Ex	pert com	mittee met	hodology						
1987-88	URP	57.64	41.53	55.58	39.09	38.2	38.4			
1993-94	URP	49.72	41.64	48.56	37.27	32.36	36			
2004-05	URP	46.8	44.33	46.4	28.3	25.7	27.5			
	Tend	lulkar Cor	mmittee M	ethodolog	gy					
1993-94	MRP	63	34.5	59.1	50.1	30.8	45.3			
2004-05	MRP	60.8	37.6	57.2	41.8	25.7	37.2			
2009-10	MRP	39.2	25.9	37	33.8	20.9	29.8			
2011-12 MRP 35.69 17.29 32.59 25.7 13.7 2										
Source: Eco	Source: Economic Survey of Odisha, 2013-14									

<sup>4</sup> India Human Development Report 2011, IAMR and Planning Commission, New Delhi.



Table 1 show that the percentage of poor in 1993-94 was 49.72 % (URP) and 60.8% (Tendulkar Committee method, MRP) in rural Odisha. The figure for urban Odisha for the same period was 41.64% and 37.6% respectively. By 2011-12 it has come down to 35.69% for rural Odisha and 17.29% for urban Odisha(based on Tendulkar method).

Moreover, the percentage of abjectly poor people in Odisha has declined faster than in any other state except Bihar between 2004-05 and 2011-12. However, in a measure of how poorly off they were earlier, the proportion of the poor in the state remains well above the national average. The proportion of people below the poverty line (BPL) fell by 24.6 per cent, from 57.2 per cent in 2004-05 to 32.6 per cent in 2011-12. The data showed Odisha, which had the highest poverty headcount ratio (57%) in 2004-5, has brought the proportion of poor down to 37% as per the new benchmark. Bihar (53.5%), Chhattisgarh (48.7%) and Manipur (47.1%) now have the three worst HCRs.

Table 2 below gives an idea about status of Odisha vis-à-vis India in terms of percentage of population below the poverty line. Over the time the poverty in Odisha has definitely decreased in respect of different measures. It is much higher than the national average but still there is a little bit of cheer for all of us.

	Rur	al	Urb	an	C	ombined
	% of p	ersons	% of p	ersons	% (	of persons
Year	Odisha	India	Odisha	India	Odisha	India
1973-74	67.28	56.44	55.62	49.01	66.18	54.88
1983-84	67.53	45.65	49.15	40.79	65.29	44.48
1993-94	49.72	37.27	41.64	32.36	48.56	35.97
1999-2000(30 days recall period)	48.01	27.09	42.83	23.62	47.15	26.10
2004-05(based on MRP consumption)	60.8	42.00	37.6	25.50	57.2	37.20
2004-05(based on URP consumption)	46.8	28.30	44.3	25.70	46.4	27.50
2009-10(based on MRP consumption)	39.2	33.80	25.9	20.90	37	29.80
2011-12(based on MRP consumption)	35.69	25.70	17.29	13.70	32.59	21.92

Source: HBS Tables

**2.2. Different Indicators of Poverty and Deprivation:** Despite the reduction in poverty rate, one finds that Odisha's rank among all states cuts a sorry figure. Analyzing Table 3 below for the other indicators for the state particularly the hunger and human development indicators, Its rank is 12 in GHI out of 17;HDI rank of 22out of 23;GDI rank of 32 out of 35 and GEM rank of 29 out of 35.Close to four-fifths of the households in Odisha do not have access to toilet facilities. For these reasons, the state has one of the lowest Human Development values. At 0.362, the state is just above Chhattisgarh, which has the lowest HDI value. The performance of the state in terms of literacy also remains a source of concern.

Sl No		Odisha	India
	Poverty & Hunger Indicators	2005	2005
1	Multi Dimensional Poverty Index(MPI)	0.339	0.238
2	Multi Dimensional Poverty Head Count(%)	63.2	53.7
3	Number of Multidimensional Poor(in millions)	26.5	612
		2007	2007
4	Global Hunger Index(GHI)	23.8	23.3
5	GHI Rank(out of 17)	12	

Table3:Poverty, Hunger and Human Development Indicators For Odisha and India



		2005-06	2005-07
6	Prevalence of Calorie undernourishment(%)	21.4	20
7	Prevalence of Underweight Children under 5 years of age(%)	40.9	42.5
	Human Development Indicators	2007-08	2007-09
8	Human Development Index value(HDI)	0.362	0.467
9	HDI Rank(out of 23)	22	
		2006	2006
10	Gender related Development Index(GDI)	0.524	0.59
11	GDI Rank(out of 35)	32	122
12	Gender Empowerment Measure(GEM)	0.393	0.497
13	GEM Rank (out of 35)	29	
Source: 1	.http://www.ophi.org.uk/policy/multidimensional-poverty-index/mpi-data	a-methodology	
	2.http://www.ifri.org/publication-hunger-across-states-india-state-hun	iger-index	
	3.Indian Human Development Report,2011,IAMR & Planning Comm	nission	
	4.http://www.undp.org.in/sites/default/files/GDI_and_GEM_Report.p	odf	

Thus from section II, it is evident that Odisha as a whole has improved from the prospect of poverty by different possible measures and obviously this has been possible because all the districts must have improved in terms of these indices. However, when one looks at inter-district disparity in terms of different indicators of deprivation one may find a different result altogether. The following section discusses this disparity in detail.

## **III.INTER DISTRICT ANALYSIS OF DEPRIVATION**

Decentralised district based plannings are essential for India as well as a state like Odisha because of large inter district variations within the state. The hot spots (districts requiring special attentions) very often get overlooked by the state averages. In this situation, it is necessary to look at the inter district variations in different indicators such as education, health, nutrition and mortality rates to have a better grip over the situations.

**3.1. Classification of Districts:** From the above section it is clear that Odisha's situation has not improved the way it should have been as far as poverty is concerned. What about the districts' performance in terms of deprivation? For this, one has to find out the status of districts first. We have heavily relied upon the "Report of Regional Imbalance Enquiry Commission-Orissa", (2008), which identifies the districts into four categories A, B, C and D. on the basis of twenty six district level indicators .On the basis of overall development indicators, the very backward districts (Debagarh, Gajapati, Kalahandi, Kandhamala, Malkangiri, Mauyrbhanj, Nuapada &Nabarangapur in category D); the backward districts (Bolangir, Baudh, Kendujhar, Koraput, Nayagarh, Rayagada and Subarnapur in category C); developing districts (Anugul,Baleshwar, Bargarh,Bhadrak, Dhenkanal, Ganjam, Kendrapada, Jajpur in category B) and developed districts (Cuttack, Jagatsinghpur, Jharsuguda and Khordha in category A) were identified for 2003-04. Census 2001 was used for this purpose. We have focused on the KBK plus districts-which are under very backward and backward districts categories (50% of all the districts of Odisha) - for analysis of deprivation. Literacy, IMR, Mortality under five, Neo natal and post neo natal mortality, access to sanitation and drinking water are taken as parameters for deprivation.

**3.2. Literacy Rankings:** Deprivation of right to education (RTE) is reflected in terms of literacy. Lack of basic education in terms of literacy maks people of a state backward. Table 4 gives a comparative account of the literacy rate of all the districts of Odisha for two census periods. Literacy rate has increased for all the districts. Improvement in Female literacy is higher than males in all Districts except Malkangiri during the decade 2001-11. Although the literacy rate of Odisha (73.45 percent) is only slightly lower than the national average (74.04 percent), the gap between male and female literacy, at 82 and 64 percent respectively, is huge. The literacy rate comparison of two census periods shows the largest increase for Malkangiri (18 points from 30.5 % to 48.5%), Nuapada (15.3 points, from 42.0% to 57.3%), Baudh (13.9 points, from 57.7% to 71.6%),

Rayagada (13.7 points, from 36.1% to 49.8%), Koraput (13.5 points from 35.7 % to 49.2%)-all very backward KBK districts. Table 4 shows the ranking of the districts of Odisha on the basis of literacy during the decade 2001-11.

Image: Normal strateImage: Normal strate	Table - 4: Literacy Kankings of Districts of			Odisha for Across Rural-Urbar			n & Maie-Female			
1 Bargarh 14 14 15 13 15 15 15 15   2 Jharsuguda 11 12 19 17 9 11 8 10   3 Sambalpur 13 15 16 15 13 12 13 13   4 Debgarh 16 16 21 18 16 18 19 17   5 Sundergarh 20 19 9 14 14 14 17 18   6 Kendujhar 17 20 24 26 18 21 20 20   7 Mayurbhanj 23 23 7 12 22 23 23 23   8 Baleshwar 9 9 17 16 8 8 10 8   9 Bhadrak 4 5 28 24 6 6 6   10 Kendrapada 3 2 8 4 5 4 4 3   11 <th></th> <th></th> <th>RU</th> <th>RAL</th> <th colspan="2">URBAN</th> <th>FEM</th> <th>ALE</th> <th colspan="2">MALE</th>			RU	RAL	URBAN		FEM	ALE	MALE	
2   Jharsuguda   11   12   19   17   9   11   8   10     3   Sambalpur   13   15   16   15   13   12   13   13     4   Debgarh   16   16   21   18   16   18   19   17     5   Sundergarh   20   19   9   14   14   14   14   17   18     6   Kendujhar   17   20   24   26   18   21   20   20     7   Mayurbhanj   23   23   7   12   22   23   23   23     8   Baleshwar   9   9   17   16   8   8   10   8     9   Bhadrak   4   5   28   24   6   6   6     10   Kendrapada   3   2   8   13   11   7   7   9   9 <t< td=""><td>sl no</td><td>Districts</td><td>2001</td><td>2011</td><td>2001</td><td>2011</td><td>2001</td><td>2011</td><td>2001</td><td>2011</td></t<>	sl no	Districts	2001	2011	2001	2011	2001	2011	2001	2011
3   Sambalpur   13   15   16   15   13   12   13   13     4   Debgarh   16   16   21   18   16   18   19   17     5   Sundergarh   20   19   9   14   14   14   17   18     6   Kendujhar   17   20   24   26   18   21   20   20     7   Mayurbhanj   23   23   7   12   22   23   23   23     8   Baleshwar   9   9   17   16   8   8   10   8     9   Bhadrak   4   5   28   24   6   6   6     10   Kendrapada   3   2   8   4   5   4   4   3     11   jagatsinghpur   1   1   10   7   2   2   1   1    12   Cuttack   6 <td>1</td> <td>Bargarh</td> <td>14</td> <td>14</td> <td>15</td> <td>13</td> <td>15</td> <td>15</td> <td>15</td> <td>15</td>	1	Bargarh	14	14	15	13	15	15	15	15
4   Debgarh   16   16   21   18   16   18   19   17     5   Sundergarh   20   19   9   14   14   14   17   18     6   Kendujhar   17   20   24   26   18   21   20   20     7   Mayurbhanj   23   23   7   12   22   23   23   23     8   Baleshwar   9   9   17   16   8   8   10   8     9   Bhadrak   4   5   28   24   6   6   6     10   Kendrapada   3   2   8   4   5   4   4   3     11   jagatsinghpur   1   1   10   7   2   2   1   1     12   Cuttack   6   4   5   2   4   3   5   4     13   Jaipur   7 <td>2</td> <td>Jharsuguda</td> <td>11</td> <td>12</td> <td>19</td> <td>17</td> <td>9</td> <td>11</td> <td>8</td> <td>10</td>	2	Jharsuguda	11	12	19	17	9	11	8	10
5   Sundergarh   20   19   9   14   14   14   17   18     6   Kendujhar   17   20   24   26   18   21   20   20     7   Mayurbhanj   23   23   7   12   22   23   23   23     8   Baleshwar   9   9   17   16   8   8   10   8     9   Bhadrak   4   5   28   24   6   6   6   6     10   Kendrapada   3   2   8   4   5   4   4   3     11   jagatsinghpur   1   1   10   7   2   2   1   1     12   Cuttack   6   4   5   2   4   3   5   4     13   Jajpur   7   8   13   11   7   7   9   9     14   Dhenkanal	3	Sambalpur	13	15	16	15	13	12	13	13
6   Kendujhar   17   20   24   26   18   21   20   20     7   Mayurbhanj   23   23   7   12   22   23   23   23     8   Baleshwar   9   9   17   16   8   8   10   8     9   Bhadrak   4   5   28   24   6   6   6   6     10   Kendrapada   3   2   8   4   5   4   4   3     11   jagatsinghpur   1   1   10   7   2   2   1   1     12   Cuttack   6   4   5   2   4   3   5   4     13   Jajpur   7   8   13   11   7   7   9   9     14   Dhenkanal   10   10   6   3   10   10   12   11     15   Anugul	4	Debgarh	16	16	21	18	16	18	19	17
7   Mayurbhanj   23   23   7   12   22   23   23   23     8   Baleshwar   9   9   17   16   8   8   10   8     9   Bhadrak   4   5   28   24   6   6   6   6     10   Kendrapada   3   2   8   4   5   4   4   3     11   jagatsinghpur   1   1   10   7   2   2   1   1     12   Cuttack   6   4   5   2   4   3   5   4     13   Jajpur   7   8   13   11   7   7   9   9     14   Dhenkanal   10   10   6   3   10   10   12   11     15   Anugul   12   11   4   8   12   13   11   12     16   Nayagarh	5	Sundergarh	20	19	9	14	14	14	17	18
8   Baleshwar   9   9   17   16   8   8   10   8     9   Bhadrak   4   5   28   24   6   6   6   6     10   Kendrapada   3   2   8   4   5   4   4   3     11   jagatsinghpur   1   1   10   7   2   2   1   1     12   Cuttack   6   4   5   2   4   3   5   4     13   Jajpur   7   8   13   11   7   7   9   9     14   Dhenkanal   10   10   6   3   10   10   12   11     15   Anugul   12   11   4   8   12   13   11   12     16   Nayagarh   8   7   2   5   11   9   7   7     17   Khordha   5 </td <td>6</td> <td>Kendujhar</td> <td>17</td> <td>20</td> <td>24</td> <td>26</td> <td>18</td> <td>21</td> <td>20</td> <td>20</td>	6	Kendujhar	17	20	24	26	18	21	20	20
9   Bhadrak   4   5   28   24   6   6   6   6     10   Kendrapada   3   2   8   4   5   4   4   3     11   jagatsinghpur   1   1   10   7   2   2   1   1     12   Cuttack   6   4   5   2   4   3   5   4     13   Jajpur   7   8   13   11   7   7   9   9     14   Dhenkanal   10   10   6   3   10   10   12   11     15   Anugul   12   11   4   8   12   13   11   12     16   Nayagarh   8   7   2   5   11   9   7   7     17   Khordha   5   6   1   1   1   1   3   2     18   Puri   26	7	Mayurbhanj	23	23	7	12	22	23	23	23
10Kendrapada3284544311jagatsinghpur11107221112Cuttack6452435413Jajpur781311779914Dhenkanal1010631010121115Anugul1211481213111216Nayagarh87251197717Khordha5611113218Puri23126352519Ganjam181814201719181920Gajapati*262627282526262621Kandhamal*191711102120161623Subarnapur*151320211916141424Balangir*212118192022212225Nuapada*252529252625252526Kalahandi*242423232417242427Rayagada*2828262727 <td>8</td> <td>Baleshwar</td> <td>9</td> <td>9</td> <td>17</td> <td>16</td> <td>8</td> <td>8</td> <td>10</td> <td>8</td>	8	Baleshwar	9	9	17	16	8	8	10	8
11   jagatsinghpur   1   1   10   7   2   2   1   1     12   Cuttack   6   4   5   2   4   3   5   4     13   Jajpur   7   8   13   11   7   7   9   9     14   Dhenkanal   10   10   6   3   10   10   12   11     15   Anugul   12   11   4   8   12   13   11   12     16   Nayagarh   8   7   2   5   11   9   7   7     17   Khordha   5   6   1   1   1   3   2     18   Puri   2   3   12   6   3   5   2   5     19   Ganjam   18   18   14   20   17   19   18   19     20   Gajapati*   22   22<	9	Bhadrak	4	5	28	24	6	6	6	6
12   Cuttack   6   4   5   2   4   3   5   4     13   Jajpur   7   8   13   11   7   7   9   9     14   Dhenkanal   10   10   6   3   10   10   12   11     15   Anugul   12   11   4   8   12   13   11   12     16   Nayagarh   8   7   2   5   11   9   7   7     17   Khordha   5   6   1   1   1   3   2     18   Puri   2   3   12   6   3   5   2   5     19   Ganjam   18   18   14   20   17   19   18   19     20   Gajapati*   22   22   3   9   23   24   22   21     22   Boudh*   19   17 <td>10</td> <td>Kendrapada</td> <td>3</td> <td>2</td> <td>8</td> <td>4</td> <td>5</td> <td>4</td> <td>4</td> <td>3</td>	10	Kendrapada	3	2	8	4	5	4	4	3
13   Jajpur   7   8   13   11   7   7   9   9     14   Dhenkanal   10   10   6   3   10   10   12   11     15   Anugul   12   11   4   8   12   13   11   12     16   Nayagarh   8   7   2   5   11   9   7   7     17   Khordha   5   6   1   1   1   3   2     18   Puri   2   3   12   6   3   5   2   5     19   Ganjam   18   18   14   20   17   19   18   19     20   Gajapati*   26   26   27   28   25   26   26   26     21   Kandhamal*   22   22   3   9   23   24   22   21     22   Boudh*   19	11	jagatsinghpur	1	1	10	7	2	2	1	1
14   Dhenkanal   10   10   6   3   10   10   12   11     15   Anugul   12   11   4   8   12   13   11   12     16   Nayagarh   8   7   2   5   11   9   7   7     17   Khordha   5   6   1   1   1   3   2     18   Puri   2   3   12   6   3   5   2   5     19   Ganjam   18   18   14   20   17   19   18   19     20   Gajapati*   26   26   27   28   25   26   26   26     21   Kandhamal*   22   22   3   9   23   24   22   21     22   Boudh*   19   17   11   10   21   20   16   16     23   Subarnapur*   15<	12	Cuttack	6	4	5	2	4	3	5	4
15 Anugul 12 11 4 8 12 13 11 12   16 Nayagarh 8 7 2 5 11 9 7 7   17 Khordha 5 6 1 1 1 1 3 2   18 Puri 2 3 12 6 3 5 2 5   19 Ganjam 18 18 14 20 17 19 18 19   20 Gajapati* 26 26 27 28 25 26 26 26   21 Kandhamal* 22 22 3 9 23 24 22 21   22 Boudh* 19 17 11 10 21 20 16 16   23 Subarnapur* 15 13 20 21 19 16 14 14   24 Balangir* 21 21 18 19 20 22 21 22	13	Jajpur	7	8	13	11	7	7	9	9
16   Nayagarh   8   7   2   5   11   9   7   7     17   Khordha   5   6   1   1   1   1   3   2     18   Puri   2   3   12   6   3   5   2   5     19   Ganjam   18   18   14   20   17   19   18   19     20   Gajapati*   26   26   27   28   25   26   26   26     21   Kandhamal*   22   22   3   9   23   24   22   21     22   Boudh*   19   17   11   10   21   20   16   16     23   Subarnapur*   15   13   20   21   19   16   14   14     24   Balangir*   21   21   18   19   20   22   25   25   25   25   25<	14	Dhenkanal	10	10	6	3	10	10	12	11
17Khordha5611113218Puri23126352519Ganjam181814201719181920Gajapati*262627282526262621Kandhamal*2222392324222122Boudh*191711102120161623Subarnapur*151320211916141424Balangir*212118192022212225Nuapada*252529252625252526Kalahandi*242423232417242427Rayagada*282826272727272728Nabrangpur*272925293030293029koraput*303022222828282828	15	Anugul	12	11	4	8	12	13	11	12
18 Puri 2 3 12 6 3 5 2 5   19 Ganjam 18 18 14 20 17 19 18 19   20 Gajapati* 26 26 27 28 25 26 26 26   21 Kandhamal* 22 22 3 9 23 24 22 21   22 Boudh* 19 17 11 10 21 20 16 16   23 Subarnapur* 15 13 20 21 19 16 14 14   24 Balangir* 21 21 18 19 20 22 21 22   25 Nuapada* 25 25 29 25 26 25	16	Nayagarh	8	7	2	5	11	9	7	7
19Ganjam181814201719181920Gajapati*262627282526262621Kandhamal*2222392324222122Boudh*191711102120161623Subarnapur*151320211916141424Balangir*212118192022212225Nuapada*252529252625252526Kalahandi*242423232417242427Rayagada*282826272727272728Nabrangpur*272925293030293029koraput*3030222228282828	17	Khordha	5	6	1	1	1	1	3	2
20 Gajapati* 26 26 27 28 25 26 26 26   21 Kandhamal* 22 22 3 9 23 24 22 21   22 Boudh* 19 17 11 10 21 20 16 16   23 Subarnapur* 15 13 20 21 19 16 14 14   24 Balangir* 21 21 18 19 20 22 21 22   25 Nuapada* 25 25 29 25 26 25 25 25   26 Kalahandi* 24 24 23 23 24 17 24 24   27 Rayagada* 28 28 26 27 27 27 27 27   28 Nabrangpur* 27 29 25 29 30 30 29 30   29 koraput* 30 30 22 22 28 28 28	18	Puri	2	3	12	6	3	5	2	5
21 Kandhamal* 22 22 3 9 23 24 22 21   22 Boudh* 19 17 11 10 21 20 16 16   23 Subarnapur* 15 13 20 21 19 16 14 14   24 Balangir* 21 21 18 19 20 22 21 22   25 Nuapada* 25 25 29 25 26 25 25 25   26 Kalahandi* 24 24 23 23 24 17 24 24   27 Rayagada* 28 28 26 27 27 27 27 27   28 Nabrangpur* 27 29 25 29 30 30 29 30   29 koraput* 30 30 22 22 28 28 28 28 28 28 28 28 28 28 28 28 28 28 2	19	Ganjam	18	18	14	20	17	19	18	19
22 Boudh* 19 17 11 10 21 20 16 16   23 Subarnapur* 15 13 20 21 19 16 14 14   24 Balangir* 21 21 18 19 20 22 21 22   25 Nuapada* 25 25 29 25 26 25 25 25   26 Kalahandi* 24 24 23 23 24 17 24 24   27 Rayagada* 28 28 26 27 27 27 27 27   28 Nabrangpur* 27 29 25 29 30 30 29 30   29 koraput* 30 30 22 22 28	20	Gajapati <sup>*</sup>	26	26	27	28	25	26	26	26
23 Subarnapur* 15 13 20 21 19 16 14 14   24 Balangir* 21 21 18 19 20 22 21 22   25 Nuapada* 25 25 29 25 26 25 25 25   26 Kalahandi* 24 24 23 23 24 17 24 24   27 Rayagada* 28 28 26 27 27 27 27 27   28 Nabrangpur* 27 29 25 29 30 30 29 30   29 koraput* 30 30 22 22 28	21	Kandhamal <sup>*</sup>	22	22	3	9	23	24	22	21
24 Balangir* 21 21 18 19 20 22 21 22   25 Nuapada* 25 25 29 25 26 25 25 25   26 Kalahandi* 24 24 23 23 24 17 24 24   27 Rayagada* 28 28 26 27 27 27 27   28 Nabrangpur* 27 29 25 29 30 30 29 30   29 koraput* 30 30 22 22 28 <td>22</td> <td>Boudh<sup>*</sup></td> <td>19</td> <td>17</td> <td>11</td> <td>10</td> <td>21</td> <td>20</td> <td>16</td> <td>16</td>	22	Boudh <sup>*</sup>	19	17	11	10	21	20	16	16
25Nuapada*252529252625252526Kalahandi*242423232417242427Rayagada*282826272727272728Nabrangpur*272925293030293029koraput*3030222228282828	23	Subarnapur*	15	13	20	21	19	16	14	14
26   Kalahandi*   24   24   23   23   24   17   24   24     27   Rayagada*   28   28   26   27   27   27   27   27     28   Nabrangpur*   27   29   25   29   30   30   29   30     29   koraput*   30   30   22   22   28   28   28   28	24	Balangir*	21	21	18	19	20	22	21	22
27   Rayagada*   28   28   26   27	25	Nuapada*	25	25	29	25	26	25	25	25
28   Nabrangpur*   27   29   25   29   30   30   29   30     29   koraput*   30   30   22   22   28   28   28   28	26	Kalahandi*	24	24	23	23	24	17	24	24
29   koraput*   30   30   22   22   28   28   28   28	27	Rayagada*	28	28	26	27	27	27	27	27
	28	Nabrangpur*	27	29	25	29	30	30	29	30
30   Malkangiri*   29   27   30   30   29   29   30   29	29	koraput*	30	30	22	22	28	28	28	28
	30	Malkangiri*	29	27	30	30	29	29	30	29

Table - 4: Literacy Rankings of Districts of Odisha for Across Rural-Urban & Male-Female

Source: Calculated from census 2001 and 2011 data.\*KBK plus Districts. Note: Highest percentage of literacy is given rank 1.

If we focus on the bottom ten districts as per rural-urban and male-female literacy rate, 9 KBK districts are in bottom ten in both 2001 and 2011 in rural literacy. For urban literacy, 7 KBK districts have rankings in the bottom ten in both the census periods though there is some change in rankings among them. Rankings of three of these districts in urban literacy have



worsened in 2011 census(Gajapati, Rayagada and Nabarangapur). For female literacy, 9 KBK districts are thre in bottom ten as per 2001 census. Only Kalahandi has been able to come out from bottom ten districts in female literacy in 2011. The same 9 districts are also in bottom ten in both the censuses as far as male literacy is concerned. Bouch and Subarnapur are the only two districts which have a rank above the rest of the KBK districts but their ranks have nothing to cheer about. The very backward KBK districts that are showing a fall in rank of literacy are Gajapati(urban and female), Kandhamal(urban and female) and Nabarangapur(rural and male).Similarly, among the backward KBK districts, Bolangir( urban, male and female), Rayagada(urban) and Subarnapur(urban) are showing a decline in literacy ranks. Ranking in terms of literacy for all the categories has remained unchanged for Koraput though the rank is quite low i.e between 22 and 30. In terms of urban literacy, Nabarangapur has fared poorly (from 25<sup>th</sup> rank in 2001 to 29<sup>th</sup> rank in 2011). On the other hand Nuapada has improved its position in urban literacy. Not maintaining the rank in rural literacy and female literacy questions the success of various literacy programmes implemented. It implies that though the population is increasing the literacy is not increasing at the same rate or other districts are way ahead of literacy percentage achievement. For worsening of ranks for rural literacy, it is little more perplexing as there is rural exodus of labour in Odisha. However, for most of the backward and very backward districts the ranks have worsened though the literacy percentage has increased for all the districts. The most important point here is that over a 10 year period which is long enough to implement the various development programmes, certain backward KBK districts have not performed up to expectations.

**3.3. Health and Sanitation Rankings:** Just like lack of literacy, deprivation can also be measured in terms of access to health, sanitation and mortality rates. Table 5 gives a comparative picture of bottom ten districts of Odisha in terms of different parameters other than literacy. For status of health, government health institutions and health sub centres (Economic Survey, 2013-14) are taken together for analyzing the access to health facilities which shows that only 13 districts are having an average better than the state average of 0.20565. The bottom ten districts are non backward districts. Interestingly most of the high ranking districts are backward and very backward. There are six KBK plus districts in top ten districts getting access to health facilities. It implies that as far as access to health is concerned, these districts have got required governmental intervention. However, this may be misleading considering the fact that for Malkangiri (rank no 1) the highest amount of health facilities is only 0.33units per thousand population. If one takes out the relatively advanced districts from the picture (assuming that developed districts attract private health care facilities), we can infer that the access to health facilities has not improved much for these districts.

Similarly the districts are ranked on the basis of access to sanitation (column 3, Table 5). Number of toilets available per 1000 population for each district has been taken as a proxy for access to sanitation. The number of household toilets, the number of school toilets and number of anganwadi toilets are clubbed together for each district (data from Economic Survey 2013-14), then divided by the respective population (2011 Census) and multiplied by 1000. For Odisha the figure is 97 toilets per thousand population. The figure ranges from 57.27 toilets per thousand population (Kandhamal) to162.43 toilets per thousand population (Jagatsinghpur).Only thirteen districts are having the average more than the state figures .Three KBK districts among five backward and very back ward districts are having a rank of below 20. Puri, Anugul, Jharsuguda , Sambalpur and Khordha are among relatively developing/developed districts having ranks below 20.

		_		-
	1	2	3	4
	Access to health facilities	Sanitary ranking	H.H.Access to toilet/latrine within their premises	% of H.H. fetching water from faraway places
1	Khurda(30)	Kandhamal *(30)	Debagarh(30)	Kandhamala * (30)
2	Jarsuguda(29)	Kendujhar(29)	Malkangiri *(29)	Kendujhar (29)
3	Baleswar(28)	Khordha(28)	Nabarangapur * (28)	Dhenkanal(28)
4	Bhadrak(27)	Jharsuguda(27)	Subarnapur *(27)	Balangir * (27)
5	Cuttack(26)	Sambalpur(26)	Baudh *(26)	Mayurbhanj(26)
6	Ganjam(25)	Nabarangapur *(25)	Kandhamal *(25)	Subarnapur * (25)

Table - 5, Bottom Ten Districts of Odisha on the basis of rankings of different parameters of deprivation



7	Anugul(24)	Puri(24)	Kalahandi *(24)	Debagarh(24)
8	Debagarh(23)	Rayagada *(23)	Nuapada *(23)	Kalahandi * (23)
9	Puri(22)	Anugul (22)	Rayagada * (22)	Kendrapada(22)
10	Jajpur(21)	Ganjam(21)	Balangir *(21)	Nuapada * (21)

\* KBK plus Districts

Figures in parentheses shows the rank of the districts.

**Source:** Computed from 2011 Census Data; Calculated from data on Health Institutions, toilets and H.H access to toilets in their premises from Economic Survey of Odisha, 2013-14.

As per 2011 census, 78 per cent of households in Odisha do not have any latrine within their premises and 76.6 percent households still are in the habit of open defecation .Only eleven out of thirty districts are having the percentage of households having latrine facilities within their households premises which is higher than the state average (22.4%). Nine out of these ten lowest ranking districts are KBK districts (Column 3, Table 5).

For Odisha as a whole, 22.4 percent households have drinking water in their own premises while 42.2 percent households have water sources near their premises. If one looks at the 2011 census data on drinking water facilities, only 11 districts have a higher than 22.4 percent (state average) of households have drinking water facilities within their premises. Seventeen districts are having percentage of households having water near their premises which is higher than the state average. About 35.4 percent of households in Odisha have access to drinking water away from their premises. 15 districts have a higher percentage than the state average (35.4%) as far as fetching of water from faraway places is concerned. Eight out of ten lowest rankings districts are backward and highly backward. Five of them are KBK districts (column 4, Table5).

**3.4. IMR and other indicators of health for the bottom ten Districts:** An improvement in IMR, Neo Natal Mortality rate and Post Neo Natal Mortality Rates is a reflection of the improvement in quality of lives of people. Seven districts of Odisha are in top hundred districts in IMR in India. Out of these three are KBK plus districts (Kandhamala, Balangir and Rayagada).In this respect analyzing the inter district disparity would give a clear picture.

Table 6 &7 analyse the situation of bottom ten districts of Odisha in terms of IMR, Neo Natal Mortality Rates, post Neo Natal Mortality Rate and under five mortality rates for the two periods 2010-11 and 2012-13. The ten bottom districts are having figures higher than the state figures in 2010-11. From Table 6 it is clear that three KBK districts (starred ones) are in the bottom ten group. However, three relatively more advanced districts (Cuttack, Kendrapada and Nayagarh) have been able to move out of this group in 2012-13. In terms of neo natal mortality rate, three KBK districts are there in the group of bottom ten districts in both the periods (Table 6). Jharsuguda has been able to come out of this group in 2012-13. For Debagarh it has become worse.

	Infant mortality I	Rate(per 1000	Neo Natal Mortality Rate(per 1000)			
		2010-11 2012-13			2010-11	2012-13
	ODISHA	62	56	ODISHA	40	37
1	Balangir*	100	97	Balangir*	75	71
2	Kandhamala*	88	82	Dhenkanal	54	46
3	Puri	80	75	Bargarh	51	46
4	Dhenkanal	76	67	Boudh*	48	45
5	Khordha	76	67	Khordha	46	43
6	Nayagarh	67		Kendrapada	45	43
7	Bargarh	66	60	Kandhamala*	43	39

# Table6: IMR and Neo Natal Mortality Rate of bottom Ten Districts of Odisha 2010-2011 to 2012-13



8	Rayagada*	65	58	Puri	42	41
9	Kendrapada	64		Jharsuguda	41	
10	Cuttack	63		Debagarh	41	46

Source: Extracted from Annual Health Survey data 2010-11 and 2012-13

Five KBK plus districts are in bottom ten group of under-five mortality rate (Table7). Further, seven KBK districts are there in bottom ten group of post neo natal mortality rate. However, Koraput and Malkangiri have come out of this group in 2012-13 having a rate of 17 and 16 per 1000 -lower than state figure. The u8nder five mortality rate is much higher for these districts.

	Under 5 Mor	tality Rate(p	er 1000)	Post Neo Natal Mortality Rate(per 1000)		
		2010-11	2012-13		2010-11	2012-13
	ODISHA	82	75	ODISHA	22	19
1	Kandhamala*	145	139	Kandhamala*	45	43
2	Balangir*	115	111	Puri	38	34
3	Puri	108	101	Koraput*	36	_
4	Rayagada*	105	98	Malkangiri*	33	
5	Khordha	102	96	Kalahandi*	32	23
6	Ganjam	93	87	Nabarangapur*	32	21
7	Cuttack	91	85	Rayagada*	32	30
8	Dhenkanal	90	78	Gajapati	32	28
9	Boudh *	89	85	Khordha	29	25
10	Nabarangapur*	87	83	Nuapada *	23	24

Та	able -7, Unde	r Five and Post Neo Natal Mortality Rate of bo	ottom ten districts of	Odisha, 2010-11 to 2012-13
		Under 5 Mortality Rate(per 1000)	Post Neo Natal M	ortality Rate(per 1000)

Source: Annual Family Health Survey Data, 2010-11 and 2012-13

Besides the above mentioned parameters, Six KBK districts (Koraput, Nabarangapur, Kandhamala, Gajapati, Malkangiri and Boudh) are in the bottom ten districts of Odisha having highest percentage of children with less than 2.5 kg birth weight. Surprisingly, seven KBK districts are in the ten districts showing least number of people per 100000 population for Chronic illnesses<sup>5</sup> and acute illness<sup>6</sup>.Bhadrak(17616),Baleswar(16083) and Jajpur (14245) top the list for maximum number of acute illnesses. Nayagarh(21919), Puri(15698) and Khordha(14320) top the list for chronic illness. Table 8 makes it clear

Tabl	Table 8 :Districts showing Least no of people having diagnosed										
	for any kind of illness										
Rankschronic (per 100,000)acute (per 100,000)											
1	Kendujhar	ijhar 3034 Koraput*		4594							
2	Rayagada*	ada* 3346 Nabarangpur*		4747							
3	Nuapada*	3377	Rayagada*	5104							

<sup>5</sup> Diabetes, Hypertension, T.B, Asthama /chronic respiratory diseases and Arthritis.

<sup>6</sup> Fever all types, acute respiratory infection, Diarrhea/dysentery.

International Journal of Management and Social Science Research Review, Vol.1, Issue.13, July - 2015. Page 145



4	Malkangiri*	4336	Subarnapur*	5939
5	Baleswar	4664	Nuapada*	6110
6	Nabarangapur*	4942	Sundergarh	6776
7	Koraput*	5555	Kalahandi*	7169
8	Kalahandi*	6322	Gajapati*	7365
9	Mayurbhanj	6377	Ganjam	7863
10	Kandhamala*	6389	Cuttack	8164
Source: Annual Health Survey 2012-13				

## **V.SUGGESTIONS AND CONCLUSIONS**

Poverty and deprivation are not new to India in general and Odisha in particular but the state figures cannot give a clear picture regarding the inter-district disparity of the level of deprivation. Odisha contributes to about 8% of the total burden of malnutrition in the Country. The Prevalence of malnutrition amongst under-five is 41% in Odisha as compared to the National average of 40%, which takes into account both acute and chronic malnutrition. Out of total of 30 Districts in Odisha, the KBK Plus districts (Koraput, Bolangir, Malkanagiri, Nuapara, Gajapati, Kalahandi, Nawarangpur, Sonepur and Kandhamal, Boudh and Rayagara) are found in the bottom ten districts in all categories of literacy, access to sanitation and health. Annual health survey data indicate that the some of the above eleven Districts report maximum number of under five deaths in Odisha. This could be partly attributed to the high burden of malnutrition prevalent in these districts.

Infrastructure, in addition to the above discussed indices also plays a larger role for increasing the development of the districts. Rural electrification and transport can be taken as the representative of infrastructure development. District wise percentage of villages electrified in 2012-13 data shows that Koraput, Boudh, Kalahandi,, Malkangiri, Rayagada, Kandhamala, Sundergarh, Nabarangapur and Gajapati are having percentage of electrified villages less than state average of 88%.

Analyzing the status of the bottom ten districts of Odisha, one finds that the KBK districts are lagging behind other districts in all aspects. From literacy point of view the situation has marginally improved for this districts. However, on basis of sanitary access and drinking water facilities the situation for them has not improved at all. The health ranking of these districts only on government health facilities belies the true development status. The state has been operating on the assumption that the development of Orissa's immense reserve of natural resources would lead to all round development of the state and thereby also alter the conditions of the poor. However this has not happened over the last ten to fifteen years period. The acute inter district disparity of deprivation seems to infer that proper intervention and/ or proper channelization of government resources are required. Pumping of central funding in a big way may be helpful for these acutely deprived districts However, the new method of Centre-State sharing of the development programmes under the 14<sup>th</sup> Finance Commission may decelerate the progress of these districts.

Role of agriculture is very important especially for a predominantly agricultural state like Odisha. In addition to the role of agriculture as a source of growth, it can be seen as an instrument for poverty reduction since more than 80 percent of the total workforce is directly dependent on agriculture. This includes about 3.4 million cultivators and 2.1 million agricultural labourers. Agriculture employs over 65% of the total workforce and 80% of the workforce in rural areas. Odisha, which ranked 5th on the Nutrition Index in 1994, ranks 12th in 2008 (Global Hunger Index 2008). Thus policy makers should take note of this.

## REFERENCES

- 1. Government of India, "Annual Health Survey2012-13, Fact Sheet, Odisha", Office of the Registrar General and Census Commissioner, India, Ministry of Home Affairs, , New Delhi.
- 2. Government of India, "Primary Census Abstract, Data Highlights, Odisha Series 22", Census 2011 Report, New Delhi.
- 3. Government of Odisha, "Odisha Economic Survey 2013-14", Planning and Coordination Department,



Bhubaneswar.

- 4. Government of Orissa, (2008), "Report of Regional Imbalance Enquiry Commission-Orissa", Planning & Coordination Department of Odisha, Bhubaneswar, Mimeo.
- 5. http://www.ifri.org/publication-hunger-across-states-india-state-hunger-index
- 6. http://www.ophi.org.uk/policy/multidimensional-poverty-index/mpi-data-methodology
- 7. http://www.undp.org.in/sites/default/files/GDI\_and\_GEM\_Report.pdf
- 8. Human Development Report 2010- The Real Wealth of Nations: Pathways to Human Development.
- 9. Indian Human Development Report,2011,IAMR & Planning Commission
- 10. Krishnaji, N.(2012), "Abolish the Poverty Line", Economic & Political Weekly, Vol XLVII, No. 15, April 14, 2012.
- 11. Manna, G.C.,(2012), "On Some Contentious Issues of the New Poverty Line", Economic and political Weekly, Vol. XLVII,No. 15, April 14,2012.
- 12. National Family Health Survey, 2011-12,
- 13. Planning Commission Reports, various years.
- 14. Public Health Nutrition Programmes in Odisha: A Conceptual Approach to Assessment of Intervention. Volume : 1 | Issue : 4 , Sep 2012 .