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Food Security: Status and Concerns of India

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Abstract:
At one hand, various factors like food production, rising food prices, poverty, unemployment, climate changes, efficient public distribution of food, affecting the food security are the major concerns at domestic front, passing of ambitious Food Security Bill in Sep, 2013 by UPA government in India to provide the basic food staples at highly subsidized prices aimed at ensuring the economic access to food for around two-third of its population coupled with India's obligations of agriculture trade liberalization as a WTO member, exposes how liberalization of agriculture trade can affect India's food security on the other. Out of 842 million, 214 million people are suffered from chronic hunger in India which is around 17percent of its total population and one fourth of total chronically hunger in the world (FAO, 2013). Almost half of children under age five years (48 percent) are chronically malnourished and one out of every five children in India under age five years is acutely malnourished i.e. wasted (NFHS-3, 2005-06). Among all this, income growth, poverty reduction from 45.3% in 1993-94 to 21.9% in 2011-12, food self-sufficiency and various government schemes to augment employment, health and nutritional status of the population over the years are the noticeable steps taken by GOI in the food security domain. Present paper focuses on status of food security based on its various dimensions such as food availability, access, utilization and stability and associated concerns that India has especially in the post reform period. It is found that though India has been among the fastest developing economy, the pace of reduction of hunger and undernourishment has remained sluggish and well below the developed countries (2 percent hunger and undernourished population). There are challenges at domestic and international level which require more effort on development of agriculture infrastructure, fiscal consolidation, efficient public distribution of food and effective bargaining at international trade forums to secure long term benefits for food security.

Key words: *RDA(Recommended Dietery Allowance), PFA(Primary Food Articles), TPDS(Targetted Public Distribution System), GFD(Gross Fiscal Deficit), NFHS(National Family Health Survey), FRBM(Fiscal Responsibilities and Budget Management), MGNREGA(Mahatma Gandhi National Rural Employment Gaurantee Act), CPI-AL (Consumer Price Index for Agriculture Labour), CPI-UNME(Conumer Price Index for Urban Non-Manual Employees)*

1. Food Security Concept

The concept of food security which originated in the mid-1970s, during the global food crisis has undergone various changes, adding each time a new dimension to its definition by different international institutions and forums. Starting from addressing supply side issues to ensure availability of food at stable prices, the concept was subsequently extended to biological absorption issues related to the health. The 1974 World Food Summit defined food security as "Availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices". In 1986 the World Bank in its report "Poverty and Hunger" distinguishes food security on a temporal basis as chronic food insecurity caused by structural poverty and low income and transitory food insecurity which is temporary in nature and caused by natural disasters and economic crisis. The most advance and widely accepted concept of food security is FAO's refined definition of WFS 1996 which recognizes four important dimensions of food security i.e. availability, access, utilization and stability. Thus food security as defined by the FAO is "Food security [is] a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life".

2. Food Security: Status Check and Associated Concerns

As it is evident from the definition of food security that it's a very comprehensive concept having multiple dimensions. Judging the level of food security of a country requires assessment of each dimension from the perspective of various factors that can possibly affect them and in turn overall food security. In the following analysis a stock taking has been carried out for each dimension of food security, the various factors which influence them and the associated concerns of India.

2.1. Food Availability

Food availability is the main determinant of food security. Sufficient stocks of food to meet domestic demand, either through domestic supply or through imports is necessary, though not sufficient condition for food security. Post green revolution, India has achieved self-sufficiency in food grain production and seldom resorted to the import of food grains except in 1970s. Presently it is the net exporters, of the cereals. Table1 given below shows the per capita availability of major food items in the country. Though per capita availability has its own limitation as a measure of food adequacy because the actual requirement varies according to the nature of composition of the population and level of physical activity of the consumers, yet it provides approximate availability of food items per capita. Food grain production has increased from 150.5 million tonnes in 1985-86 to 259.3 million tonnes in 2011-12. The trend growth rate of cereals during the period from 1996-97 to 2011-12 declined to 1.56% from 2.88% in 1985-86 to 1995-96 period. India has turned out to be a net exporter of the cereals barring few years when it has imported the wheat to offset the low production and rising prices in the domestic market. The major concern of India's food security is from lower growth rate of pulses which has remained less than 1 percent in both the periods stagnating the pulses production around 13-14 million tones till 2009-10. However, pulses production has moderately improved in the last couple of years and touched to 18.2 million tonnes in 2010-11. Declining per capita availability of pulses has left its impression on the nutrition of the population through a decrease in share of MPCE on pulses and protein intake. The share of pulses in MPCE of both rural and urban areas has declined to 3.1% and 2.1% in 2011-12 (NSSO, 68th round) from 3.8% and 3.2% respectively in 1993-94(NSSO, 50th round). Similarly, protein intake in the corresponding periods in both rural and urban area has also declined, to 55gm and 53.5gm from 60gm and 57.2gm respectively. Demand of pulses in India is partially met through pulses imports which has increased from 0.5 million tonnes in 1995-96 to 3.8 million tonnes in 2009-10.

Year	Cereals	Pulses	Foodgrains	EdibleOil	Vanaspati	Sugar	Milk	Eggs	Fish
	gm/day	gm/day	gm/day	(Kg/Year)	(Kg/Year)	(Kg/Year)	gm/day	(nos/annum)	gm/day
1	2	3	4	5	6	7	7	8	9
1960-61	400	69	469	3.2	0.8	5	126	7	7
1970-71	418	51	469	3.5	1.0	7	126	7	7
1980-81	417	38	455	3.8	1.2	7	128	15	10
1990-91	469	42	510	5.5	1.0	13	176	25	13
1991-92	435	34	469	5.4	1.0	13	178	26	13
1992-93	428	36	464	5.8	1.0	14	182	26	14
1993-94	434	37	471	6.1	1.0	13	186	27	14
1994-95	458	38	495	6.3	1.0	13	192	29	14
1995-96	443	33	475	7.0	1.0	14	195	29	15
1996-97	466	37	503	8.0	1.0	15	200	29	15
1997-98	414	33	447	6.2	1.0	15	205	30	15
1998-99	429	37	466	8.5	1.3	15	210	30	15
1999-00	423	32	454	9.0	1.4	16	214	30	16
2000-01	386	30	416	8.2	1.3	16	217	36	15
2001-02	459	35	494	8.8	1.4	16	222	37	16
2002-03	409	29	438	7.2	1.4	16	224	38	16
2003-04	427	36	463	9.9	1.2	16	225	38	16
2004-05	391	32	422	10.2	1.1	16	233	42	16
2005-06	413	33	445	10.6	1.1	16	241	42	16
2006-07	407	36	443	11.1	1.2	17	251	45	17
2007-08	394	42	436	11.4	1.3	18	260	47	17
2008-09	407	37	444	12.7	1.2	19	266	48	18
2009-10	402	35	437	13.1	1.1	18	273	52	19
2010-11	424	39	463	13.6	1.0	17	281	53	19
Source: Economic Survey, GOI, 2013									

Table 1: Per Capita Availability of Major Food Items

Another major food article is Edible Oil whose per capita availability has increased from 6.1 Kg in 1993-94 to 13.6 Kg in 2010-11 which is still lower than the 14.6 kg as recommended by RDA,2009 of ICMR. Around 48 percent of its domestic edible oil demand is met through Imports. The edible oil imports are rising in the post-WTO period and a record 8.1 million tonnes of edible oil were imported in 2009-10. The oilseed production has risen from 10.8 million tonnes in 1985-86 to 29.8 million tonnes in 2010-11. The higher trend growth rate of 7.28% of oilseeds production in 1985-86 to 1995-96 can be attributed to Oil Technology Mission (OTM) of GOI in mid 1980s. The trend however could not be maintained in the later period, 1996-97 to 2011-12 in

which it trended to 2.64% only. The burgeoning edible oil import bill share in total agriculture import bill is the matter of great concern exposing India's dependency on trade for domestic food security. The share of edible oil in total agricultural imports has risen to woofing 60 percent in 2011-12.

India is the largest milk producer in the world. Milk availability has reached at all time high of 283 gms/ day in 2011-12 as against the recommended 150 gms/day for the low cost vegetarian diet with moderate work. It has also started to export the milk and exported 14615 tonnes of fresh milk in 2012-13. The share of poultry and meat products is growing in the total exports and stood at 388.37 crore and 14111crore in 2011-12.

(Million tonnes)								
Year	**Net production**	**Net Imports**	**Net Availability**	**Procure-ment**	**Public distributio n**	**% Share in Net Availability of**		
						Net Imports	**Procurement**	**Public Distribution**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1951	48.1	4.8	52.4	3.8	8.0	9.2	7.9	15.3
1961	72.0	3.5	75.7	0.5	4.0	4.6	0.7	5.3
1971	94.9	2.0	94.3	8.9	7.8	2.1	9.3	8.3
1981	113.4	0.7	114.3	13.0	13.0	0.6	11.4	11.4
1991	154.3	(-)0.1	158.6	19.6	20.8	...	12.7	13.1
1992	147.3	(-)0.4	148.5	17.9	18.8	(-)0.3	12.2	12.7
1993	157.5	3.1	149.8	28.1	16.4	2.1	17.9	10.9
1994	161.2	1.1	154.8	26.0	14.0	0.7	16.1	9.1
1995	167.6	(-)2.6	166.7	22.6	15.3	(-)1.6	13.5	9.0
1996	157.9	(-)3.1	163.3	19.8	18.3	(-)1.9	12.5	11.2
1997	174.5	(-)0.1	176.2	23.6	17.8	...	13.5	10.1
1998	168.2	(-)2.5	159.6	26.3	18.6	(-)1.6	15.6	11.1
1999	178.2	(-)1.3	169.4	30.8	17.7	(-)0.8	17.3	9.9
2000	183.6	(-)1.4	168.3	35.6	13.0	(-)0.8	19.4	7.7
2001	172.2	(-)2.9	156.9	42.6	13.2	(-)1.8	24.7	8.4
2002	186.2	(-)6.7	189.5	40.3	18.2	(-)3.5	21.7	9.6
2003	152.9	(-)5.5	170.6	34.5	23.2	(-)2.8	22.6	13.2
2004	186.5	(-)6.5	183.3	41.1	28.3	(-) 3.5	22.0	15.5
2005	173.6	(-)6.0	170.0	41.5	31.0	(-) 3.5	23.9	18.2
2006	182.5	(-)2.3	181.9	37.0	31.8	(-) 1.3	20.3	17.5
2007	190.1	(-)4.7	183.7	35.8	32.8	(-) 2.6	18.8	17.8
2008	210.2	(-) 9.7	183.5	54.2	34.7	(-) 5.3	25.8	18.9
2009	205.2	(-) 4.1	189.5	60.5	41.3	(-) 2.2	29.5	21.8
2010	190.8	(-) 2.2	189.2	56.1	43.7	(-)1.2	29.4	23.1
2011 (P)	214.2	(-) 2.9	203.1	64.5	47.9	(-)1.4	30.1	23.6
Sources: 1. Department of Food and Public Distribution. 2. Directorate of Economics & Statistics, Department of Agriculture & Cooperation								

Table 2: Net Availibility, Procurement And Public Distribution Of Foodgrains

2.2. Access to Food

Having enough food available does not by itself ensure food security. The ability to access food depends upon two important pillars i.e. economic and physical access. Personal disposable income, food prices and social security measures are the key determinant of economic access. Physical access is determined by the availability and quality of infrastructure, including ports, roads, railways, communication and food storage facilities and other installations that facilitate the functioning of markets. At the individual level, food security means that all members of the society have access to the food they need, either from their own production, from the market and/or from the government's transfer mechanism. In order to achieve food security it is also important that the poor have sufficient means to purchase food. Poor people cannot afford to purchase the food they need at market prices, and therefore, social protection programmes are needed. Adequate purchasing power for the poor to buy food can be ensured through employment generation which can provide remunerative work and subsidize food through social protection programmes like TPDS.

Various NSSO data show that rural and urban employment has grown at the rate of 2.08% and 3.26% in 1983-1994 and 1.84% and 3.09% in the period 1994-2005 respectively. The government's MGNREGA has improved the employment opportunities in the rural thus boosting the wages in rural area and hence purchasing power of the rural population. At the national level poverty ratio has declined to 21.9% in 2004-05 recording 269.3 million people BPL. The decline as shown in the table3 is steeper in rural area from 2004-05 to 2011-12 for both kinds of estimates. However the poverty line based on Tendulkar's methodology expressed in terms of MPCE based on a Mixed Reference Period has attracted larger controversy of being quite low. For 2011-12, for rural areas the national poverty line using the Tendulkar methodology is estimated at Rs. 816 per capita per month and Rs. 1,000 per capita per month in urban areas.

Year	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
2009-10	33.8	20.9	29.8	278.21	76.47	354.68
2011-12	25.7	13.7	21.9	216.5	52.8	269.3
Annual Average Decline : 1993-94 to 2004-05 (% points per annum)	0.75	0.55	0.74	0.21	-0.57	-0.31
2004-05 from 1993-94 by Expert Group 1993	0.82	0.61	0.77	2.1	-0.41	1.7
2009-10 from 2004-05 by Expert Group 2009	1.6	0.96	1.48	9.62	0.87	10.48
Annual Average Decline : 2004-05 to 2011-12 (% points per annum)	2.32	1.69	2.18	15.69	4	19.69
Source: Planning Commission of India						

Table 3: Percentage and Number of Poor based on the methodology recommended by Tendulkar Committee (Expert Group 2009)

Another indicator of purchasing power is agricultural wages. Healthy growth in real agricultural wages appears to be a sufficient condition for significant reduction in poverty in rural areas (Deaton and Dreze, 2002). The growth of regular and casual wage during the pre- and post-reform periods is almost the same in rural areas. Within the post-reform period, however, the growth rate of real wages declined substantially during 1999-2005 as compared to 1993- 2000.

The most important indicator of economic access to food is the food prices, which are on the rising side in the last few years. Average food price inflation is estimated at 5.1% from 1995-96 to 2007-08 but in the later period it has grown sharply and average food inflation for the last five years from 2008-09 to 2012-13 stands at 10.2 percent to a peak of 14.6 percent in 2009-10. The food total index, which has the weight of 26.9 in all commodities consist of Primary Food Articles (PFA with Wt.=15.4) and Manufactured Food Products (Wt=11.5). Among Primary Food Articles, egg, meat & fish (16.2%), Milk (12.8%) and Pulses (11.0%) are the major drivers of the average food inflation in the last five years (Table 4).

	1995-96 to 2007-08	2008-09 to 2012-13	1995-96 to 2012-13
ALL COMMODITIES	5.2	7.5	5.9
I. Food Total	5.1	10.2	6.5
A. Primary Food Articles (PFA)	5.7	11.4	7.3
a. Cereals	5.6	9.4	6.7
b. Pulses	6.2	11.0	7.5
c. Fruits & Vegetables	7.4	9.8	8.1
d. Milk	5.1	12.8	7.3
e. Eggs,Meat & Fish	5.3	16.2	8.4
f. Condiments & Spices	7.0	9.1	7.6
g. Other Food Articles	4.0	13.5	6.7
B. Manufactured Food Products	4.2	8.2	5.3
a. Dairy Products	5.8	8.7	6.6
b. Canning, Preserving & Processing of fish	8.9	6.6	8.3
c. Grain Mill Products	6.3	4.6	5.8
d. Bakery Products	4.4	4.3	4.4
e. Sugar, Khandsari & Gur	2.1	16.7	6.2
f. Manufacture of Common Salts	10.5	5.8	9.2
h. Edible Oils	4.5	5.2	4.7
i. Oil Cakes	6.6	11.8	8.0
j. Tea & Coffee Proccessing	6.0	8.6	6.7

k. Other Food Products n.e.c	5.1	8.9	6.1
Source: Estimated from WPI of Office Economic Adviser, GOI			

Table 4: Average Inflation of Different Food Products

Food Expenditure Index based on average monthly per capita food expenditure (MPCE) in various NSSO rounds has remained little above to the Consumer Price Index for Agriculture, Labor (CPI-AL) in the rural area showing improvement in their consumption, but for urban area the respective price index i.e Conumer Price Index for Urban Non-Manual Employees (CPI-UNME) was higher in 2000-01 to 2005-06 and letter improved from 2005-06 to 2011-12 despite rising food inflation (fig 1).

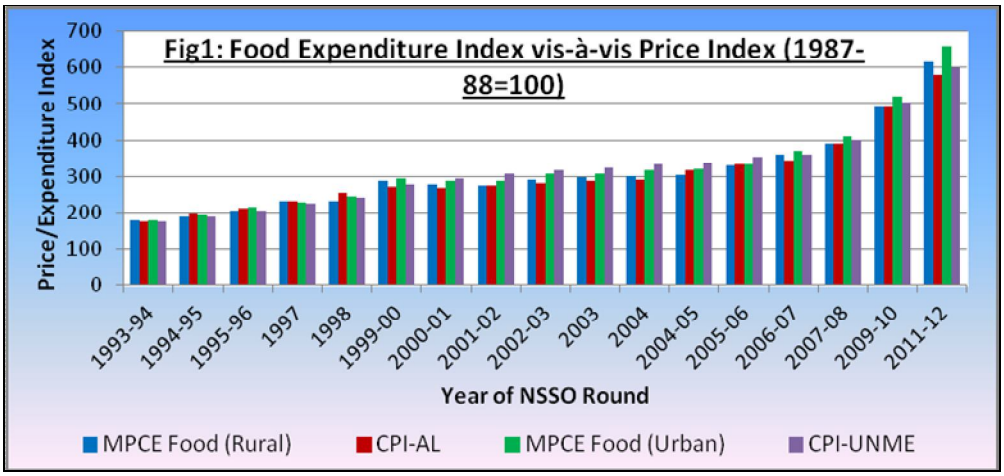

Figure 1

Rising Fiscal Deficit, farm wages, and transmission of the global food inflation in the neoliberal regime are the major causes of food inflation in India and together they explain 98 percent of the variation in Indian food inflation over the period 1995-96 to December, 2012 (Gulati and Saini, 2013). Moderating Fiscal deficit post FRBM (2003) is accompanied by a low rate of inflation. The states & centre's combined Gross Fiscal Deficit (GFD) was 4.0 percent in 2007-08 but it then again started rising due to stimulation packages to counter economic crisis of 2008 and went as high as 9.3 percent in 2009-10.Thus food inflation too, in the period rose at an average level of 10.2 percent from 2008-09 to 2012-13. India's food inflation with some lag seems to be in sync with Global Food Inflation based on FAO's Food Price Index (2002-04=100) (fig2). It is also evident that the fluctuations in food prices are lesser in India, probably the government's intervention in the market through Minimum Support Price (MSP) policies, Market Intervention Scheme (MIS) and policies of the export ban during short supplies of foods has provided better stability in food prices. Free trade in the foods may thus bring in price volatility in the food market jeopardizing the interests of both consumers and producers, hence the food security of the country.

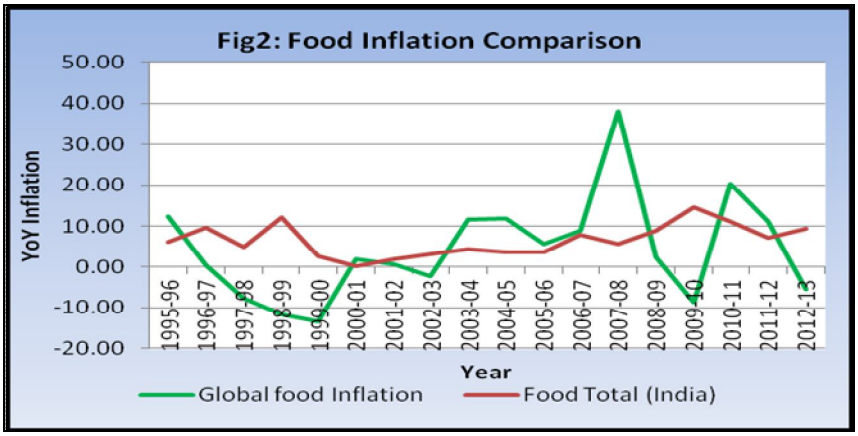

Figure 2

Procurement and distribution of food under Targeted Public Distribution System (TPDS) also help to augment access of food to poor and targeted people at economical prices. The public procurement agencies procure the foodgrains at Minimum Support Price (MSP) and then allocate to the States for distribution to the identified beneficiaries under the TPDS and other Welfare Schemes at subsidized prices. The difference between the economic cost of foodgrains and Issue Prices is incurred by the Central Government as consumer subsidy. In addition to procuring food grains for meeting the requirements of the TPDS and welfare

schemes, the Central Government is also under obligation to procure food grains for meeting the requirements of the buffer stock to ensure food security of the country. As revealed by data of Department of Food and Public Distribution, foodgrain distributed through TPDS has increased from 15.3 million tonnes in 1995-96 to 47.9 million tonnes in 2011-12. Foodgrain distribution as percent to total availability has risen from 9 percent to 23.6 percent in the same period. In the last couple of years procurement of foodgrain has reached around 30 million tones.

The major concern forthcoming to India is its rising food subsidy bill which has attracted the attention both at the domestic and international level. Subsidies on food bill has grown to 90'000 crore as per BE 2013-14 and accounted nearly one third of total subsidies (Table 5). Though the total proportion has declined from 56.1% in 2001-01 to 38.9% 2012-13 but it is expected to rise sharply due to implementation of "Food Security Act,2013". The act provides for the entitlement of 7Kg per capita food grains per month to nearly 75 % rural and 50 % urban population. Foodgrains will be distributed through TPDS at prices of Rs 3, Rs2 and Rs 3 per Kg for rice, wheat and coarse cereals respectively. The act will have subsidy implications of around Rs 1,24,502 crore for 2013-14 and total food grain requirement is estimated at 61.2 million tonnes. The cost is estimated to rise to Rs 1,40,192 crore and Rs 1,57,701 crore in 2014-15 and 2015-16, respectively. The food subsidy poses challenges both at domestic for fiscal reasons and at international level of opposition by WTO members as trade rules under WTO prohibits any domestic support or subsidies which are trade distorting. For the time being, however, India has bought the respite in the in Bali ministerial of the WTO and the matter will be renegotiated in 2015 during the WTO's 10th ministerial. It seems that even if India secures the deal in its favour in the future, the developed countries are going to bargain tough in the forthcoming negotiations.

Year	**2000-01**	**01-02**	**02-03**	**03-04**	**04-05**	**05-06**	**06-07**	**07-08**	**08-09**	**09-10**	**10-11**	**11-12**	**12-13**	**13-14***
Food Subsidy	12.1	17.5	24.2	25.2	25.8	23.1	24.0	31.3	43.8	58.4	63.8	72.8	85.0	90.0
Total Subsidies	26.8	31.2	43.5	44.3	46.0	47.5	57.1	70.9	129.7	141.4	173.4	217.9	257.7	231.1
Food Subsidy % of Total Subsidies	44.9	56.1	55.5	56.8	56.1	48.6	42.0	44.2	33.7	41.3	36.8	33.4	33.0	38.9
Source: Various Budgets of GOI *Budget Estimates														

Table 5:Trends In Food Subsidies (Rs '000 Crore)

2.3. Utilization of Food

Availability and access of food is not the end, but a means to achieve a healthy and active life which is possible through proper utilization of food. It is captured by anthropometric indicators and outcome indicators. Anthropometric indicators are affected by undernutrition and are widely available for children under five years of age. These include wasting (being too thin for one's height), stunting (being too short for one's age) and underweight (being too thin for one's age). Measurements of children under five years of age are considered effective approximations of the nutritional status of the entire population. Outcome indicators of food utilization convey the impact of inadequate food intake and poor health. Wasting, for instance, is the result of the short-term inadequacy of food intake, an illness or an infection, whereas stunting is often caused by prolonged inadequacy of food intake, repeated episodes of infections and/or repeated episodes of acute undernutrition. The data given below of Various NSSO rounds shows that Calorie and protein intake both in urban and rural area has declined, whereas there is increasing trend in fat consumption over the same period (Table 6). The entire three important nutrients have remained lower on a per capita basis than the Recommended Dietary Allowances (RDA) guidelines for Indians. Per capita calorie intake by quartiles shows that there was a significant decline in the case of the top quartile, while in the bottom quartile it has been stagnant. It may be noted that the per capita calorie consumption for the bottom decile was very low at 1485 kcal per day in 2004-05. This level is much below the norm of 2400 calories in rural areas.

NFHS data show that the proportion of underweight children declined only marginally from 47 per cent in 1998-99 to 45.9 per cent in 2005-06, although stunting among children declined to a much greater extent. International studies have shown that the rate of decline of child undernutrition tends to be around half the rate of growth of per capita GDP (Haddad et al, 2003). As against this finding, the rate of decline in malnutrition is much lower than per capita income growth in India. Thus, economic growth alone cannot reduce malnutrition. For example, in India, GDP growth was 6 to 7 per cent per annum during 1992-93 to 2005-06 and 9 per cent in the last four years. However, child malnutrition declined from 52 per cent to 46 per cent at the rate of 0.5 percentage points per annum. Severe and mild malnutrition contributed to 11% and 43% mortality rate in children under age 5 years. Undernutrition is prevalent even in the highest wealth group as shown in the table7.

	Rural			Urban		
Year (Round)	**Calorie (Kcal)**	**Protein (gm)**	**Fat (gm)**	**Calorie (Kcal)**	**Protein (gm)**	**Fat (gm)**
1972-73(27th)	2266	62	24	2107	56	36
1983(38th)	2221	62	27	2089	57	37
1993-94(50th)	2153	60.2	31.4	2071	57.2	42
1999-00 (55th)	2149	59.1	36.1	2156	58.5	49.6
2004-05(61th)	2047	57	35.5	2020	57	47.5
2009-10 (66th)	2020	55	38.3	1946	53.5	47.9
Source: NSSO Report(540)on "Nutritional Intake in India" of 66th round, Jul2009 -Jun 2010						

Table 6 : Changes in average per capita intake of Calorie, Protein and Fat per day over NSS rounds: all India

Where around 60 percent children in the lowest wealth group is malnourished, in the highest wealth group it is around 25 percent. Malnutrition in adults can be assessed using the body mass index (BMI), which is defined as weight in kilograms divided by height in meters squared (kg/m2). A normal weight for height is indicated by a BMI of 18.5-24.9. Thirty-six percent of women and 34 percent of men are undernourished, with a BMI less than 18.5, indicating a high prevalence of nutritional deficiency (FHS-3).

Wealth Category	**Stunting**	**Underweight**	**Waisting**
Lowest	60	57	25
Second	54	49	22
Middle	49	41	19
Fourth	41	34	17
Highest	25	20	13
All Categories	48	43	20
Source: NFHS-3			

Table 7 : Proportion of Children Undernourished in Different Wealth Categories

3. Conclusion

From the present state of India's food security and progress made in past, it can be discerned that though India has made a noticeable progress over the years but still it has to go a long way in improving it. The prevalence of malnutrition in all categories of age, income and sex, acute malnutrition in nearly one-fifth children, decreasing per capita availability of cereals and specially pulses, decreasing per capita calorie and protein intake and poor health of women are the major concerns. Most of its domestic food demand is met through domestic food production except pulses and edible oil. Around 50 percent of domestic consumption of edible oil is import dependent causing heavy drain to the state exchequer. Increae in production of pulses and oilseeds and infrastructure development to ensure proper food storage and above all maintaining the growth of agriculture sector around 4 % per annum can improve the food security scenario of the country. Other challenges which India faces is the taming of rising food prices especially of Primary Food Articles (PFAs) which hit the poors hard. At international level tough bargaining is needed in the WTO negotiations to keep "public stockholding for food security purposes" in the permissible Green Box measures of domestic support so that the interest of poor consumers and resource poor marginal farmers can be protected.

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Table: Area, Production and Trade of Major Food Products

Annexure:1

Area (Million Hectares)
Production, Export, Import (Million Tonnes)

Year	Cereals				Pulses				Fruits & Vegetables				Sugarcane				Oilseeds			
	Area	Prod.	Imp	Exp	Area	Prod.	Imp	Exp	Area	Prod.	Imp	Exp	Area	Prod.	Imp	Exp	Area	Prod.	Imp	Exp
1985-86	103.6	137.1	0.2	0.6	24.4	13.4	0.3	0.0	na	na	na	na	2.8	170.6	1.6	0.0	19.0	10.8	1.3	0.1
1986-87	104.0	131.7	0.2	0.4	23.2	11.7	0.6	0.0	na	na	na	na	3.1	186.1	0.9	0.0	18.6	11.3	1.4	0.1
1987-88	98.4	129.4	0.0	0.7	21.3	11.0	0.7	0.0	na	na	na	0.2	3.3	195.7	0.6	0.0	20.1	12.7	1.9	0.1
1988-89	104.5	156.1	2.7	0.4	23.2	13.9	0.9	0.0	na	na	na	0.3	3.3	203.0	0.0	0.0	21.9	18.0	1.1	0.0
1989-90	103.4	158.2	0.6	0.4	23.4	12.9	0.5	0.0	na	na	na	0.3	3.4	225.6	0.1	0.0	22.8	16.9	0.3	0.1
1990-91	103.2	162.1	0.1	0.4	24.7	14.3	0.9	0.0	7.5	na	na	0.3	3.7	241.0	0.0	0.0	24.1	18.6	0.5	0.1
1991-92	99.3	156.4	0.0	1.4	22.5	12.0	0.4	0.0	8.5	87.2	na	0.5	3.8	254.0	0.0	0.2	25.9	18.6	0.2	0.1
1992-93	100.8	166.7	1.5	0.6	22.4	12.8	0.4	0.0	8.3	96.8	na	0.5	3.6	228.0	0.0	0.4	25.2	20.1	0.3	0.1
1993-94	100.9	171.0	0.3	0.9	22.3	13.3	0.7	0.0	8.1	103.0	na	0.5	3.4	229.7	0.0	0.2	26.9	21.5	0.1	0.1

1994-95	100.8	177.5	0.0	1.2	23.0	14.0	0.6	0.1	8.3	105.9	na	0.6	3.9	275.5	1.8	0.0	25.3	21.3	0.4	0.2
1995-96	98.7	168.0	0.0	5.6	22.3	12.3	0.5	0.1	8.7	113.1	na	0.5	4.1	281.1	0.2	0.4	26.0	22.1	1.1	0.3
1996-97	101.1	184.2	0.6	3.7	22.4	14.2	0.7	0.1	9.1	115.5	na	0.7	4.2	277.6	0.0	0.7	26.3	23.3	1.5	0.2
1997-98	101.2	179.3	1.5	2.4	22.9	13.0	1.1	0.2	9.3	115.9	na	0.6	3.9	279.5	0.3	0.2	26.1	21.3	1.3	0.2
1998-99	101.7	188.7	1.8	5.0	23.5	14.9	0.6	0.1	9.6	131.6	na	0.4	4.1	288.7	0.9	0.0	26.2	24.7	2.7	0.2
1999-00	102.0	196.4	1.6	1.9	21.1	13.4	0.3	0.2	9.8	136.3	na	0.5	4.2	299.3	1.2	0.0	24.3	20.7	4.2	0.2
2000-01	100.7	185.7	0.0	2.4	20.3	11.1	0.4	0.2	10.1	137.0	na	0.6	4.3	296.0	0.0	0.3	22.8	18.4	4.3	0.3
2001-02	100.8	199.5	0.0	5.0	22.0	13.4	2.3	0.2	10.2	131.6	na	0.8	4.4	297.2	0.0	1.4	22.6	20.7	4.3	0.2
2002-03	93.4	163.6	0.0	8.8	20.5	11.1	2.2	0.2	9.9	130.0	na	0.9	4.5	287.4	0.0	1.7	21.5	14.8	4.4	0.2
2003-04	100.0	198.3	0.0	8.1	23.5	14.9	2.0	0.2	10.7	134.3	na	1.3	3.9	233.9	0.1	1.2	23.7	25.2	5.3	0.2
2004-05	97.3	185.2	0.1	8.0	22.8	13.1	1.5	0.3	11.8	152.1	na	1.3	3.7	237.1	0.9	0.1	27.5	24.4	4.7	0.3
2005-06	99.2	195.2	0.1	5.4	22.4	13.4	1.9	0.5	12.5	166.8	na	1.5	4.2	281.2	0.6	0.3	27.9	28.0	4.3	0.3
2006-07	100.5	203.1	6.1	5.5	23.2	14.2	2.5	0.3	13.1	174.6	na	2.0	5.2	355.5	0.0	1.6	26.5	24.3	4.3	0.3
2007-08	100.4	216.0	2.7	9.7	23.6	14.8	3.0	0.2	13.7	194.0	na	1.7	5.1	348.2	0.0	4.7	26.7	29.8	4.9	0.3
2008-09	100.7	219.9	0.0	6.5	22.1	14.6	2.6	0.1	14.1	197.5	0.4	2.6	4.4	285.0	0.4	3.3	27.6	27.7	6.7	0.4
2009-10	98.1	203.4	0.2	5.0	23.3	14.7	3.8	0.1	14.3	205.3	0.5	2.6	4.2	292.3	2.6	0.0	26.0	24.9	8.1	0.4
2010-11	100.3	226.3	0.2	5.7	26.4	18.2	2.3	0.2	14.9	221.4	0.6	2.1	4.9	342.4	1.2	1.3	27.2	32.5	5.5	0.5
2011-12	100.3	242.2	0.0	12.0	24.5	17.1	3.2	0.2	na	na	0.6	2.5	5.0	361.0	0.1	2.7	26.3	29.8	7.8	0.5

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