

## Chapter II

### Food Security and Food Production in India

#### 2.1 Introduction.

Food security is a basic human right. It advocates fair distribution of food, particularly grain crops, as a means of ending chronic hunger & malnutrition.

World Food Day is celebrated every year around the world on 16<sup>th</sup> October, in honour of the date of the founding of the Food & Agriculture Organization of the United States in 1945.

The World Food Day theme for 2010 is “United against Hunger”

Food security has been a major development objective in India since the beginning of planning. India achieved self – sufficiency in food grains in the 1990's & has sustained it since then.

Food security is a function not only of availability of food but also of the purchasing power of the people. It is therefore, important that every household should either have capacity to produce adequate food for all the members or have purchasing power to acquire it. It has to be appreciated that a country may be food surplus but all its citizens may not be enjoying food security as some may have no purchasing power.

#### 2.2 Concept of Food security :

Food & Agriculture Organisation (FAO, 1983) defined food security as “ensuring that all people at all times have both physical & economic access to basic food they need”. (1)

World Development Report (1986) defined food security as “access by all people at all times to enough food for an active, healthy life”. (2)

Staatz (1990) defined food security as “the ability to assure, on a long term basis, that the food system provides the total population access to a timely, receivable and nutritionally adequate supply of food”. (3)

### 2.3 Stages of Food Security for a developing country like India :

- i] The most basic need from the point of view of human survival is to make an adequate quantity of cereals available to all.
- ii] In the second stage we may think of food security as the adequate availability of cereals & pulses.
- iii] In the third stage, food security should include cereals, pulses, milk & milk products.
- iv] In the fourth stage, food security should include cereals, pulses, milk & milk products, vegetables, & fruits, fish, eggs & meat.

### 2.4 Food self – sufficiency and Food security in India.

Ninth Plan (1997 – 2002) has discussed the problem of food security at the national level and at the household level. The planning commission states. “An approach to national food security, which relies largely on domestic production of food needed for consumption as well as for building buffer stocks, can be described as a strategy of self sufficiency”.<sup>(4)</sup> This strategy was adopted in the early phase of Indian Planning . It emphasized the extension of irrigation facilities & later in the 1960’s adopted Green Revolution. As a consequence of these concerted efforts, India was able to attain its goal of self sufficiency in food grains.

Even though self – sufficiency of food production has been achieved , the population still lacks access to balanced food. The average per capita intakes of cereals have remained satisfactory but there have been a fall in the per capita consumption of pulses. It is important not only to improve pulse production but also make them available at affordable cost.

### 2.5 Trends in Production of foodgrains.

- a) In 1950-51, the production of foodgrains was 51 million tonnes but in 2009-10, it has increased to 218.20mt more than four fold increase.

- b) In 1950s, cereals accounted for 84% in foodgrains but their share has increased to 94% in 2009-10, the share of pulses, however, declined from 16% to 6% during the same period.

## 2.6 Net Availability of cereals & pulses.

Table No 2.1 given below gives a vivid picture of foodgrains production, per capita food availability & consumption.

Table no. 2.1

Total food production & per capita net availability of cereals & pulses.

Year	Total Foodgrains Production (million tonnes)		Cereals (million tonnes)				Pulses (Million Tonnes)		Per capita Net Availability per day gram			
			Net Production	Net Imports	Net Availability	Percent growth	Net Availability	Percent growth	Cearls	Pulses	Total	
1951	50.8	N A	40.1	N A	4.1	44.3	N A	8.0	N A	334.2	60.7	394.9
1961	82.0	61.41	60.9	51.87	3.5	64.6	45.82	11.1	38.75	399.7	69.0	468.7
1971	108.4	32.19	84.5	32.75	2.0	84.0	30.0	1.3	-7.20	417.6	51.2	468.8
1981	129.6	19.55	104.1	23.19	0.5	104.8	24.76	9.4	-8.73	417.3	37.5	454.8
1991	176.4	36.11	141.9	36.31	-0.6	145.7	39.0	12.9	37.23	468.5	41.6	510.1
2001	196.8	11.56	162.5	14.51	-4.5	145.6	-0.06	11.3	-0.12	366.2	30.0	416.2
2005	198.4	0.8	162.1	-0.24	-7.2	157.4	8.10	12.7	12.38	390.9	31.5	422.4
2006	217.3	9.52	170.8	5.36	-3.8	168.8	7.24	13.3	4.72	412.1	32.5	444.5

(Source : Government of India Economic survey 1999-2000, page no, 483.)

In the table no. 2.1 the data reveals that the net availability of cereals had gone up except in some years. But the govt had to import large quantity of cereals from other countries to increase the net availability of cereals in the country.

Data about per capita availability of cereals & pulses indicates an over all improvement in per capita availability of foodgrains from about 395 grams per day to 445 grams between 1951 & 2007. The per capita availability of cereals increased from

334 gms to 412 gms but the availability of pulses has declined deeply from 61 gms per day to about 33 gms per day - indicating the growing poor quality of food.

## 2.7 Foodgrain production in India.

Table No 2.2

### Food grain production in India.

Year	Cereals Million Tonnes	Pulses Million Tonnes	Foodgrain Production (Millian Tonnes)	% growth
1991-92	156.36	12.02	168.38	--
1992-93	166.66	12.82	179.48	6.6
1993-94	170.95	13.31	184.26	2.66
1994-95	177.46	14.04	191.50	3.92
1995-96	168.11	12.31	180.42	-5.78
1996-97	185.19	14.25	199.44	10.53
1997-98	179.29	12.91	192.2	-3.6
1998-99	188.70	14.91	203.61	5.43
1999-2000	196.39	13.41	209.80	3.00
2000-01	185.74	11.07	196.81	-6.19
2001-02	198.83	13.19	212.02	7.7
2002-03	204.00	16.00	220	3.7
2003-04	171.26	11.31	182.57	17.0
2004-05	185.23	13.13	198.36	8.6
2005-06	195.20	13.39	208.59	5.15
2006-07	203.08	14.20	217.28	4.16
2007-08	216.02	14.76	230.78	6.21
2008-09	219.90	14.57	234.47	1.59
2009-10	203.61	14.59	218.20	6.93

(Source ministry of agriculture Government of India.)

In the above table no. 2.2 it is shown that during the year 1996-97 and 2002-03 foodgrain production has increased a lot but in the year 2003-04, 2004-05, 2009-10 the

production has decreased. In the remaining year's food production has increased at the rate of 4% to 5% .

Due to deficient and erratic distribution of rainfall during the last monsoon season, production of khariff crops, particularly rice cereals, and sugarcane had been affected adversely. The early trends indicate that during Rabi season the production scenario will be better.

## 2.8 Statewise Food production of Some Major States

Table No 2.3 (Thousand Tonnes)  
Statewise Food Production of Some Major States

Sl. No	State	1991-92	1995-96	2000-01	2005-06	2006-07	2007-08	2008-09	2009-10
1	Andrapradesh	11705.4	11666.6	16029.2	16951.0	16229.10	19303.0	20421.0	15847.0
2	Gujarat	3393.5	4103.3	2539.0	6154.0	6499.0	8206.0	6481.10	6064.0
3	Haryana	9561.2	10137.4	13294.4	12998.1	14763.0	15307.8	15613.7	15773.6
4	Madya pradesh	17997.7	18072.8	10185.4	13195.0	13747.0	12070.5	13914.6	14476.9
5	Maharashtra	12184.2	11604.3	10134.9	12087.0	12645.1	1591.7	11427.6	12906.3
6	Punjab	19634.8	19806.12	25324.5	25184.2	25313.1	26815.3	27329.8	27320.4
7	Uttar Pradesh	35521.7	38367.5	42714.9	40410.2	41214.5	42094.8	46729.3	44023.5
8	West Bengal	12856.0	12884.8	13815.0	15608.9	15974.5	16050.2	16295.6	16109.1
9	Bihar	10638.4	12953.4	12056.1	8586.8	16098.6	10864.1	12220.7	10556.8
10	Jharkand			2011.0	2067.6	3686.8	4164.5	4188.7	2107.8
11	Karnataka	7927.00	8645.5	10986	13489	9599.00	12186.00	11275	10619.0
12	Orissa	8273.00	6802.00	4984.2	7359.7	7344.7	8143.00	7399.1	7582.5
13	Rajastan	7981.3	9567.1	10040.2	11445.0	14208.00	16058.7	16680.2	11283.4
14	Tamilnadu	8245.3	6405.3	8616.9	6127.2	8263.00	6583.00	7102.3	8034.8
15	All States	168110.2	180154.4	196571.6	208352.8	217027.4	230538.9	234231.4	215912.3

(Source : Agricultural statistics at a glance, ministry of Agriculture Government of India.)

In the above table no 2.3 it is shown that Uttar Pradesh, Andra Pradesh, Punjab & West Bengal have produced the highest quantity of food grains. Their share in the total production is more. The production is growing every year . This increased production is due to the use of High yielding variety seeds, use of modern technology and irrigation facility.

Table No 2.4

## Food production (Million Tonnes)

Item	2007-08	2008-09	2009-10
Rice	96.69	99.37	87.13
Wheat	78.57	77.63	80.71
Cereals	40.76	38.67	33.77
Pulses	14.67	14.18	14.59
Oilseeds	29.75	27.71	24.9
Total Food Grains	230.78	229.85	218.19

(Source : Crop Production)

It is found that although the yield per hectare of foodgrains has shown some improvement in recent years. It is clear that the food grain production decreased during the year 2009-10 due to drought in some area and deficient rainfall in other area. It is not enough to cater to the needs of the rising population when income level are also rising since farm productivity is not showing desirable growth there is urgent need to focus on research as well as better agricultural practices to ensure that productivity levels are increased in the shortest time possible.

India is the second largest exporters of rice & fifth largest exporter of wheat in the world. Its agricultural exports accounts for nearly 14.2 % of its total exports. India ranks first in the world in production of cereals & milk. It is second largest fruit & vegetable producer & is among the top five producers of rice, wheat , groundnut, tea, coffee, spices, sugar & oilseeds. India is the 7<sup>th</sup> largest producer of fish in the world.

2.9 Food production in Karnataka from 1991-2010.

Table No 2.5

Food production in Karnataka from 1991-2010

Year	Food production (Thousand Tonnes)	% Growth
1990-91	6399.2	N A
1991-92	7927.10	23.87
1992-93	8498.6	7.20
1993-94	8659.3	1.89
1994-95	8106.6	-6.38
1995-96	8645.6	6.64
1996-97	9212.8	6.56
1997-98	8046.8	-12.65
1998-99	9996.6	24.23
1999-2000	9859.3	-1.37
2000-01	10986.0	11.42
2001-02	8696.7	-20.83
2002-03	6664.4	-23.36
2003-04	6562.1	-1.53
2004-05	10495.0	59.93
2005-06	13489.0	28.52
2006-07	9599.0	-28.83
2007-08	12186.0	26.95
2008-09	11275.0	-7.47
2009-10	10619	-5.81

(Source : Agricultural statistics at a glance, Ministry of Agriculture, Government of India.)

It is found that, growth of food production in Karnataka has decreased many times. In the year 2001-02, 2002-03, and 2006-07 it has decreased remarkably. In the year 2000-01, the food grain production is increased at the growth rate of 11.42%.

Even in the year 2005-06 also it was increased at the higher rate. The same growth rate is found in the year 2007-08 also.

#### 2.10 Food security & Nutrition.

During the last 50 years, there has been substantial reduction in moderate & severe under – nutrition in children & some improvement in nutritional status of all segments of population.

Milder forms of chronic energy deficiency still persists in many parts of the country; serious malnutrition & even widespread starvation among children and the aged has become common in tribal belts, essentially because their purchasing power is low.

#### 2.11 Prevention of Chronic Energy Deficiency. :

Applied Nutrition Project (ANP) introduced in 1963 was intended to promote production of protected food such as vegetables & fruits & ensure their consumption by pregnant & nursing mothers & children.

Special Nutrition programme (SNP) was started in 1970 with the objective of providing 500k cal & 25gms of protein to expectant & nursing mothers. Integrated Child Development Services Scheme started in 1975 was intended to provide food supplementation to children & pregnant/nursing women.

Goals set in Nutrition policy

The major goals are

- A. Intensify nutrition and health education to reduce infant mortality and child feeding and caring practices so as to
  - i. Bring down the prevalence of under weight children under three years from the current level of 47% to 40%.
  - ii Reduce prevalence of severe under nutrition in children in 0-6 year's age groups by 50%.
- B. Reduce prevalence of anamia by 25% and that of moderate/severe anamia by 50%.
- C. Eliminate vitamin A deficiency as a public health problem.
- D. Reduce prevalence of iodine deficiency disorders to less than 10%.



## 2.12 Mid Day Meal Programme

Mid Day Meal programme was introduced for children between ages of 2-14 attending balwadis /schools. The programme doesnot cover poor children not attending school. This programme has been renamed as Nutritional Support To Primary Education.

Income status bears a positive relationships with consumption of pulses, milk, fruits, meat, oil & sugar. Recommended intake of pulses, is 40 gms per day. Even the national average is 33gms in 2006-07 & thus the condition of the poor intake of pulses has become worse.

## 2.13 Public Distribution system & Food Security :

Public Distribution System acts as a price support programme for the consumers during the periods of food shortage. It also acts as an instrument of price stabilisation. The basic aim was to provide essential commodities such as rice, wheat sugar, edible oil, kerosene at subsidised prices and it was considered as an essential element of Governments safety net to the poor. The persistence of hunger and malnutrition is the principal justification for public distribution system.

Public Distribution System supplies have rapidly increased since the mid 1960's During drought years, Public Distribution System supplies were greater than during normal years. During years of low foodgrains production, the Government increased Public Distribution System supplies by enlarging the employment programmes in distressed areas.

### Targeted Public Distribution System

It was introduced in June 1997. It envisaged that the below poverty line population would be identified in every state to a certain quantity of foodgrains at specially subsidized prices.

The Govt tried to streamline the system by issuing special cards to Below Poverty Line families and selling food grains to them at specially subsidized prices with effect

from June 1997. Under Targeted Public Distribution system each poor family was entitled to 10 kg of food grains at highly subsidized prices.

To increase the extent of benefit to the poor the allocation of Below Poverty Line families was increased from 10 kg to 20 kg per month at 50% of the economic cost from April 2000. The allocation of above poverty line families was retained at the 10 kg level fixed in 1997 at the price which was equal to 100% of the economic cost.

The main aim was to direct the subsidy to Below Poverty Line and discourage Above Poverty Line families to benefit from Public Distribution System. As a consequence, it was expected that 65 million Below Poverty Line families would receive a kind of income transfer.

With effect from July 2001, the Below Poverty Line allocation of food grains was increased from 20 kg to 25 kg per family per month. In addition, 25 kg of food grains was to be provided to the poorest of the poor families of the Anthodya Anna Yojana at a highly subsidized price of Rs 2 kg for wheat and Rs 3 per kg for rice under Public Distribution System

#### Objectives :

- \* To protect the low income groups by guaranteeing the supply of certain minimum quantities of foodgrains at affordable price.
- \* Ensuring equitable distribution.
- \* Controlling the price of essential commodities in the open market.

The objectives of universal coverage with preferential treatment to the poor families living in rural areas and having an annual income of less than Rs 12000 or less and in urban areas with an annual income of Rs 17000/- or less have been issued with yellow cards with entitlement to draw subsidized foodgrains.

Government of Karnataka is committed to issue 28 kgs of rice, 7kgs of wheat to the Anthyodaya Anna Yojana cardholders and 20kg of rice and 5 kg of wheat per card per month through the Fair Price Depots, indicated in the ration cards at subsidized prices for the BPL families.

Table No 2.6

Procurement and offtake of wheat and Rice (million tonnes)

Item	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Rice	16.6	19.2	21.2	22.6	22.2	18.1
Wheat	13.1	12.2	10.4	10.9	12.6	14.4
Total	29.7	31.4	31.6	33.5	34.8	32.4
* BPL (Rice+Wheat)	17.5	15.6	14.2	15.1	15.7	12.4
* APL (Rice+Wheat)	6.7	8.3	8.7	9.0	9.6	12.5
* AAY (Rice+Wheat)	5.5	7.4	8.7	9.4	9.5	7.4

\* B P L = Below Poverty Line

\* A P L = Above Poverty Line

\* A A Y = Anthodia Anna Yojana

(Source – Dept of Food and public distribution.)

In the table number 2.6 it is found that the wheat and rice are distributed in different years through the public distribution system to BPL & APL card holders. It is also found that the rice & wheat are distributed through the Anthodaya Anna Yojana.

Table No 2.7

Central Government Expenditure on Food.

Year	Expenditure (Rs. Crore)	Percent of Total Govt. Expenditure.
1980-81	650	2.9
1990-91	2450	2.3
2000-01	12,120	3.6
2006-07	23,830	5.2

(Source : Department of food &amp; public distribution)

In the table no. 2.7, it is found that the central government expenditure on the food during the different years. The expenditure is increasing every year.

Table No 2.8

## Quantum of food subsidies released by Government

Year	Food subsidy (Rs Crores)	Annual growth (Percent)
1999-2000	9200.00	5.75
2000-01	12000.00	30.43
2001-02	17494.00	45.66
2002-03	24,176.45	38.20
2003-04	25,160.00	4.07
2004-05	25,746.00	2.33
2005-06	23,071.00	10.39
2006-07	23,827.59	3.28
2007-08	31,259.00	31.19
2008-09	43,668.08	39.63
2009-10	46,906.68	7.42

(Source: Department of Food & public distribution)

The above figure depicts the amount which was spent on food subsidy. It was more in the year 2000 – 01, 2001-02, & 2002-03. 2007 - 08 & 2008 - 09 It was very less in the year 2004 & 05 and 2006-07.

Scenario of Public Distribution System in Recent years.

In addition to distribution of foodgrains to population under Below Poverty Line and Above Poverty Line , allocation is made to population identified under various schemes such as.

- 1 Antodaya anna yojana
- 2 Mid Day Meal Scheme
- 3 Annapurna scheme
- 4 Wheat based nutrition schemes.

- 5 Foodgrains to adolescent girls and lactating mothers nutrition programme.
- 5 Scheduled Caste / Scheduled Tribe / Other Backward Communities / Hostels and welfare institutions.
- 6 Sampurna Gramin Anna Yojana
- 7 National Food for Work Programme.
- 8 Village Grain Bank Scheme.
- 9 Emergency feeding programme.
- 10 World food Programme
- 11 Defence and paramilitary forces.

#### 2.14 Main Components of the food security system.

The components of the food security are as follows.

- i] Promoting domestic production to meet the demands of the growing population as also to reduce under nutrition among quite a large section of the population.
- ii] Providing minimum support prices for procurement & storage of food items.
- iii] Operating a public distribution system.
- iv] Maintaining buffer stocks so as to take care of natural calamities resulting in temporary shortage of food, and to act as a countervailing mechanism against traders & businessmen who try to push up prices, especially during periods of shortages of food.

#### 2.15 Food Security at the National level and local level.

##### Food security at National level

The planning commission states “An approach to National Food Security which relies largely on domestic production of food needed for consumption as well as building buffer stocks can be described as a strategy of self sufficiency.”

As a result of the green revolution India was able to avert, famines and acute food sacrifice, yet it has not been able to provide food needed for active and healthy life to its population. There was a need of a balanced diet. It consists of needed cereals, necessary quantity of pulses, vegetables and fruits.

#### Food Security at the Local Level.

At the house hold level, food security implies having physical and economic access to food articles that are adequate in terms of quantity, quality and affordability. This raises the question of prices of food articles and the purchasing power in the hands of the population. To help the poor sections, the Govt introduced the public distribution system and adopted dual price mechanism. At the Public Distribution System outlet, the issue of price to enable the poor to purchase subsidized food.

To achieve house hold level food security, efforts should be directed on the following fronts.

- i. Accelerating growth in food and agricultural sectors.
- ii. Promoting rural development that focuses on poor.
- iii. Improving access to land and other natural resources.
- iv. Providing cheap credit for poor house holds.
- v. Increasing employment opportunities.
- vi. Introducing income transfer scheme including Public Distribution System of subsidized cheap food.
- vii. Stabilizing food supplies and food prices.
- viii. Improving emergency preparedness planning for providing food aid during natural disasters like drought, flood, earth quake etc.

#### 2.16 Integrated Child Development Services Scheme

Integrated Child Development Services was launched on 2<sup>nd</sup> October 1975. It was intended to provide food supplementation to children and pregnant/nursing women. Review of the Integrated child Development services programme revealed “ while 25% of nursing mothers in Integrated Child Development Services area introduced

semi solid supplements to their breast fed infants at 6 months only 19% did so in non Integrated child Development services area.”

Expansion of the Integrated child Development services scheme.

Objectives :

- 1] To improve the nutritional and health status of children in the age group of 0-6 years.
- 2] To lay the foundation for proper psychological, physical and social development of the child.
- 3] To reduce the incidence of mortality, morbidity, malnutrition and school drop out .
- 4] To enhance the capability of the mother to cook after the normal health.

Services :

The above objectives are sought to be achieved through on package of services comprising.

- 1] Supplementary nutrition
- 2] Immunization.
- 3] Health check up.
- 4] Referral services.
- 5] Pre school non formal education.
- 6] Nutrition and health education.

Table No 2.9

Expansion of the Integrated Child Development services scheme.

Year ending	operational projects (Thousands)	operational * AWC (Lakhs)	supplementary nutrition beneficiaries (Lakhs)	pre school education beneficiaries. (Lakhs)
2002	4608	545714	375.10	166.56
2003	4903	600391	387.84	188.02
2004	5267	649307	415.08	204.38
2005	5422	706872	484.42	218.41
2006	5659	748229	562.18	244.92
2007	5829	844743	705.43	300.81
2008	6070	1013337	843.26	339.11
2009	6120	1044269	873.43	340.60
2010	6509	1142029	884.34	354.93
	6719	1241749	918.65	355.02

\* A W C = Anganawadi Centres

(Source : No. of beneficial for Integrated Child Development Scheme)

The Central Government sponsored integrated child development scheme has been expanding since 2002. The number of anganawadi centre have been increasing. The supplementary nutrition beneficiaries and number pre school education beneficiaries have been increasing year after year.

#### Nutrition Food in Anganawadi Centers

Ragi, wheat or ragi based nutritious food are served in Anganwadi centres and 300 plus calories energy is ensured in the beneficiary's diet which contains enough carbohydrates, protein, fat and vegetable, common menu applicable to all projects is prepared and food items are limited to 2-3 varieties.



Table No 2.10

## Food Menu

A W children and pregnant/lactating mothers, malnourished children	calorie to be served	Items required for preparation in grams	Rate per Child in Rs
1] Kichedy (Rice based +Milk)	+ 300 calorie for children below 6 years	1) Rice -60 M/dal -15 oil-05 Potato-10 Onion-5 2] Milk 19.50 3] Others Spices/Salt /detergent 4] Fuel & Transport	00.50 00.45 00.35 00.10 00.05 01.85 00.10 00.20 00.15 ----- 3.75
2] Daliya (Wheat based)	+ 300 calorie for children below 6 years	Daliya -50 Sugar/Jaggery – 25 Milk – 14 Fuel Transport	1.00 0.50 1.90 0.20 0.15 ----- 3.75
3] Ragi (Ragi based)	+ 300 calorie for children below 6 years	Rage-50 sugar/Jaggery-25 Milk-14  Fuel Transport	1.00 0.50 1.90  0.20 0.15 ----- 3.75

(Source : Status report of Anganwadi Centres)

The above table shows that the child gets the food worth of 300 calorie. It includes rice , oil, potato, milk, onions, spices, salt & etc. It is of Rs. 3.75. for each child and each day. The food menu varies from region to region.

Table No 2.11

Status of Funds released under Integrated Child Development Scheme during 2009-10

Andra Pradesh	34974.3
Karnataka	20579.49
Maharashtra	31780.80
Tamilnadu	17653.51
Uttar Pradesh	50853.63
Bihar	28965.41
Chattisgarh	14068.71
Goa	816.47
Gujarat	15631.96
Haryaa	7940.70
Himachal Pradesh	7002.53
Jammu Kashmir	8282.34
Jharkand	12697.56
Kerala	14037.04
Madya Pradesh	19973.34
Orissa	22026.29
Punjab	8779.45
Rajastan	22254.95
Uttarakhand	3596.49
West Bengal	36739.78
Delhi	3137..32
Pandicherry	222.41
Andaman a Nicobar	288.66
Assam	23551.88
Manipur	3307.42
Tripur	7362.81
Nagaland	4994.32
Total	430682.15

(Source : Release of funds for Integrated Child Development Scheme.)

In the table no 2.11, it is found that during the year 2009-10 Uttar pradesh received the highest fund for Integrated Child Development Scheme programmes. Andra pradesh, Maharashtra, Bihar followed Uttar pradesh. Goa and Pondicheery have received less funds.

## 2.17 India boosting production of food grains for enhancing food security.

“Achieving food security in times of crises” This is the theme for this year’s World Food Day being celebrated on October 16 India has no doubt won the battle against famines and starvation deaths which have become the thing of the past. The food output has grown annually. On an average by 1.98% between 2004-05 and 2008-09 this is higher than the estimated population growth of 1.5% during this period. Yet there is rampant disguised hunger and malnutrition, more than one fifth of the country’s population is reckoned to be under nourished in terms of energy and protein intake.

Modern concept of food security goes far beyond the availability and accessibility of staple food. It includes the man’s need for safe drinking water, clean surrounding environment and health cover. Livelihood security, essential for ensuring economic access to food is related to food security. Sanitation and shelter are also part of the bread new concept of food security.

Moreover, social welfare schemes involving food as components of assistance, and food for work kind of programme are launched with the dual objective of providing food and alleviating poverty. National Rural Employment Guarantee Act guaranteeing right to food. Such measures can take care of both food security and livelihood security. Presently, over half of country’s population is covered by one or the other scheme in which subsidized food is made available to the beneficiaries.

National Food Security mission which essential aims at boosting the production of food grains like rice, wheat and pulses.

The biggest challenge to food security has been posed by the global warming and the resultant climate change.

#### 2.18. Why India Concerned?

India is second most populated country in the world, where the majority of rural population is still dependent on agriculture for their livelihood and over 600 million farmers are involved in agriculture & related activities. Agriculture and allied activities contribute about 30% to the gross domestic product of India. India has 52% of cultivable land and varied climates. With arable land area of 168 million hectares, India ranks second only to the US in size of agricultural area. India a developing nation quite vulnerable to climate change, can also cause tremendous impact in world food demand.

Table No 2.12  
State wise Hunger Index, 2007

State	Prevalence of caloric under Nourishment	Population of under weight children <5 years %	Under five mortality rate %	Hunger Index Score	Hunger Index Rank
Punjab	11.1	24.6	5.2	13.63	1
Kerala	28.6	22.7	1.6	17.63	2
Andra Pradesh	19.6	32.7	6.3	19.59	3
West Bengal	18.5	38.5	5.9	20.97	7
Maharashtra	27.0	36.7	4.7	22.80	10
Karnataka	28.1	37.6	5.5	23.73	11
India	20.0	42.5	7.4	23.30	

(Source: India State Hunger Index)

Within India, some of richest states with most rapid recent growth of Gross Domestic Product such as Maharashtra and Karnataka perform very poorly on the hunger index, clearly much worse than Kerala. West Bengal is close to the middle among the major states and slightly below the national average in terms of the hunger index.

## 2.19 Ensuring Food Security of Nation

The Food Corporation of India was setup under the Food Corporation Act 1964 in order to fulfill following objectives of the food policy.

- 1) Effective price support operations for safeguarding the interest of the farmers.
- 2) Distribution of food grains through out the country through public distribution system.

- 3) Maintaining satisfactory level of operational and buffer stocks of food grains to ensure National Food Security.

In its 46 years of service to the nation, Food Corporation of India has played a significant role in India, success in transforming the crisis management oriented food security into a stable security system.

References :

- 1) Krishnamurthy Hosabedu. H. R. - Economic Development of India, published by Swapna Book House Pvt Ltd Bangalore, Edition 2007, Page no 175.
- 2) Ruddar Dutta – Indian Economics , published by S. Chand and Company Ltd New Delhi, Edition 2002, page no 496.
- 3) Ruddar Dutta et.al – Indian Economics , published by S. Chand and Company Ltd New Delhi, Edition 2002, page no 481.
- 4) [http://www.worldig.com/definition/food security](http://www.worldig.com/definition/food%20security), page no 1