

**POVERTY, HUNGER AND MALNUTRITION IN INDIA:  
A CHALLENGE FOR THE DEVELOPMENT POLICY  
MAKERS**

**Dr. PitabasaSahoo\***

**Abstract:**

India has failed in making a dent in poverty, hunger and malnutrition. The overall improvement in reducing poverty and hunger and increasing nutritional status is slow in various states in the country. While India has achieved success in combating transient food insecurity caused by droughts or floods, it miserably failed in solving chronic food and nutritional insecurity. In recent years, the concept of food security has undergone considerable changes in India. Food production, availability, procurement and distribution are considered good measures of food security, which has been accorded high priority in food security policies in India. The Government of India has implemented a number of food and nutrition security programs i.e. Targeted Public Distribution System, Integrated Child Development Scheme, Mid-Day Meal and National Employment Guarantee Act to meet the food and nutritional security among vulnerable sections of the society. The National Advisory Council of Government of India has approved the proposed Food Security Act 2010, giving a right to food for rural and urban food insecure population. The present paper focuses into the magnitude of Poverty, Hunger and Malnutrition in India and the challenges faced by the policy makers in India.

**Key Words: Poverty, Hunger, Malnutrition and Food Security**

**1. Introduction:**

\* Dean, Research & Head of the Department, School of Youth Studies and Extension, Rajiv Gandhi National Institute of Youth Development, Srperumbudur-602105, Tamil Nadu.

The basic objective of India's Five Year Plans have been development along socialist lines to secure rapid economic growth and expansions of employment opportunities, reduction of disparities in income and wealth, prevention of concentration of economic power and creation of the values and attitudes of free and equal society. Economic development in the last four decades has indeed resulted in some increase in per capita income and the proportion of poor has to some extent come down. Yet the absolute number of people below the poverty line today just as large as it was four decades ago. Available projection suggests that, if one were to rely to growth, alone without directly tackling the problems of unemployment and income distribution, it would take another 50 years or more for the poorer sections of the people to cross the poverty line. From Seventh Five Year plan onwards, the direct attack on poverty has been accepted as one of the basic strategies of our recent development approach. Poverty and unemployment being two sides of the coin, considerable stress has been to maximize employment generation. However, the desired results have not been achieved so far. Therefore in the 8<sup>th</sup> Five Year plan, considerable stress has been given on decentralization of planning to prepare at the Micro level i.e. village, G.P., and Block with participation of local people and Non-Government Organizations to directly attack poverty and in employment at the household level.

## **2. Poverty, Hunger and Malnutrition in India:**

India is the second most populous country in the world after China. Recently, the population of India has crossed the one billion marks. According to the Census of India 2001, the population of India on 1st March 2001 was 1027 million. At the time of independence, the country's population was 342 million. The number has multiplied three-fold in around five decades. The population growth of India from 1951 to 2001 is presented in Table No 1. The total population size of India had grown from 361 million in 1951 to around 1027 million in 2001. The population of India increased by three times during the period of 1951-2001. The rural population of India has increased around two and half times from 298.7 million to 741.7 million during 1951-2001, whereas the urban population has grown 4.6 fold from 62.4 million in 1951 to 285.3 million in 2001. The decadal growth rates of the population are irregular, as it increased from 13.31 percent in 1951 to 24.8 percent in 1971. It declined to 24.7 percent in 1981, 23.8 percent in 1991 and 21.35 percent in 2001. The rural decadal growth rate of population varies from 8.79 percent in

1951 to 17.97 percent in 2001, whereas the urban decadal growth rate of population varies from 41.43 percent in 1951 to 31.11 percent in 2001.

There are various reasons for this variation in the trend of population growth rate in various censuses. The increase in population has been due to the improvement in health conditions and control of diseases. The density of population has gone up from 117 in 1951 to 312 persons in 2001 and it always shows an increasing trend over the census years in persons per square kilometer. Several push and pull factors are presumed to be operative towards distress out migration from rural to urban areas. This might be due to the declining resource availability per capita and shrinking economic opportunities in rural areas, and better economic opportunities, health and educational facilities etc. in urban areas, providing opportunities for higher level of human capital development. The Table No. 1 depicts the Population Growth in India since 1951 to 2001.

**Table No.1 Population Growth in India**

Year	Population in Million			Decadal Growth rate of Population in %	Density of Population	Ratio of Population to 1951 population
	Total	Rural	Urban			
1951	361.1	298.7	62.4	13.31 8.79 41.43	117	100
1961	439.2	360.3	78.9	21.51 20.49 26.41	142	121.63
1971	548.2	439.1	109.1	24.8 21.86 38.23	173	151.81
1981	683.3	523.9	159.4	24.66 19.32 46.14	216	189.23
1991	846.3	628.7	217.6	23.85 20.01 36.47	267	234.37
2001	1027	741.7	285.3	21.35 17.97 31.11	312	284
2011	121,0193,422 ( Provisional			17.64		

Source: Census of India

India is in the process of a demographic transition from high fertility, high mortality and stable population to low fertility, low mortality and stable population. This phenomenon is generated by the improved availability and access to health care and reduces in mortality rates and increased

life expectancy. As per the report of the Committee on India Vision 2020, Planning Commission, 2002 “ India is the second most populous country in the world, with about 1.04 billion people, home to a-sixth of humanity, although it is difficult to accurately predict population growth rate 20 years to the future, the committee feels this number to rise by another 350 million, in spite of continuous efforts to reduce fertility rates. This would raise the total population to about 1330 million by 2020”

The largest growth of population will be in the 15-64 year age group, which will expand by about 46 percent by 2020 (i.e annually by 1.9 percent as against the population growth of much lower, at 1.4 percent. The Table No.2 below shows the population projections based on P.N. Mari Bhatt, “ Indian Demographic Scenario 2025”, Institute of Economic Growth, and New Delhi.

**Table no. 2 Population Projections (Millions)**

Year	2000	2005	2010	2015	2020
Total	1010	1093	1175	1256	1331
Under 15	361	368	370	372	373
15-64	604	673	747	819	882
65+	45	51	58	65	76

Source: Report of the Committee on India Vision 2020, Planning Commission, Govt. of India, 2002

### **Poverty:**

The first report of the Brandt Commission [1] identified two geographical belts of absolute poverty in 1980. These two belts contain the vast majority of the World’s absolute poor-defines as those not being able to obtain the minimum amount of food needed to pursue moderately active life. One of these belt runs North-South across the continents of Africa and includes all Sub

Saharan countries, the other beginning with the two Yemen and Afghanistan, stretches across Pakistan, India, Bangladesh, Burma and into Kampuchea Vietnam, Laos and Indonesia.

Poverty remains a major cause of hunger and malnutrition and rapid population growth, unhealthy environment, and lack of education and depletion of natural resources further aggravate this situation. Hunger is basically a problem of the inability of the large number of people to command access to sufficient food. Hunger is the worst form of deprivation of a human being. Although inability to access food is the immediate cause of hunger, the real cause is most incidents of hunger are lack of ability to pay for food. Hunger has three components i.e. starvation, chronic hunger or under nutrition and Hidden hunger or malnutrition. Criteria for distinguishing poor from non-poor tend to reflect specific national priorities and concepts of welfare and rights. In general, when a country becomes wealthier, its perception of the acceptable minimum levels of consumption i.e. the poverty line changes. Chronic poverty is differentiated from acute poverty on the basis of various deprivation processes. Chronic poverty has been observed due to a long or deprivation occurring after a period spent above poverty level, while acute poverty is observed among elder citizens, may cause even multi-generational deprivation process.

[1] Brandt Commission: On January 14, 1977, Robert McNamara, the president of the World Bank, announced the idea of establishing a commission headed by Willy Brandt to make recommendations on ways of breaking through the existing international political impasse in North-South negotiations for global development. The Commission presented the report in 1980.

The question of measuring poverty in India was first mooted by the Indian Labor Conference, 1957 and thereafter by a working group set up by the planning commission. Putting a price on the minimum required consumption level of food, clothing, shelter, fuel and health care etc uses a poverty line dividing poor from non-poor. To find the status of food and nutrition security in India, it can be stated that a country can be said to have achieved complete food and nutrition security if each and every person in that country is able to consume a minimum quantum and quality of various ingredients of as an adequate and balanced diet on a regular basis. Availability and affordability of such diet, backed by health and educational services in an environmentally sustainable scenario will then enable each member of the society to live a 'healthy and active'

life. The definition of poverty line in the Indian context was attempted for the first time in 1962 by a working Group of eminent economists and social thinkers after taking into account the recommendations of the Nutrition Advisory Committee of the Indian Council of Medical Research, 1958 regarding balance diet. The working Group comprising Prof. D.R.Gadgil, Dr. B.N.Ganguli, Dr. P.S. Loknathan, Sri M.R. Masani, Sri Ashok Mehta, Sri Pitambar Pant, Dr. V.K.R.V.Rao, Sri Sriman Narayan, Sri Anna SahebSahasrabuddhe, set up by the seminar on Some Aspects of Planning recommended in 1962, “ the national minimum for each household of 5 persons should be not less than Rs 100 per month in terms of 1960-61 prices or Rs 20 per capita. For urban areas, this figure was raised to Rs 125 per month per household or Rs 25 per capita.

Following the recommendation of Taskforce on projection of Minimum Needs and Effective Consumption Demand, the Planning Commission has been estimating the proportion and number of poor separately for rural and urban India at national and state levels. These estimates have been released from the year 1972-73 onwards, using the survey data on household consumption expenditure collected by the National Sample Survey Organization (NSSO) at an interval of five years. The official estimates are based on a calorie norm of 2400 calories per capita per day for rural areas and 2100 calories per capita per day for urban areas. The Task Force defined the poverty line as the per capita expenditure level at which the calorie norms were met on the basis of the all India consumption basket for 1973-74. This was equivalent to Rs 49.09 and Rs 56.64 per capita per month for rural and urban areas respectively at 1973-74 prices.

Food and nutrition are basic human needs and this is recognized in the first Millennium Development Goal (MDG)-the eradication of extreme poverty and hunger. The Planning Commission as the Nodal agency in the Government of India for estimation of poverty has been estimating the number and percentage of poor at national and state levels. According to the criterion used by the Planning Commission of India, 51.3 % of the population was living below the poverty line in 1977-78, 36 % in 1993-94 and 27.5% in 2004-05. Poverty in India is measured purely on the consumption dimension including calorie norms on which poverty lines are constructed. The poverty line was originally fixed in terms of income/food requirements in 1978. It was stipulated that the calorie standard for a typical individual in rural areas was 2400 calorie

and was 2100 calorie in urban areas. Then the cost of the grains (about 650 grams) that fulfil this normative standard was calculated. This cost was the poverty line. In 1978, it was Rs. 61.80 per person per month for rural areas and Rs. 71.30 for urban areas. Since then the Planning Commission calculates the poverty line every year adjusting for inflation. The poverty line in 2004-05 years is Rs 446.68 for rural areas and Rs 578.80 for urban areas based on Uniform Recall Period (URP) consumption in which the consumer expenditure data for all the items are collected from 30-day recall period. The Poverty Estimates based on Uniform Recall Period is 28.3% for rural, 25.7 for% for urban and 27.5 % as total in 2004-05. The table no.3 shows the percentage of people below poverty line in India from 1973-2004.

**TableNo.3. Percentage of People below Poverty line in India (1973-2004)**

Years	Rural Million %	Urban Million %	Total Million %
1973	261.3 56.4	60.0 49.0	321.3 54.9
1983	251.9 45.7	70.9 40.8	322.9 44.5
1993	244.0 37.3	76.3 32.3	320.4 36.0
2004	220.9 28.3	80.7 25.7	301.7 27.5

Source: Planning Commission, Govt. of India, 2007

The National Sample Survey organization released the result of the sample survey data on household consumer expenditure covering the period July 2004 to June 2005. The consumer data was collected using 30-day recall period (also known as reference period) for all the items. The table no. 4 shows the State wise number of poor persons below poverty line in India estimated in different period by the Planning Commission in India since 1973-74 to 2004-05. Some States Have been successful in reducing the percentage of the poor. In 2004-05, the States with the lowest head count ratio were Jammu & Kashmir (5.4%), Punjab (8.4%), Himachal Pradesh (10%), Haryana (14%), Kerala (15%), Andhra Pradesh (15.8%) and Gujarat (16.8%). On the other hand, the States with highest head count ratio are Orissa (46.4%), Bihar (41.4%), Madhya Pradesh (38.3%) and Uttar Pradesh (32.8%). The States that were formed recently (Chhattisgarh 40.9%, Jharkhand 40.3%, Uttarakhand 39.6%) also have highest poverty ratio. The absolute number of poor has increased in the last three decades in Uttar Pradesh from 53.57 million in

1973 to 59 million in 2004-05; in Maharashtra from 28.74 million to 31.74 million and in Rajasthan from 12.85 million to 13.49 million.

**Table No.4 Headcount Ratio [2] and Number of Poor Persons below Poverty Line in India (Combined)**

State/Uts	Headcount Ratio				Number of Poor Persons (in million)			
	1973-74	1983	1993-94	2004-05	1973-74	1983	1993-94	2004-05
Andhra Pradesh	48.9	28.9	22.2	15.8	22.57	16.46	15.40	12.61
Assam	51.2	40.5	40.9	19.7	8.18	7.77	9.64	5.58
Bihar	61.9	62.2	55.0	41.4	37.06	46.21	49.34	36.92
Delhi	49.6	26.2	14.7	14.7	2.28	1.84	1.55	2.29
Goa	44.3	18.9	14.9	13.8	0.42	0.22	0.19	0.20
Gujarat	48.2	32.8	24.2	16.8	13.84	11.79	10.52	9.07
Haryana	35.4	21.4	25.1	14.0	3.83	2.96	4.39	3.21
Himachal Pradesh	26.4	16.4	28.4	10.0	0.97	0.74	1.59	0.64
Karnataka	54.5	38.2	33.2	25.0	17.07	14.98	15.65	13.89
Kerala	59.8	40.4	25.4	15.0	13.55	10.68	7.64	4.96
Madhya Pradesh	61.8	49.8	42.5	38.3	27.63	27.80	29.85	24.97
Maharashtra	53.2	43.4	36.9	30.7	28.74	29.09	30.52	31.74
Orissa	66.2	65.3	48.6	46.4	15.45	18.13	16.06	17.85
Punjab	28.2	16.2	11.8	8.4	4.05	2.86	2.51	2.16
Rajasthan	46.1	34.5	27.4	22.1	12.85	12.68	12.85	13.49
Tamil Nadu	54.9	51.7	35.0	22.5	23.95	26.01	20.21	14.56
Uttar Pradesh	57.1	47.1	40.9	32.8	53.57	55.67	60.45	59.00
West Bengal	63.4	54.9	35.7	24.7	29.93	31.87	25.46	20.84
Chhattisgarh	-	-	-	40.9	-	-	-	9.10
Uttarakhand	-	-	-	39.6	-	-	-	3.60
Chandigarh	28.0	23.8	11.4	7.1	0.08	0.12	0.08	0.07
Dadra &	46.6	15.7	50.8	33.2	0.04	0.02	0.08	0.08



Nagar Haveli								
J & K	40.8	24.2	25.2	5.4	2.05	1.56	2.09	0.59
All India	54.9	44.5	36.0	27.5	321.34	322.90	320.37	301.72

Source: Eleventh Five-Year Plan, Planning Commission, and Govt. of India, 2007

[2] Head Count Ratio: The poverty headcount ratio is the proportion of the national population whose incomes are below the official threshold (or thresholds) set by the national government. National poverty lines are usually set for households of various compositions to allow for different family sizes.

### Hunger:

Starvation is a life threatening condition caused by insufficient food, which is normally associated with acute situations like famines. Chronic hunger or under-nutrition is on the other hand a persistent lack of calories (food energy) that may impair the ability to lead a healthy and active life. One out of five people (500 million) of the developing world population are chronic hunger. Hidden hunger or malnutrition is the pathological condition resulting from the inadequacy (or excess) of calories, proteins and vitamins often in combination with diseases, parasites and inadequate knowledge about nutrition. Among the various forms of hidden hunger, the two most common are protein energy malnutrition and micro nutritional deficiency. There is no single cause of hunger nor is there one general program to overcome hunger.

The Global Hunger Index (GHI) is one approach to measuring and tracking the progress on hunger. The GHI was developed by the International Food Policy Research Institute (IFPRI) in 2006 (Wiesmann et al. 2006) as a means of capturing three related dimensions of hunger inadequate consumption, child underweight and child mortality. The Global Hunger Index 2008 (von Grebmer et al. 2008) reveals India's continued performance at eradicating Hunger. India ranks 66<sup>th</sup> out of the 88 developing countries. India has consistently ranked poorly on the Global Hunger Index. Hunger is manifested in inadequate food intake and a poor diet, combination with low birth weights and mortality. It ranks slightly above Bangladesh and below all other South Asian nations. It also ranks below several countries in Sub-Saharan Africa, even though per capita income in these Sub-Saharan African Countries is much lower than in India. These countries are Cameroon, Kenya, Nigeria and Sudan. Despite the good economic performance, more than 200 million people (FAO, 2008) are food insecure in India, making home to the largest number of

hungry people in the World. International Food Policy Research Institute reveals the acute Indian hunger situation. The Global hunger Index 2008 ranks India at the bottom with 65<sup>th</sup> position (out of 84 countries) with a GHI of 23.90, which characterizes as alarming food security situation. The Table No 5 shows the Comparison of India with other countries based on the Global Hunger Index, 2008

**Table No. 5 Comparison of India with other countries based on the GHI 2008**

GHI Rank	Country	Hunger Index	GHI Rank	Country	Hunger Index	GHI Rank	Country	Hunger Index
	Argentina	<5	10	Malaysia	6.5	51	Nigeria	18.4
	Belarus	<5	11	El Salvador	6.5	52	Cameron	18.7
	Bosnia & Herz	<5	12	Morocco	6.5	53	N. Korea	18.8
	<b>Brazil</b>	<5	13	Colombia	6.7	54	Congo	19.1
	Bulgaria	<5	<b>14</b>	<b>South Africa</b>	<b>6.9</b>	55	Kenya	19.9
	Chile	<5	15	China	7.1	56	Sudan	20.5
	Costa Rica	<5	16	Fiji	7.3	57	Nepal	20.6
	Croatia	<5	17	Suriname	7.5	58	Lao PDR	20.6
	Ecuador	<5	18	Gabon	7.6	59	Djibouti	20.9
	Egypt	<5	19	Venezuela	7.7	60	Guinea	20.9
	Estonia	<5	20	Paraguay	7.9	61	Pakistan	21.7
	Iran	<5	21	Guyana	8.6	62	Malawi	21.8
	Jordan	<5	22	Panama	8.9	63	Rwanda	22.3
	Kazakhstan	<5	23	Thailand	9.9	64	Cambodia	23.2
	Kuwait	<5	24	Armenia	10.2	65	Burkina Faso	23.5
	Kyrgyz	<5	25	Azerbaijan	10.4	<b>66</b>	<b>India</b>	<b>23.7</b>
	Latvia	<5	26	Uzbekistan	11.2	67	Zimbabwe	23.8
	Lebanon	<5	27	Indonesia	11.3	68	Tanzania	24.2
	Libya	<5	28	Honduras	11.4	69	Haiti	24.3
	Lithuania	<5	29	Bolivia	11.7	70	Bangladesh	25.2
	Macedonia	<5	30	Dominican Republic	12.0	71	Tajikistan	25.9
	Mexico	<5	31	Mongolia	12.1	72	Mozambique	26.3
	Romania	<5	32	Vietnam	12.6	73	Mali	26.9

	Russian Fed.	<5	33	Nicaragua	12.8	74	Guin-Bissau	27.5
	Saudi Arabia	<5	34	Ghana	13.9	75	Central African Rep.	28.0
	Serbia & Mon	<5	35	Philippines	14.0	76	Madagascar	28.8
	Slovak Rep.	<5	36	Lesotho	14.3	77	Comoros	29.1
	Syria	<5	37	Namibia	14.3	78	Zambia	29.2
	Tunisia	<5	38	Guatemala	14.6	79	Angola	29.5
	Turkey	<5	39	Myanmar	15.0	80	Yemen	29.8
	Ukraine	<5	40	Sri Lanka	15.0	81	Chad	29.9
	Uruguay	<5	41	Benin	15.1	82	Ethiopia	31.0
1	Mauritius	5.0	42	Cote d Ivo	15.3	83	Liberia	31.8
2	Jamaica	5.1	43	Senegal	15.4	84	Sierra Leone	32.2
3	Moldova	5.4	44	Uganda	17.1	85	Niger	32.4
4	Cuba	5.5	45	Gambia	17.3	86	Burundi	38.3
5	Peru	5.6	46	Mauritania	17.6	87	Eritrea	39.0
6	Trinidad & To	5.9	47	Swaziland	17.7	88	Congo	42.7
7	Algeria	6.0	48	Botswana	17.9			
8	Albania	6.3	49	Togo	18.2			
9	Turkmenistan	6.4	50	TimorLeste	18.4			

Source : The Global Hunger Index 2008(Von Grebmer et al.2008)

PurnimaMenon, Anil Deolalikar and AnjorBhaskar compared the hunger across states in India. The Table no.6 presents the India Hunger Index as well as its underlying components for 17 major States in the country with ranking of the States. The overall objective of the development of an India Hunger Index is to make a comparison between the states in India. The States with higher hunger index are Madhya Pradesh, Jharkhand, Bihar, Chhatisgarh, Gujarat and Orissa. For majority of the States, child underweight is responsible for the largest variation between the states. The contribution of child mortality to the higher index scores is relatively small and less variable across all the states when compared with the contribution of child underweight and calorie undernourishment.

**Table No.6The India State Hunger Index and Its underlying Components**

State	Prevalence of Calorie under-Nourishment (%)	Proportion of Underweight Among Children <5 years (%)	Under-five Mortality Rate (deaths per Hundred)	India State Hunger Index score	India State Hunger Index rank
Punjab	11.1	24.6	5.2	13.63	1
Kerala	28.6	22.7	1.6	17.63	2
Andhra Pradesh	19.6	32.7	6.3	19.53	3
Assam	14.6	36.4	8.5	19.83	4
Haryana	15.1	39.7	5.2	20.00	5
Tamil Nadu	29.1	30.0	3.5	20.87	6
Rajasthan	14.0	40.4	8.5	20.97	7
West Bengal	18.5	38.5	5.9	20.97	8
Uttar Pradesh	14.5	42.3	9.6	22.13	9
Maharashtra	27.0	36.7	4.7	22.80	10
Karnataka	28.1	37.6	5.5	23.73	11
Orissa	21.4	40.9	9.1	23.80	12
Gujarat	23.3	44.7	6.1	24.70	13
Chhattisgarh	23.3	47.6	9.0	26.63	14
Bihar	17.3	56.1	8.5	27.30	15
Jharkhand	19.6	57.1	9.3	28.67	16
Madhya Pradesh	23.4	59.8	9.4	30.87	17
<b>India</b>	<b>20.0</b>	<b>42.5</b>	<b>7.4</b>	<b>23.30</b>	

Source MenonPurnimaet. al, 2009 “ India State Hunger Index: Comparison of Hunger Across States”.

### Malnutrition:

The National Nutrition Monitoring Bureau (NNMB) and National Family Health Survey (NFHS) provide data on nutritional status for general group as well as vulnerable groups using Gomez Classification [3] (in case of children) and Body-Mass Index (BMI) classification in the case of others. The NNMB data show that the instance of under-nutrition among children and Chronic

Energy Deficiency (CED) among other population, even though slowly declining is still alarming. In his paper on “Food and Nutritional Security”, Prof R. Radhakrishna analyzed the percentage of children suffering from severe malnutrition in rural areas of eight states covered by the NNMB, which declined from 15.0 in 1975-79 to 6.4 in 2000-01. Similarly, if moderate and severe malnutrition is taken together, the percentage of children suffering from malnutrition declined from 62.5 to 47.7 percent during the same period (Radhakrishnan, 2002). The table no 7 shows the increase in the percentage of malnourished children in NNMB (rural) 2001 sample states Gujarat and Madhya Pradesh in comparison to NFHS (rural) 1993. No data is available to compare rural 1993 and rural 2000-01 for the state of Karnataka and Orissa. The decline is very striking in Andhra Pradesh, Kerala, Maharashtra and Tamil Nadu. The table below shows the malnutrition among children and adults in India.

**Table No. 7 Malnutrition among Children and Adults in India**

State	Malnutrition among children					CED among Adults
	Rural (1993) NFHS	Urban (1993) NFHS	Total (Rural and Urban) (1993) NFHS	Total (Rural and Urban) 1998-99 NFHS	Rural 2000-01 NNMB	1996 Rural NNMBat
Andhra Pradesh	52.1	40.2	49.1	37.7	39.9	39.9
Assam	51.8	37.3	50.4	36.0		
Bihar	64.1	53.8	62.6	54.4		
Gujarat	45.8	40.5	44.1	45.1	48.9	53.1
Haryana	39.4	33.0	37.9	34.6		
Himachal Pradesh	48.3	30.2	47.0	43.6		
Jammu & Kashmir	N.A.	N.A.	44.5	34.5		
Karnataka	N.A.	N.A.	N.A.	43.9	47.6	53.8
Kerala	30.6	22.9	28.5	26.9	28.8	33.2
Madhya Pradesh	59.4	50.1	57.4	55.1	63.9	53.3
Maharashtra	57.5	45.5	52.6	49.6	52.2	51.0

Orissa	N.A.	N.A.	55.3	54.4	54.4	57.3
Punjab	47.4	40.0	45.9	28.7		
Rajasthan	41.1	43.9	41.6	50.6		
Tamil Nadu	42.1	32.3	46.6	36.7	39.0	37.3
Uttar Pradesh	N.A.	N.A.	49.8	51.7		
West Bengal	N.A.	N.A.	56.8	48.7		
Arunachal	40.3	36.2	39.7	24.3		
Manipur	31.6	25.9	30.1	27.5		
Nagaland	30.5	19.7	28.7	24.1		
Tripura	50.0	31.6	48.8	N.A.		
Meghalaya	47.2	37.5	45.5	37.9		
Mizoram	34.5	22.0	28.1	27.7		
All-India	59.9	45.2	53.4	47.0	47.7+	48.5+

Source: R.Radhakrishna and K. Venkata Reddy: Food Security and Nutrition: Vision 2020

[3] Gomez Classification is one of the earliest systems for classify protein energy malnutrition in children, based on percentage of expected weight for age: over 90% is normal, 76–90% is mild (first degree) malnutrition, 61–75% is moderate (second degree) malnutrition and less than 60% is severe (third degree) malnutrition.

Micronutrient malnutrition is the deficiencies of vitamins and minerals, which constitutes the most widespread form of malnutrition. Deficiencies of vitamin A, iron and iodine can lead to serious health problems, including blindness, mental retardation, reduced resistance to infectious disease and, in some cases, death. The low intakes of calcium and vitamin D, zinc, foliate and vitamin C are increasingly recognized as impairing the health of large segments of many populations. Micronutrient deficiency is a serious public health concern in most of the developing countries and India is no exception. An average Indian diet, especially that of the people of poor socioeconomic strata, is often deficient in a number of essential vitamins and minerals though these are required in very minute amounts and this is mainly due to lack of awareness. Three micronutrients, namely iron, iodine and vitamin A are among the most important of all the nutrients needed by human body as these are vital to develop normal learning and cognitive

functions, immunity, work capacity, psychomotor development, general growth processes and also mental development. Social factors of poverty, illiteracy, ignorance and gender bias need priority attention. Failures of the poverty alleviation program and a lack of special measures for achieving nutritional security for girls and women before they become mothers are the major contributors to Low Birth Weight (LBW) babies and the malnutrition among women reflected in Body Mass Index (BMI) below 18.

In India, it was observed during the National Family Health Survey – 3 (2005-06) that, 45.9% of children under 3 years of age are suffering from under nutrition (Wt. For Age) and 38.4% of Children of same age group was stunted. Malnutrition among the children under the 3 years of age has reduced slowly over the years (Table No.8). It was observed that, Chronic Energy Deficiency (CED), as determined by BMI, was observed among 33% ever married women (15 – 49 yrs) during the National Family Health Survey – 3 (2005-2006). CED has declined slightly over the years (from 36.2% in 1998-99 to 33% in 2005-06). Prevalence of CED (BMI <18) was also observed in 28.1% among ever-married men (15-49 yrs of age group) during the National Family Health Survey conducted in 2005-06.

**Table No.8. Nutritional Status among Children and Adults in India (by States)**

State	Percentage prevalence among Children (6-35 months)		Percentage prevalence among Ever Married Women (15-49 yrs)	Percentage prevalence among Ever Married men (15-49 yrs)
	Under Weight	Stunted	CED (BMI<18)	CED (BMI<18)
<b>India</b>	<b>45.9</b>	<b>38.4</b>	<b>33.0</b>	<b>28.1</b>
<b>North</b>				
Uttaranchal	38.0	31.9	25.7	21.8
Delhi	33.1	35.4	10.6	10.4
Haryana	41.9	35.9	27.8	26.8
Himachal Pradesh	36.2	26.6		19.8

State	Percentage prevalence among Children (6-35 months)	Percentage prevalence among Ever Married Women (15-49 yrs)	Percentage prevalence among Ever Married men (15-49 yrs)	
	Under Weight	Stunted	CED (BMI<18)	CED (BMI<18)
Jammu & Kashmir	29.4	27.6	21.3	19.9
Punjab	27.0	27.9	13.5	12.0
Rajasthan	44.0	33.7	33.6	33.8
<b>Central</b>				
Madhya Pradesh	60.3	39.9	40.1	36.3
Chhattisgarh	52.1	45.4	41.0	31.8
Uttar Pradesh	47.3	37.9	34.1	32.7
<b>East</b>				
Bihar	58.4	42.3	43.0	28.7
Jharkhand	77.7	59.2	42.6	33.4
Orissa	44.0	38.3	40.5	32.1
West Bengal	43.5	33.0	37.7	31.6
<b>North-East</b>				
Tripura	39.0	30.0	35.1	38.3
Arunachal Pradesh	36.9	34.2	15.5	13.6
Assam	40.4	34.8	36.5	33.4
Manipur	23.8	24.7	13.9	12.2
Meghalaya	46.3	41.7	13.7	8.0
Mizoram	21.6	30.1	15.3	6.0



State	Percentage prevalence among Children (6-35 months)	Percentage prevalence among Ever Married Women (15-49 yrs)	Percentage prevalence among Ever Married men (15-49 yrs)	
	Under Weight	Stunted	CED (BMI<18)	CED (BMI<18)
Nagaland	29.7	30.3	15.9	NA
Sikkim	22.6	28.9	9.6	7.2
<b>West</b>				
Goa	20.8	24.3	20.5	16.8
Gujarat	...	...	32.3	28.2
Maharashtra	39.7	37.9	32.6	24.9
<b>South</b>				
Andhra Pradesh	36.5	33.9	30.8	24.8
Karnataka	41.1	38.0	31.4	25.5
Kerala	28.8	21.1	12.5	11.9
Tamil Nadu	33.2	25.1	23.5	18.5

National Family Health Survey (NFHS) – 3: India (2005-2006)

### Recommended Balanced Diet in India:

In India, it is the Indian Council of Medical Research (ICMR) that sets up Nutrition Advisory Committees (NAC) or Expert Groups and recommend the "Dietary Allowances" in respect of energy (Calories), proteins, fats, minerals, iron, vitamins etc. for various age groups within the population including special groups like infants, pregnant/nursing mothers, children etc. and at the same time recommend dietary allowance by activity groupings also. The first Nutrition Advisory Committee of ICMR had made its recommendations way back in 1944. The recommendations

have been reviewed, up-dated and amended ever since, generally at intervals of ten years. Such reviews and revised recommendations have been made in 1958, 1968, 1978, 1984 and 1990. The 1984 Recommendations had specially observed that "RDA (Recommended Dietary Allowance) for Indians are being revised and updated at intervals of about 10 years in view of the changes in our concept of human requirements of several nutrients as a result of studies carried out during the previous decade" (ICMR pub. 1984). Recommendations on energy requirements are vital because they have a direct bearing on the status of poverty, which in India, is defined by per capita incomes that will enable a person to achieve daily intake of 2400 K.Cal in rural areas and 2100 K Cal in urban areas.

The balanced diet is, in a way, the practical prescription for consumption of a basket of food items, which is likely to provide all the required nutrients to the human body. It was the Advisory Committee of the ICMR (1984) that had reviewed the matter in detail and formulated a new set of recommendations with regard to balanced diets for Indians based on the concept of 'least cost'. The report has given details of balanced diets for adult man, adult woman, children, boys and girls separately & activity wise but those for adult man and woman are given as under in the table no 9:

**Table No 9 Recommended Balanced Diets in India (In grams/day)**

Food Items	Adult Man			Adult Woman		
	Sedentary	Moderate at work	Heavy work	Sedentary	Moderate work	Heavy work
Cereals	460	520	670	410	440	575
Pulses	40	50	60	40	45	50
Leafy Vegetables	40	40	40	100	100	100
Other-do-	60	70	80	40	40	100
Roots & Tubers	50	60	80	50	50	60
Milk	150	200	250	100	150	200
Oils & fats	40	45	65	20	25	40
Sugar & Jaggery	30	35	55	20	20	40

Source: Recommended Dietary Allowances in India, Indian Council of Medical Research, 1984  
The 1984 report, recognizing that the average per capita requirement of foodstuffs is one of the important considerations from the practical point of view in estimating national food supplies, gave this per capita requirement as under in Table No.10:

**Table No. 10 Per Capita Requirement of Food (gms/day)**

Foodstuff	Physiological	Retail	Production
Cereals	396	436	490
Pulses	43	47	53
Leafy Vegetables	58	64	72
Other-do-	45	49	55
Roots & tubers	40	44	0
Milk	200	220	248
Fats & Oils	31	34	38
Sugar/Jaggery	31	34	38

Source: Recommended Dietary Allowances in India, Indian Council of Medical Research, 1984

The food demand is driven by income and population growth, urbanization, food prices and income distribution. While the production of food grains did increase after 2005, the population is going still faster rate. In the recent past, the Government is depending on imports to maintain food security. Overall, food grains are experiencing declining growth rate over the past decades (Table No.13).

**Table No. 13 Projection of Household Food Demand and the Supply for India**

(Million Tonnes per annum)

Sl.No.	Food Items	Production 2006-07	Demand Projection 2010 2020
1	Rice	92.7	97.99 118.93
2	Wheat	74.9	72.07 92.37

3	All Cereals	201.9	181.12 221.11
4	Pulses	14.2	14.58 19.53
5	Food Grains	216.1	195.69 240.64
6	Milk & Milk products	100	106.43 165.84
7	Edible oil	5.96	7.67 10.94
8	Meat & Fish	10.16	7.25 10.8
9	Sugar &Gur	28.32	17.23 25.07
10	Fruits and Vegetables.	186.9	75.21 113.17

Source: Economic Survey, 200-08, Government of India and R. Radhakrishnan and K.V. Reddy “Food Security and Nutrition Vision 2020”

#### FOOD SECURITY SCHEMES IN INDIA:

The Government of India has initiated various schemes from time to time since First Five Year Plan (1951-56) to increase domestic agricultural Production making food available to the people, introducing safety nets to procure food, consumption of food taking into account food preparation, storage, utilization and dietary balance and finally meeting the food requirement at the time of vulnerability through Emergency feeding Program.

S N	Schemes	Target Population	Implementation
1.	a) Public Distribution System	a) Poor People	1. Introduced during the Second World War in 1939 to address food security concerns in the face of food scarcity, with the intention of maintaining price stability and checking dishonest practices in private trade
	b) Revamped	b)	2. Introduced a Revamped Public Distribution

- |    |                                     |  |   |
|----|-------------------------------------|--|---|
|    | Public Distribution System          | Household Below Poverty Line                 | System (RPDS) in 1992 to reach the poor households with more varieties and quantities of foodstuff at cheaper prices.   |
| c) | Targeted Public Distribution System | Line c) Household Below Poverty Line         | 3. The Targeted Public Distribution System (TPDS) was introduced in the year 1997 with issue of special cards to the BPL families who were provided with subsidized food grains.  |
| 2. | Essential Commodities Act           | General Public                               | Launched in 1955 to protect poorest of the people from the vagaries of market and empower the Government to control production, supply and distribution of essential commodities to ensure equitable distribution of food grain at fair prices. |
| 3. | Green Revolution                    | Farmers                                      | Launched in 1966 for continued expansion of farming area, double cropping existing farm land and using of seeds with improved genetics  |
| 4. | Integrated Child Development Scheme | Children, Pregnant Women & Lactating Mothers | Launched in 1975 to provide nutrition and health care services to children, pregnant women and lactating mothers in rural and urban areas   |
| 5. | SC/ST/OBC Hostel                    | Residents of Hostel                          | Launched in the year 1994 to provide 15 kg of food grain per resident per month having students belonging to Scheduled Caste/ Scheduled Tribe/ Other Backward Castes  |
| 6. | Mid Day Meal                        | Students of class I-V in                     | Largest school feeding program launched in 1995   |

primary  
schools

7. Village Grain Bank  
Antyodaya Anna Yojana  
Families
- BPL and Launched in 1997 to provide safeguard against starvation during the period of natural calamity or during lean season when the marginalized food insecure households do not have sufficient resources to purchase rations
8. Antyodaya Anna Yojana  
10 million Poorest of the poor
- Launched in the year 2000 for provision of wheat and rice at subsidized price of Rs 2 and Rs3 per kg respectively
9. Annapurna  
Indigent senior citizens
- Launched in 2000 to provide food security to indigent senior citizens who have no income of their own and none to take care of them in the village.
10. National Nutrition Mission  
Pregnant Women, Lactating Mothers and children
- The Government launched a pilot project in 51 nutritionally deficient districts in 2001 in the country with the release of special additional central assistance of Rs. 1033.3 million (US\$ 22991990) to the States to provide free food grains to under-nourished, pregnant and lactating women and adolescent girls belonging to BPL
11. Emergency Feeding Program.  
Old, infirm and destitute belonging to BPL
- Launched in 2001, the scheme is being implemented by Government of Orissa in eight KBK districts, is a food based intervention targeted for Old, infirm and destitute belonging to Below Poverty Level households

12. Supply of Food Hostels/ grains to Welfare ST/SC/OBC Institutions Hostels/ Welfare Institutions  
Launched in the year 2002 with a view to meet the food grain requirement of Hostels/Welfare Institutions viz: NGOs/Charitable Institutions which help the shelter less/homeless poor and other categories not covered under TPDS or under any other welfare schemes.

13. Nutritional Adolescent Program for Girls (11-19 years age)  
Launched in 2002 to provide free food grain at 6kg per beneficiary per month for a period of initially for 3 months for adolescent girls (11-19 years age) as identified by prescribed weight (< 35 kg) covered irrespective of financial status of the family.

14. National Rural Semi-Rural Employment Guarantee Act  
Launched in 2005, the Act aims at enhancing livelihood security of households in rural areas of the country by providing at least 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work below the poverty line in rural India

15. National Food Security Mission  
Launched in 2007, the National Food Security Mission aims at increasing production of rice, wheat and pulses through area expansion and productivity enhancement in a sustainable manner in the identified districts of the country.

16. Proposed National Food Right  
The National Food Security Act 2011 has been passed in the Parliament giving right to food to the Below

Security Act Food to Poverty Level households through targeted Public  
2011 BPL Distribution System  
households  
through  
TPDS

The Government of India introduced and implemented many food security schemes since its first five-year plan for making food available, accessible and utilized by the people. These program are Targeted Public Distribution System benefiting the BPL households, ICDS for children under five years age, pregnant women and lactating mothers and NREGA for rural unemployed persons.

### Conclusion:

To overcome food insecurity and fight against hunger and malnutrition India has formulated several policies. However, these policies are not sufficient to address the hunger situation in the countries and there exists a gap between the policies of ending hunger and their implementation. Lack of effective implementation, corruption, inefficiency and discrimination deprive the poor in India who continuously struggle for survival and endure different degrees of chronic and endemic hunger. The social welfare schemes are poorly implemented, central provisions of funds are inadequate or underutilized, food grains meant for the poor are diverted and enjoyed by powerful elites, discrimination in distribution, irregular and untimely supports, corruption, biased political influences at grassroots are elements of a complex web of causes contributing to widespread hunger in India



### References:

- Acharya, KCS, “ Food Security System in India” Concept Publishing Co, New Delhi, 1983
- Ahluwalia, D,’ Public Distribution of Food in India: Coverage, Targeting and Leakages”, Food Policy 8(1): 33-54
- Alagh, Y.K. “ Poverty and Food Security: Towards a policy System”, Economic and Political Weekly 30(52): A-1420A-150
- Bapna, S.L, “ Options for Ensuring Household Food Security in India” Indian Institute of Management, Ahmedabad, 1993
- Bhatt, M.S. (ed.)” Poverty and Food Security in India”, JamaMilliaIslamia, New Delhi, 2004
- Bhatia, B.M, “Food Security in South Asia”, Oxford & IBH Publishing Co. New Delhi, 1985
- Bhatia, B.M., Famines in India: A Study in Some Aspects of the Economic History of India with Special Reference to Food Problem, Konark Publishers Private Ltd, Delhi, 1985
- ChakrabortyDebashish“ Food Security in India” Policy Challeges and Responses” , Briefing Paper, Asia Program, Chatham House, Feb.2005
- Chand, Ramesh “ Whither India’s Food Policy? From Food Security to Food Deprivation”,Economic and Political Weekly 40(12): 1055-61, March, 12, 2005
- Chopra, R.N.” Food Policy in India: A Survey, Intellectual Publishing, and New Delhi, 1988
- Dantawala, M.L,” Agricultural Policy: Prices and Public Distribution System-A Review”, Indian Journal of Agri, Economists, April-June, 1993
- Davis, Mike.Lake Victorian Holocausts: El Nino Famine and Making of the Third World, London: Verso, 2001
- Dreze, J. and J. Sen“ Hunger and Public Action, UNU-WIDER Studies in Development Economics, Oxford: Clarendon Press, 1991
- Dutt, Ramesh C. “ The Economic History of India under early British Rule, 2001 edition by Routledge, ISBN 0-415-24493-5

- FAO (Food and Agriculture Organization of the United Nations). 2008. “ The state of food insecurity in the world” .Rome
- FAO/WHO, “ Declaration and Plan of Action adopted at International Conference on Nutrition”, Rome, 1992
- Food & Nutrition Board, Govt. of India.” Proceedings of National Workshop on Dietary and Nutritional Guidelines”, 4-6 Oct.1989, New Delhi
- Ghosh, Jayati,” The Global Food crisis and Food Security in India, NarenSen Memorial Lecture, Kolkata, 2009
- Gupta, S.P. “Report of the Committee on India Vision 2020, Planning Commission, New Delhi, 2002
- Ministry of HRD, Deptt. Of Women & Child Development, National Nutrition Policy (NNP), 1993
- Ministry of Civil Supplies, Consumer Affairs &PD “ Report of the Committee of Ministers on National Policy on PDS”, New Delhi, 1993
- Ministry of Agriculture, Report of the Working Group on Food grains Requirement by the year 2000AD, New Delhi, 1994
- Ministry of Consumer Affairs, Food & Public Distribution, Govt. of India ‘ Proposed National Food Security Act – A Concept Note, June 2009
- Mittal Surabhi&DeeptiSethi“ Food Security in South Asia: Issues and Opportunities, Working paper No. 240, Indian Council for Research on International Economic Relations, Sept. 2009
- National Food Security Mission Operational Guidelines, Government of India, 2007
- National Academy of Agricultural Sciences, India “ Dichotomy Between Grain Surplus and Widespread Endemic Hunger”, Policy paper 20, 2003
- Planning Commission,” Approach Paper to the 11<sup>th</sup> Five Year Plan, Government of India, New Delhi, 2006
- Planning Commission, Government of India “Eleventh Five Year Plan 2007-12, Volume-II, Social Sector-Nutrition and Social Safety Net”, New Delhi, 2006
- Planning Commission, Govt. of India ”Poverty Estimates for 2004-05, 2007

- Radhakrishna, R “ Food and Nutritional Security” in Kirti S Parikh and R. Radhakrishnas (eds) India Development Report, 2002, Oxford University Press.
- Radhakrishna, R and K.Venkata Reddy” Food security and Nutrition: Vision 2020
- Roy, Tirthankar, “ The Economic History of India, 1857-1947
- Sen, Amartya“ Poverty& Famines: An Essay on Entitlement and Deprivation’, Clarendon Press, Oxford, 1981
- Swaminathan A.M. “ Food Security: Policy Options for Tamil Nadu”, Academy Foundation, New Delhi, 2009

