

## **Prevalence of Child Poverty in India and China**

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*Paper to be Presented at the  
Session on “Demographic Billionaires: India and China Compared”  
Annual Meetings of Population Association of America, 2007*

There has been increasing interest in evaluating the impact of economic reforms, economic liberalization, and structural adjustment policies on child labor and child poverty. There is a perception that during the 1980's and 1990's, there was 'deterioration in the rate of improvement of children's living standards'. In this paper we review the literature and estimates of child poverty in China and also provide estimates of absolute and relative child poverty in rural India for the year 1993-94 and 1999-00. Comparability issues aside, it is clear that prevalence of child poverty is higher in India than in China. We show that, in rural India, absolute child poverty declined in India between 1993-94 and 1999-00. Relative child poverty, i.e. the proportion of children living in households with monthly per capita consumption expenditure (MPCE) below 60 percent of the median MPCE declined at a slower rate than absolute child poverty. We find that the states with the high prevalence of child poverty are also the states with higher proportion of malnourished children.

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## 1. Introduction

Children from poorer households are at a serious disadvantage in the sense that they could suffer from inferior health and educational outcomes. This can potentially handicap them for the rest of their lives. Consequently, issues relating to child poverty have received attention among policy makers not only in developing countries but also in developed countries. Recently, the focus has been on the impact of economic reforms, economic liberalization, and structural adjustment policies not only on poverty but also on child labor and child poverty. Waddington (2004) concludes that during the 1980's and 1990's, there was 'deterioration in the rate of improvement of children's living standards'. This period incidentally witnessed the onset of economic reforms and liberalization. It was during this period that economic reforms commenced in the world's most populace countries; viz. India and China.

Child poverty has been measured along different dimensions, viz. proportion of children suffering from malnutrition, school enrollment and drop out rates, and proportion of children living in below poverty line households. Using the Demographic Health Survey data researchers have examined issues relating to changed in inequalities in reproductive and child health outcomes. Alternatively, child poverty can be measured in reference to the monthly consumption expenditure of households. Information on the consumption pattern of households is routinely collected as part of numerous nationally representative surveys in many countries.

Estimates of absolute poverty measure the percentage number of population living below the subsistence minimum. It is well known that a limitation of the concept of absolute poverty is that it is defined and measured with respect to an absolute minimum. This minimum is independent of general level of income or standard of living. Time series information on such estimates provide little clue as to how far the poor have benefitted from or participated in the growth process of the economy. Recognizing this there is increasing focus on whether growth is 'pro poor', whether the process is 'inclusive' or whether the growth process bypasses the vulnerable groups.

Some authors have argued that growth is pro poor if absolute poverty declines. Others have argued growth is pro poor if the poor benefit more compared to the non poor. From a policy perspective, the Indian government in the approach paper to the Eleventh Five Year Plan lays down 'Inclusive Growth' as its objective (Planning Commission 2006, Murgai, Pritchett and Wes 2006). However, the approach paper does not provide an explicit statement on its concept of 'Inclusive Growth', which has formed the basis for its plan outline and recommendations. It does not provide any empirical evidence on the extent of 'inclusiveness' of the growth process so far. Nor does it provide any profile of the social or occupational or regional groups or sub-groups excluded from the growth process or their magnitudes.

In contrast to absolute poverty, relative poverty captures elements of the two often used phrases, viz. 'inclusive growth' and 'pro poor growth'. The concept of relative poverty takes into account the general level of income or consumption by considering the median monthly per capita consumption expenditure (MPCE). Relative child poverty is defined as the proportion of children living in households with MPCE lower than 60 percent of the MPCE of the median

household. The choice of the relative poverty line as a proportion of the median is in line with the literature on relative poverty in the developed countries (United Nations Children's Fund 2005).

If over course of time, absolute poverty and relative poverty both decline one could interpret this as inclusive growth or pro poor growth.

One criticism of relative poverty is that it is invariant to the situation where every the consumption of every individual increases or decreased by the same amount or percentage. Thus if consumption of every individual decreases by 10 percent then relative poverty is unchanged though absolute poverty will increase. This criticism does not affect the analysis presented in this paper since such a situation has not arisen in the Indian case.

In this paper, we compare prevalence of poverty and child poverty in particular in India and China. For China, we draw upon the existing literature to discuss the extent of poverty. For India, we compute estimates of child poverty, both absolute and relative poverty. We find that poverty is higher in India compared to China.

In the context of India, we also provide estimates of the extent to which absolute and relative poverty declined over the period 1993-94 and 1999-00. Not surprisingly, we find that absolute poverty has declined faster than relative poverty. We find that states with a high prevalence of child poverty are also the states with a large proportion of malnourished children. These states spend little on child nutrition programmes implying that coverage of such programmes in these states is far from universal.

This paper is structured as follows. In Section 2 we present a comparison of key indicators of human development. In Section 3 we draw upon the existing literature to discuss the extent of poverty and child poverty in China. In Section 4 we provide estimates of absolute and relative child poverty in India. This is followed by a discussion of Integrated Child Development Scheme (ICDS), a programme aimed at improving child health outcomes. In Section 5 we offer some concluding thoughts.

## **2. India and China Some Key Comparisons**

According to the Human Development Report 2006, India was ranked 126<sup>th</sup> out of 177 countries with a human development index (HDI) of 0.611. China was ranked 81<sup>st</sup> with a HDI of 0.768. Norway was ranked first with a HDI of 0.965.

In 2001, for China as a whole, Chen and Ravallion report that 7.97 percent of the Chinese were poor. In contrast in India, 26.10 percent of people were living below the poverty line.

There are sizable differences between India and China when we consider the life expectancy at birth and child nutrition outcomes. In 2004, the life expectancy at birth in China was 71.9 years as against 63.6 in India. Ranking of the countries by life expectancy reveals that China was ranked 72<sup>nd</sup> while India was ranked 121<sup>st</sup> out 177 countries. The difference is particularly stark when one considers children who are underweight for their age. In 2004, among children aged 0 – 5 years, 47 percent of children in Indian were underweight. Only Bangladesh and Nepal had a higher proportion of underweight children.

In contrast to India, in China only 8 percent of children aged 0 – 5 years were underweight for their age. Tandon and Zhuang (2007) report that the numbers for China mask large rural urban variations in indicators of child health like height for age. They conclude that in the post reform period, in China there has been marked decline in the pace of improvements in health outcomes. They also find divergence in rural and urban health outcomes during the reform period and marked differences in health care coverage across poor and rich households.

### **3. Child Poverty in China**

Based on the official poverty line, poverty in rural China declined from 40.65 percent in 1980 to 4.75 percent in 2001. Using a different poverty line Chen and Ravallion (2004) find that poverty declined from 75.70 percent in 1980 to 3.32 percent. In 1982, based on the official poverty line, poverty in urban areas was estimated at 0.82 percent in 1981. By 2001 there were no poor households in urban China. Using a different poverty line Chen and Ravallion report that urban poverty was 6.01 percent in 1981 and by 2002 it had declined to 0.54 percent. For China as a whole, they report that population weighted poverty numbers: poverty declined from 52.84 percent in 1981 to 7.97 percent in 2001. Among their main findings are the following. While China has managed to reduce poverty substantially, the progress has been uneven. Whether the poor benefited from economic growth depended on the 'geographic and sectoral composition'.

Given the remarkable achievement in poverty reduction it is only to be expected that child poverty will not be a severe problem in China. Solomon et al (2004) provide a review of issues relating to urban poverty and also focus on childhood poverty. Aiguo and Zhong (2001) examine the impact of economic reforms and external liberalization on child poverty and well-being in China. They report that child poverty in urban areas fell from 24.4 percent in 1988 to 6.6 percent in 1999. Using an alternative urban poverty line (comparable to rural poverty line) urban child poverty decreased from 6.7% in 1988 to 1.9% in 1999. They also find that there are spatial variations in extent of child poverty in China. In the coastal provinces in 1999, child poverty was 2.45 percent, in the interior regions it was 6.20 percent and in rural areas it was 5.15 percent. They also provide estimates of child poverty by age groups.

### **4. Estimates of Child Poverty in India**

Comparability issues aside, overall, the prevalence of poverty in India is much higher than in China. Rural poverty declined from 37.27 percent in 1993-94 to 27.09 percent in 1999-00. During this period urban poverty declined from 32.26 percent to 23.62 percent. The national averages mask large differences across the states of India. Rural poverty was concentrated in the states of Bihar, Madhya Pradesh, Orissa and Uttar Pradesh. The differences in prevalence of poverty across the states of household get reflected in the stark differences in the proportion of poor children across the various states.

We present estimates of absolute child poverty and relative child poverty for the year 1993-94 and 1999-00. In addition to all India estimates, we provide estimates for the 17 major states of India.

Absolute poverty among children in the age group 0 – 4 years declined from 46.78 percent to 35.73 percent between 1993-94 and 1999-00 in rural India. This implies that poverty was lower in the new cohort of children aged 0-4 years in 1999-00. The children in the age group 0 – 4 years in 1993-94 would constitute the cohort of children aged 5 – 9 years in 1999-00. Poverty among children in the age group 5–9 years was 35.74 percent in 1999-00.

Relative poverty among children in the age group 0 – 4 years declined from 13.57 percent to 11.7 percent between 1993-94 and 1999-00 in rural India (Table 2). Relative poverty among children in the age group 5–9 years was 11.18 percent in 1999-00. While there has been a sharp drop in the extent of absolute child poverty, a similar decline is not evident in the prevalence of relative poverty.

There are stark differences in the level of absolute child poverty across the states of India and the extent of decline in the level of absolute child poverty has not been uniform across the states of India (Table 1).

In 1993-94, the prevalence of absolute poverty among children aged 0 – 4 years was highest in Bihar (67.34 percent), Orissa (60.43 percent), Assam (57.32 percent), and West Bengal (54.42 percent). In the states of Maharashtra, Madhya Pradesh and Uttar Pradesh almost 50 percent of the children are poor. The states of Bihar, Orissa and Assam had the highest incidence of rural poverty in 1993-94.

There are substantial differences in the extent to which child poverty declined over the period 1993-94 and 1999-0. By 1999-00, there was no change in prevalence of child poverty in Orissa. In Orissa poverty among children aged 0 – 4 years was nearly 62 percent.

In 1993-94, the top four states of incidence of child poverty were Bihar, Orissa, Assam, and West Bengal. In 1999-00 the states with the worst record in child poverty were Orissa, Bihar, Assam, and Madhya Pradesh. In percentage terms, there were large reductions in child poverty in Haryana, Jammu and Kashmir, Himachal Pradesh and Kerala.

When one superimposes the figures on malnutrition on the child poverty numbers a disturbing picture emerges. Data from the National Family Health Survey (NFHS-1) conducted in 1992-93, revealed that children are deprived along multiple dimensions in the above mentioned states. In the states of Bihar, Uttar Pradesh, Madhya Pradesh, and West Bengal over 60 percent of the children under 4 years old were suffering from moderate to severe malnutrition. Among the states with the worst ICDS coverage are Rajasthan, Uttar Pradesh, Bihar, Orissa and Madhya Pradesh. The states with the sizable numbers of malnourished children also have the ‘smallest government budgetary allocations per malnourished child’ (Gagnolati et. al 2006).

In Maharashtra and Gujarat the state level aggregates suggest that malnutrition is a lesser problem. However, it is well known that there are geographical pockets in these states with a large proportion of malnourished children.

Ghosh (2006) has argued that there is a marked deterioration in the nutritional status of Indian children aged 6 – 24 months. This marked deterioration of course has long term

consequences. Recognising the need to improve child health outcomes, in 1975, the Government of India instituted the ICDS as an intervention programme. This is one of the world's largest integrated early child development programmes. Under this programme it is stipulated that there should be one anganwadi centre per 1000 population and one centre per 700 population in tribal areas. Overtime the programme has evolved and covers aspects of reproductive and child health outcomes. Despite the fact that ICDS has been operational for over 3 decades, 47 percent of India's children are under nourished, 16 percent are acutely undernourished, 58 percent are not fully vaccinated and 14 percent were not vaccinated at all. In case of 34 percent of children the birth was not preceded by any antenatal check up at all (National Advisory Council 2004).

While the southern states of Kerala and Tamil Nadu present contrasting pictures on poverty, these states have the best track record of delivering services under ICDS scheme<sup>1</sup> (Dreze 2006). In Kerala, poverty among children aged 0-4 years was 13 percent in 1999-00 compared to 30.8 percent in Tamil Nadu. Over the period 1993-94 and 1999-00, there was a much sharper decrease in child poverty in Kerala (61.4 percent) compared to Tamil Nadu (22.2 percent). The FOCUS survey 2004 found that all the respondents, i.e. mothers who were surveyed, reported that the local AWC opened regularly. Also 94 percent of respondents reported that the AWC provided supplementary nutrition and 96 percent of respondents believed that ICDS is important for their child's welfare.

In order to make coverage under ICDS universal it is estimated that a total number of 1,421,405 AWC need to be opened. Not surprisingly, 72 percent of the new AWC will have to be opened in the states of Assam, Bihar, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Uttar Pradesh and West Bengal (National Advisory Council 2004).

## **5. Conclusions**

The context of economic reform involving changes in the economic policy framework, given historical experience of several developing countries, has called for a careful scrutiny of the distributional consequences of the growth process. However, there is little unambiguous evidence on the distributional dimension. Available studies are based largely on estimates of absolute poverty. In other words, there is little by way of conceptual clarity to debate and verify whether the observed growth process is inclusive, meaning (in common parlance) benefited the poor and the vulnerable groups.

This paper examines issues complementing those addressed in the literature on reproductive and child health outcomes. We compare the extent of child poverty (using the metric of MPCE of households) in India and China. While we rely on existing literature for estimates of child poverty in China, for India, we calculate the estimates using unit level data for 1993-94 and 1999-00. We find that overall poverty and hence child poverty in China is markedly lower than in India.

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<sup>1</sup> In addition, pre school education activities are integrated into the ICDS in these two states.

Since estimates of absolute poverty convey little information regarding the distributional consequence of the growth process, we also calculate the estimate of relative child poverty for India. This paper has established that absolute child poverty declined at a faster rate than relative poverty in India during the reform period. We find that the states with the high prevalence of child poverty are also the states with higher proportion of malnourished children.

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**Table 1: Estimates of Child Poverty using the Absolute Poverty Line in Rural India**

	1993-94			1999-00			Change			Change for Cohort*
	0-4 Years	5-9 Years	0-14 Years	0-4 Years	5-9 Years	0-14 Years	0-4 Years	5-9 Years	0-14 Years	
India	46.78	46.06	44.04	35.73	35.74	33.5	-23.6	-22.4	-23.9	-23.6
States										
Andhra Pradesh	25.04	23.22	21.5	18.33	14.88	14.35	-26.8	-35.9	-33.3	-40.6
Assam	57.32	54.52	53.11	51.46	49.38	48.28	-10.2	-9.4	-9.1	-13.9
Bihar	67.34	65.56	64.19	53.21	53.31	51.25	-21.0	-18.7	-20.2	-20.8
Gujarat	31.95	29.58	28.59	18.33	15.46	15.27	-42.6	-47.7	-46.6	-51.6
Haryana	35.96	33.66	33.49	11.54	9.12	9.28	-67.9	-72.9	-72.3	-74.6
Himachal Pradesh	41.69	36.6	36.34	13.63	13.09	11.45	-67.3	-64.2	-68.5	-68.6
Jammu & Kashmir	24.69	23.25	21.79	8.1	8.9	6.6	-67.2	-61.7	-69.7	-64.0
Karnataka	39.39	38.48	36.63	25.78	25.61	22.48	-34.6	-33.4	-38.6	-35.0
Kerala	33.8	31.41	31.06	13.04	11.76	12.26	-61.4	-62.6	-60.5	-65.2
Madhya Pradesh	49.81	48.75	46.99	45.32	46.07	44.02	-9.0	-5.5	-6.3	-7.5
Maharashtra	49.28	50.97	46.62	31.51	31.49	29.68	-36.1	-38.2	-36.3	-36.1
Orissa	60.43	61.31	57.45	61.93	62.57	58.38	2.5	2.1	1.6	3.5
Punjab	18.16	16.2	15.75	11.24	8.5	8.41	-38.1	-47.5	-46.6	-53.2
Rajasthan	34.39	32.58	31.47	18.85	18.39	16.73	-45.2	-43.6	-46.8	-46.5
Tamil Nadu	39.61	44.87	41.33	30.8	30	27.36	-22.2	-33.1	-33.8	-24.3
Uttar Pradesh	49.65	49.02	47.54	38.18	38.16	36.6	-23.1	-22.2	-23.0	-23.1
West Bengal	54.42	51.88	50.16	40.4	41.8	38.78	-25.8	-19.4	-22.7	-23.2

\* This is the percentage change in poverty among children aged 0-4 years in 1993-94 over children aged 5-9 years in 1999-00



**Table 2: Estimates of Child Poverty using the Relative Poverty Line in Rural India**

	1993-94			1999-00			Change			Change Cohort*
	0-4 Years	5-9 Years	0-14 Years	0-4 Years	5-9 Years	0-14 Years	0-4 Years	5-9 Years	0-14 Years	
India	13.57	13.1	12.22	11.7	11.18	10.44	-13.8	-14.7	-14.6	-17.6
States										
Andhra Pradesh	12.47	10.95	10.44	10.53	8.06	7.7	-15.6	-26.4	-26.2	-35.4
Assam	4.34	5.4	4.86	11.41	11.32	10.28	162.9	109.6	111.5	160.8
Bihar	8.25	6.93	6.98	6.6	6.27	5.96	-20.0	-9.5	-14.6	-24.0
Gujarat	10.89	10.42	9.87	13.46	11.21	11.33	23.6	7.6	14.8	2.9
Haryana	16.57	16.05	15.65	13.67	11.49	11.46	-17.5	-28.4	-26.8	-30.7
Himachal Pradesh	9.84	10.74	9.06	8.28	8.07	7.22	-15.9	-24.9	-20.3	-18.0
Jammu & Kashmir	9.69	9.76	8.44	8.03	8.64	6.46	-17.1	-11.5	-23.5	-10.8
Karnataka	12.92	14.4	12.27	8.86	11.63	8.89	-31.4	-19.2	-27.5	-10.0
Kerala	14.41	13.46	13	9.5	10.64	10.26	-34.1	-21.0	-21.1	-26.2
Madhya Pradesh	14	14.07	12.66	10.39	9.99	9.49	-25.8	-29.0	-25.0	-28.6
Maharashtra	16.87	17.41	15.36	12.18	12.51	12.2	-27.8	-28.1	-20.6	-25.8
Orissa	12.75	11.51	10.55	18.06	14.42	13.58	41.6	25.3	28.7	13.1
Punjab	11.44	11.11	10.49	15.06	11.2	11.26	31.6	0.8	7.3	-2.1
Rajasthan	13.1	11.93	11.36	7.94	6.74	6.69	-39.4	-43.5	-41.1	-48.5
Tamil Nadu	12.89	14.5	13.4	14.2	12.66	11.84	10.2	-12.7	-11.6	-1.8
Uttar Pradesh	12.95	13.39	12.48	7.59	7.11	6.89	-41.4	-46.9	-44.8	-45.1
West Bengal	9.86	8.55	8.15	6.69	7.46	6.41	-32.2	-12.7	-21.3	-24.3

\* This is the percentage change in poverty among children aged 0-4 years in 1993-94 over children aged 5-9 years in 1999-00