

# Economic Scenario of Poverty, Hunger and Malnutrition in India

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## Abstract

India is the second most populous country in the world with an estimated 1.2 billion people and the third largest economy by GDP. India was classified as a (lower) middle-income country by the World Bank in 2012. Hunger, malnutrition, hidden hunger and poverty all are related to each other. Poverty is considered to be the main cause of malnutrition and hunger, however rich people still found to be malnourished. In developing countries like India, children and adults are vulnerable to malnutrition because of low dietary intakes, infectious diseases, lack of appropriate care and inequitable distribution of food within the household. Three standard indices of physical growth that describe the nutritional status of children are Height-for-age (stunting), Weight-for-height (wasting), and Weight-for-age (underweight). The incidence of poverty declined from 45.3% in 1993-94 to 37.2% in 2004-05 and further to 21.9% in 2011-12. The percentage of persons below the Poverty Line in 2011-12 has been estimated as 25.7% in rural areas, 13.7% in urban areas and 21.9% for the country as a whole. The respective ratios for the rural and urban areas were 41.8% and 25.7% and 37.2% for the country as a whole in 2004-05. It was 50.1% in rural areas, 31.8% in urban areas and 45.3% for the country as a whole in 1993-94. In 2011-12, India had 270 million persons below the Tendulkar Poverty Line as compared to 407 million in 2004-05, that is a reduction of 137 million persons over the seven year period.

**Keywords:** Hunger, poverty, malnutrition, dietary intakes, income group.

India is the second most populous country in the world with an estimated 1.2 billion people and the third largest economy by GDP. India was classified as a (lower) middle-income country by the World Bank in 2012. However, despite economic growth and self sufficiency in food grains production, high levels of poverty, food insecurity and malnutrition persist in India. India is home to a quarter of all undernourished people worldwide. Addressing hunger issues require progress in food and nutrition security.

Hunger, malnutrition, hidden hunger and poverty all are related to each other. Poverty is considered

to be the main cause of malnutrition and hunger, however rich people still found to be malnourished. The concepts can be defined as follows:

### Poverty

Poverty can be expressed in relative as well as in absolute terms. Under Relative poverty the economic conditions of different regions or countries is compared. The capita income and the national income are the two indicators of relative poverty. Absolute poverty refers to the measure of poverty, keeping in view the per capita intake of calories and

minimum level of consumption. Measurement of poverty can be done either through expenditure and income method.

### **Hunger**

Hunger is the physical sensation of desiring food. When politician's relief workers and social scientists talk about people suffering from hunger, they usually refer to those who, for sustained periods, are unable to eat sufficient food to meet basic nutritional needs. Natural disasters, conflict, poverty, poor agricultural infrastructure and over-exploitation of the environment are the key causes of hunger.

### **Malnutrition and Hidden Hunger**

Malnutrition is a serious condition that occurs when a person's diet does not contain the right amount of nutrients. Malnutrition is caused by either an inadequate diet or a problem absorbing nutrients from food. There are many reasons why this might happen, including having reduced mobility, a long term health condition or a low income. Poor nutrition refers to both under-nutrition and over-nutrition. There are two basic types of malnutrition. The first and most important is **protein-energy malnutrition** (PEM). The second type of malnutrition, also very important, is micronutrient (vitamin and mineral) deficiency. This is not the type of malnutrition that is referred to when world hunger is discussed, though it is certainly very important.

Hidden hunger or micro-nutrient deficiency is unlike the hunger that comes from a lack of food. It is a chronic lack of vitamins and minerals that often has no visible warning signs, so that people who suffer from it may not even be aware of it. Its consequences are nevertheless disastrous; hidden hunger can lead to mental impairment, poor health and productivity, or even death.

### **Multidimensional Poverty Index**

The Oxford Poverty and Human Development Initiative (OPHI) has developed a new international measure of poverty - the Multi-dimensional Poverty

Index or MPI - for the 20<sup>th</sup> Anniversary edition of the United Nations Development Programme's flagship Human Development Report. The new innovative index goes beyond a traditional focus on income to reflect the multiple deprivations that a poor person faces with respect to education, health and living standard. The MPI assesses the nature and intensity of poverty at the individual level, with poor people being those who are multiply deprived and the extent of their poverty being measured by the extent of their deprivations. The MPI has three dimensions; health, education and standard of living.

### **Status of Poverty in India**

In developing countries like India, children and adults are vulnerable to malnutrition because of low dietary intakes, infectious diseases, lack of appropriate care and inequitable distribution of food within the household. Three standard indices of physical growth that describe the nutritional status of children are Height-for-age (stunting), Weight-for-height (wasting), Weight-for-age (underweight). As per the Third National Family Health Survey (NFHS-3, 2005-06), almost half of children under five years of age (48 percent) are stunted and 43% are underweight. The proportion of children who are severely undernourished is also notable - 24% according to height-for-age and 16% according to weight-for-age. Wasting is also quite a serious problem in India, affecting 20% of children under five years of age. In NFHS-2 (1998-99), the nutritional status of children was measured only for the children less than three years of age. The proportion of children under three years of age who are underweight decreased from 43% in NFHS-2 to 40% in NFHS-3, and the proportion severely underweight decreased from 18% to 16 percent. Stunting decreased by a larger margin, from 51% to 45 percent. Severe stunting also decreased, from 28% to 22 percent. However, the improvement in height-for-age combined with a somewhat slower improvement in weight-for-age actually produced an increase in wasting and severe wasting over time. The decrease in stunting over time was greater in rural areas than urban areas. The prevalence of underweight in

children who were underweight decreased slightly more in urban areas than rural areas, but there was very little improvement in the percentage of children who were severely underweight in urban areas.

According to the National Sample Survey data of the 66th round (2009-10), Average dietary energy intake per person per day was 2147 Kcal for rural India and 2123 Kcal for urban India. The proportion of households with calorie intake below 2160 Kcal per consumer unit per day (80% of 2700 Kcal, a level used in NSS tabulation for comparisons) was 62% for rural and 63% for urban households in the bottom decile class. The proportion declined progressively with MPCE level. In the next decile class, it was about 42.5% in the rural sector and 45% in the urban sector. The proportion was only about 2.5% for the top 10% of population ranked by MPCE.

Estimates of average calorie intake for India from six quinquennial surveys of consumer expenditure including the 66th round show a decline in average calorie intake between 1972-73 and 2009-10. The overall decline is substantially greater for rural than for urban India, and appears to have been sharper in the period since 1993-94 (50th round), especially in the urban sector. The proportion of households with calorie intake below the level of 2700 Kcal per consumer unit per day has grown more or less steadily since 1993-94: from under 52% in rural India to nearly 62%, and from 57% in urban India to about 63%.

The Poverty Headcount Ratio (PHR) is the proportion of population whose per capita income/consumption expenditure is below an official threshold(s) set by the National Government. The Planning Commission in the Government of India estimates poverty at National and State levels using the poverty lines as defined and applying it to the distribution of persons by household per capita monthly consumption expenditure. The poverty ratio according to the Government of India definition is at variance with that according to international definition. India unlike most countries has different poverty lines at sub-national level in the sense that the poverty ratios are estimated for different States of

the country separately for rural and urban areas. The all India poverty ratio is obtained as state-population weighted average poverty ratio, and the all India poverty line is the per capita per month expenditure that corresponds to the all India poverty ratio.

The methodology for estimation of poverty followed by the Planning Commission has been based on the recommendations made by experts in the field from time to time. In December 2005, Planning Commission constituted an Expert Group under the Chairmanship of Prof. Suresh D. Tendulkar to review the methodology for estimation of poverty. The Tendulkar Committee submitted its report in December 2009 and computed poverty lines and poverty ratios for 2004-05. For comparison they also computed poverty lines and poverty ratios for 1993-94 with identical methodology. The Planning Commission periodically estimates poverty lines and poverty ratios for each of the years for which Large Sample Surveys on Household Consumer Expenditure have been conducted by the National Sample Survey Office (NSSO) of the Ministry of Statistics and Programme Implementation. These surveys are normally conducted on quinquennial basis.

The NSSO tabulates expenditure of about 1.20 lakh households. Since these households have different number of members, the NSSO for purpose of comparison divides the household expenditure by the number of members to arrive at per capita consumption expenditure per month. This is called Monthly Per Capita Consumption Expenditure (MPCE) and is computed on the basis of three different concepts: Uniform Reference Period (URP), Mixed Reference Period (MRP), and Modified Mixed Reference Period (MMRP). As per Tendulkar Methodology, the poverty line has been expressed in terms of MPCE based on Mixed Reference Period.

The incidence of poverty declined from 45.3% in 1993-94 to 37.2% in 2004-05 and further to 21.9% in 2011-12. The percentage of persons below the Poverty Line in 2011-12 has been estimated as 25.7% in rural areas, 13.7% in urban areas and 21.9% for the country as a whole. The respective ratios for the rural

**Table 1. Incidence of Poverty**

	Poverty Ratio (%)			Number of Poor (Million)		
	Rural	Urban	Total	Rural	Urban	Total
1993-94	50.1	31.8	45.3	328.6	74.5	403.7
2004-05	41.8	25.7	37.2	326.3	80.8	407.1
2011-12	25.7	13.7	21.9	216.5	52.8	269.3
Annual average decline (%), 1993-94:2004-05	0.75	0.55	0.74			
Annual average decline (%), 2004-05 : 2011-12	2.32	1.69	2.18			

Source: Planning Commission

and urban areas were 41.8% and 25.7% and 37.2% for the country as a whole in 2004-05. It was 50.1% in rural areas, 31.8% in urban areas and 45.3% for the country as a whole in 1993-94. In 2011-12, India had 270 million persons below the Tendulkar Poverty Line as compared to 407 million in 2004-05, that is a reduction of 137 million persons over the seven year period.

During the 11-year period 1993-94 to 2004-05 (as presented in Table 1), the average decline in the poverty ratio was 0.74 percentage points per year. It accelerated to 2.18 percentage points per year during the 7-year period 2004-05 to 2011-12. Therefore, it can be concluded that the rate of decline in the poverty ratio during the most recent 7-year period 2004-05 to 2011-12 was about three times of that experienced in the 11-year period 1993-94 to 2004-05.

The share of the poorest 20% population in terms of the monthly per capita consumption expenditure in total consumption (i.e., consumption accounted for by the poorest one fifth of the population) in the rural areas declined from 9.6% in 1993-94 to 9.5% in 2004-05 and remained at the same level of 9.5% in 2009-10 (URP). This decline was sharper in the urban areas where the ratio declined from 8.0% in 1993-94 to 7.3% in 2004-05 and further to 7.0% in 2009-10. Comparison of the URP based Lorenz ratios of NSS 2004-05 and 2009-10 shows a slight reduction from 0.297 to 0.291 in the rural sector and a slight increase from 0.373 to 0.381 in the urban sector of the Country.

According to UNDP's Human Development Report 2013, India is among the list of worst nations regarding gender equality. When India's

Human Development Index is adjusted for gender inequality, it becomes south Asia's worst performing country. Pakistan, Nepal and Bangladesh, which are poorer than India and have lower HDIs, all do comparatively better than India when it comes to gender equality. The new UNDP report ranks India 136<sup>th</sup> out of 186 countries, five ranks below post-war Iraq, on the HDI. The HDI is a composite indicator composed of three equally weighted measures for education, health and income. India also stood at 94<sup>th</sup> position out of 119 countries in the Global Hunger Index. More than 40% of the World's under-weight children below five years live in India. While per capita income in India has more than tripled in the last two decades, the minimum dietary intake reduced during the same period. Levels of inequality and social exclusion are very high. The bottom 10% of the population account for only 3.6% of the total consumption expenditure and the top 10% accounts for 31 percent; the gap between the rich and the poor has increased during the high economic growth phase (World Food Programme, 2014).

On the newly constituted Multidimensional Poverty Index (MPI), which identifies multiple deprivations in the same households in education, health and standard of living, only 29 countries do worse than India. The MPI puts India's poverty headcount ratio at 54% higher than Bangladesh and Nepal. This was even as India did extremely well economically, India and China doubled output per capita in less than 20 year, at a scale the UNDP has said was 'unprecedented in speed and scale'.

### Reasons Behind Malnutrition

There are many reasons behind malnourishment, some of which one could not assess and varies from region to region and even from person to person. Below are discussed some of the points which attribute to malnutrition in India:

#### Gender disparities and malnutrition

Gender disparities in nutrition are evident from infancy to adulthood. Infact, gender has been the most statistically significant determinant of malnutrition among young children and malnutrition is a frequent direct or underlying cause of death among girls below age 5. Adult women consume approximately 1000 fewer calories per day than men according to one estimate from Punjab. Comparison of household dietary intake studies in different parts of the country shows that nutritional equity between males and females is lower in northern than in southern states. Nutritional deprivation has two major consequences for women; they never reach their full growth potential and anaemia. Both are risk factors in pregnancy, with anaemia ranging from 40-50% in urban areas to 50-70% in rural areas. This condition complicates childbearing and result in maternal and infant deaths, and low birth weight infants.

Adequate nutrition during pregnancy and first six months of life are critical because of the impact on birth weight. Thus, the problems often start before, during and after pregnancy as malnourished mothers are more likely to produce low birth weight babies. Poor nutritional status at birth is perpetuated by inadequate breastfeeding and supplementary feeding habits. Subsequently in the first two years, they do not give sufficient quality food -particularly mothers with low education.

#### Uncertainty about poverty line definition

Every economic policy adopted in an economy is based on some ground level data and aimed at reforming the particular deprived sector. Similarly eradication of poverty, hunger and malnutrition requires the relevant information about the

population living under such conditions in order to frame effective policies in this regard. Poverty definition in India however becomes a controversial issue. According to the official data released on July 23, 2013, the proportion of people living Below the Poverty Line (BPL) has come down from 37.2% in 2004-05 to 21.9% in 2011-12 which shows a decline of 15.3 percentage points in a period of seven years. As per data, in urban areas, the poverty proportion fell 9.8 percentage points to 13.7% from 37.2 percent, while in rural areas it came down to 25.7% from 41.8 percent. These data reveal that the poverty rate in the country declined 2.18 percentage points in each year during the period 2004-05 and 2011-12, against an average of 0.74 percentage points a year in the eleven year period from 1993-94 to 2004-05.

In absolute numbers, 137.4 million people have been lifted above the poverty line over the period of seven years. Compared with 407.2 million poor people in 2004-05, the number came down to 269.7 million in 2011-12 which shows a reduction of 33 percent. The new poverty rates for the year 2011-12, however, are based on the assumption that only those people who spent less than ₹ 27.2 per day in villages and ₹ 33.33 per day in urban areas were poor. In 2004-05 the poverty was ₹ 14.89 per day in rural areas and ₹ 19.32 in urban areas. The estimates are based on the controversial Suresh Tendulkar's methodology for deciding the poverty line at ₹ 22.24 in rural areas and ₹ 28.65 in urban areas in 2009-10. This definition was sharply criticized by civil society and government had to appoint Rangarajan Committee to review the given methodology.

Planning Commission has presented the view that the correct way to assess poverty is to consider each household's monthly expenditure. In Planning Commission's view for a household having five members ₹ 4080 monthly income should be taken as the poverty line in rural areas and ₹ 5000 in urban areas in 2011-12 against ₹ 3364 and ₹ 4298 in 2009-10 and ₹ 2233.4 and ₹ 2899 in 2004-05 respectively. Common people and the media have severely criticized this ceiling of poverty line both in rural and urban areas. With retail inflation at around 10%

**Table 2. Score system for BPL**

Points	Category
4	Landless agricultural worker
3	SC/ST, agri-worker with some land
2	Most backward castes, self employed artisans, fisher folk or casual workers
1	Muslim/OBC, household where no adult studied up to class 5; any member of the house with TB, leprosy, disability, mental illness or AIDS; household headed by a person of age 60 years and above or by a single woman with major son(s).

how a common man can meet his daily basic requirements with the mentioned daily expenditure – it is a big question mark before the public in the real daily life. The Rangarajan Committee recommendations set new benchmarks with slightly raised incomes but still face criticism from the large section of the society. The Rangarajan panel considers people living on less than ₹ 32 a day in rural areas and ₹ 47 a day in urban areas as poor. According to this criterion one in three Indians was poor in 2011-12.

#### Identification of BPL families

An expert committee headed by Suresh Tendulkar has submitted its report to the Planning Commission, suggesting a new formula for identifying the people below the poverty line. The committee suggested a formula based on 'Consumption Expenditure' for identifying BPL families. A 'Basket of Minimum List' has been included in consumption expenditure. Tendulkar's new formula adopted the 'Cost of Living'

as the basis for identifying poverty. The Tendulkar committee has primarily moved away from calorie intake as the basic criteria for determining poverty and has instead broadened the scope by considering per capita expenditure on commodities and services, which includes categories like health and education.

The Union Rural Development Ministry has laid down the new guidelines for rural households under BPL census. A new Score system for BPL has been adopted as presented in table 2. The highest score achievable is 10.

Rural households having a member earning more than ₹ 10,000 a month or anyone serving in a government or government aided organisation or owning a landline phone will not be included in the Below Poverty Line (BPL) category in the new poverty census being conducted by states. However, the new census which also includes questions about religion and castes, will compulsory include rural households without shelter, destitute living on alms, previous 2002 criteria and proposed criteria for

**Table 3. Criteria for not including in BPL group**

2002 criteria	Proposed criteria
Operating more than 2 hectares of land	Owens double the district average of agri-land peer agri-household if partially or wholly irrigated (3 times if completely un-irrigated)
Owens TV/fridge/ceiling fan/two wheeler/three wheeler	Owens two-wheeled or more than three wheeled motorised vehicles.
Owens tractor/power tiller/combined thresher etc.	Owens at least one running bore-well or mechanized farm equipment like tractor, power tiller, thresher, harvester etc.
Having a pacca house	Pays income tax
Any member with yearly income more than ₹ 20,000	With any member drawing salary of over ₹ 5,000 per month in non-government/private organizations or is employed with the government on a regular basis (including para-teachers but excluding Anganwadi workers, helpers accredited social health activists).

manual scavengers, primitive tribal groups and legally bounded labourers as BPL. A comparison of the previous 2002 criteria and proposed criteria for exclusion of families under BPL is presented in Table 3.

### **Poverty Alleviation and Employment Generation Programmes**

According to a general survey done by the National Sample Survey Organisation (NSSO), 62% of total unemployment exists in rural sector and only 38% in urban sector of India. Addressing the challenge of unemployment in the rural areas of the country is central to the developing of rural sector for ameliorating the economic condition of the people. Wage employment is provided in rural areas under MANREGA and Sampoorna Grammen Rozgar Yojana (SGRY), whereas self-employment is provided under Swarnajayanti Gram Swarozgar Yojana (SGSY). National Food for Work Programme was launched on 14<sup>th</sup> November 2004 in 150 most backward districts of the country identified by the Planning commission in consultation with the Ministry of Rural Development and State Government. The programme has been subsumed in National Rural Employment Guarantee Scheme which has been initiated since 2<sup>nd</sup> February 2006. The Swarna Jayanti Shahari Rozgar Yojana (SJSRY) scheme is in operation since 1997 in all urban and semi-urban towns of India for helping urban poor to set up micro enterprises through Self Help Groups etc. the programme is being recasted as National Urban Livelihood Mission in 2013-14. A huge number of schemes sometimes make the work more complex. The Union Government too recognized the fact and decided to cut down the number of Centrally

Sponsored Schemes (CSS) from the existing 147 to 66.

National Food Security Act (NFSA) passed in 2013 to fight against hunger and malnutrition by empowering more than 800 million Indians (75% of the rural and 50% of the urban population living below and just above the national poverty line) to legally claim their right to highly subsidized staple foods. The main aim of Eleventh Five year Plan (2013-2017) is ensuring 'Faster, more Inclusive and Sustainable Growth'. Thus, India require more improvement in agriculture through diversification and risk coverage. India also needs improvement in its Public Distribution System to make it more effective and the schemes like the Targeted Public Distribution System (TPDS), the Integrated Child Development Service (ICDS) – targeting mothers and young children and the Mid Day-Meal Scheme (MDM) in primary schools need to be implemented with effective management and inspection.

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