FOOD SECURITY IN INDIA: ISSUES AND SUGGESTIONS TO IMPROVE THE PUBLIC DISTRIBUTION SYSTERM

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Abstract

Food security has three important and closely related components, which are: availability of food, access to food, and absorption of food. According to the FAOs latest food security report, micro nutrient and vitamin A deficiency were the prime determinants to child health and nutrition in India. It is reported that 57 per cent of pre-school children suffered from vitamin A deficiency. Food security in India is adversely affected by several abiotic, biotic, and socio-political situations. The current position may worsen in the future if timely and appropriate actions are not planned and executed. The pressure of human population and land for cultivation, climate change, government policies of public distribution and marketing of food grains and lack of a participatory approach all are contributing to slowdown the availability of foods. Also, crop productivity seems to be very much unsustainable. The situation has to be remedied by all possible means and citizens must be assured of food security. There has been a significant increase in the production of rice, wheat, cereals, fruits, vegetables, and other products. Among the specific suggestions made to lift the agricultural sector from its present slowdown and stagnation, increased public investment and a serious review of subsidies provided to farmers. To boost infrastructure, expansion of credit, essential inputs, land and water management, agricultural research and extension, effective marketing and price policies, the diversification of agriculture, strengthening of institutions catering to these needs, strengthening the mitigation strategies for tackling climate change, and the strict regulation of land use and diversion of land for non-agricultural activities. It is found out that in spite of having achieved self-sufficiency in cereals it is still lagging behind in the production of pulses and oilseeds. Thus, the increased production followed by the decentralization of procurement and distribution has become necessary to improve and strengthen the PDS in India.

Key words: Food security, diversification of agriculture, climate change, public distribution system, etc.

1. Introduction

The Food and Agricultural Organization (FAO) states that food security emerges when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Food security has three important and closely related components, which are availability of food, access to food, and absorption of food. According to the FAO's latest food security report, micro nutrient and vitamin A deficiency were the prime determinants to child health and nutrition in India. It is reported that nearly 57 per cent of pre-school children suffered from vitamin A deficiency. The infant mortality rate in India (for infants under one year) was as high as 56 in 2005 but it was declined 39.1

deaths/1000 live births in 2017. The NFHS-3 reported that 19 per cent of India's children were wasted, 38 per cent stunted, and 46 per cent were underweight, figures that are disturbing and far from satisfactory. The extent and nature of food insecurity can be broadly categorized into chronic food insecurity, nutritional insecurity, food insecurity caused by lack of food absorption, and transitory food insecurity. There are several factors, both on the supply side, as well as the demand side that may cause chronic food insecurity. The most important supply side determinants of food insecurity are: the level of domestic food production, the imports of food and the distribution of food. The determinants on the demand side are: the growth of population, the purchasing power, product prices/subsidies, and the extent and effectiveness of supportive social programmes and schemes such as the Integrated Child Development Services, the Mid Day Meal Scheme, Food for Work Programmes and Rural Wage Employment Programmes.

2. Objectives of the study

- 1. To assess the status of food security- i.e. access to food, food availability and food utilization in India.
- 2. To identify status of food grains distribution through the public distribution system.

3. WTO and food security

The Indian agricultural scene has witnessed changes following the economic reforms in the nineties as well as with the establishment of World Trade Organization in the mid-nineties. India seems to be a victim of thirty years of agricultural policy with an exclusive focus on spreading HYV seed fertilizer technology in a few potential regions for achieving food self sufficiency. Consequent to the adoption of this strategy, India achieved self-sufficiency in food grains by the mid-seventies and is currently facing the problem of disposing off huge food grains stocks. It is observed that self-sufficiency in food grains is partly due to the weak purchasing power of the poor. As a remedial measure it is suggested that India should diversify its agriculture and get a foothold in the world food market. The diversified and accelerated agricultural growth would enhance the food security by improving the purchasing power of the poor. However, even after the establishment of WTO, the agricultural trade did not improve much during the transition period since agricultural prices have sharply declined in the world markets and there has been no reduction in the degree of protection by the developed countries. The deceleration in the agricultural growth during the nineties is more due to internal factors such as decline in public investment in agriculture slowdown in the growth in fertilizer consumption. Slow rise in the expenditure on agricultural research and so on. It is argued that if India is to benefit from the emerging opportunities opened up by liberalized agricultural trade, major reforms have to be undertaken on the domestic front. It is recognized that cereal prices in the world market which have declined during the nineties are unlikely to rise on account of reforms in the developed countries.

TABLE 1 **Production of Food Grains (Million Tonnes)**

		Cei		Total Food			
Year	Rice	Wheat	Coarse Cereals	Total 2+4	Pulses	grains 5+6	
2000-01	84.98	69.68	31.08	185.74	11.07	196.81	
2001-02	93.34	72.77	33.37	199.48	13.37	212.85	
2002-03	71.82	65.76	26.07	163.65	11.13	174.78	
2003-04	88.53	72.16	37.60	19828	14.91	213.19	
2004-05	83.13	68.64	33.46	185.23	13.13	198.36	
2005-06	91.79	69.35	34.07	195.22	13.38	208.60	
2006-07	93.36	75.81	33.92	20308	14.20	217.28	
2007-08	96.69	78.57	40.75	216.01	14.76	230.78	
2008-09	99.18	80.68	40.04	219.90	14.57	234.47	
2009-10	89.09	80.80	33.55	203.45	14.66	218.11	
2010-11	95.98	86.87	43.40	226.25	18.24	244.49	
2011-12	105.30	94.88	42.01	242.20	17.09	259.29	
2012-13	105.24	93.51	40.04	238.79	18.34	257.13	
2013-14	106.65	95.85	43.29	245.79	19.25	265.04	
2014-15	105.48	86.53	42.86	234.87	17.15	252.02	
2015-16	104.41	92.29	38.52	235.22	16.35	251.57	
2016-17	110.15	98.38	44.19	252.73	22.95	275.68	
2017-18	111.01	97.11	45.42	295.12	23.95	319.07	

Source: Ministry of Agriculture & Farmers Welfare, Government of India

4. Public distribution system

India has a large programme of public food distribution through fair price shops, accounting for a significant part of the government's budgetary subsidies. The PDS in its present form a producer price-support-cum-consumer subsidy programme has evolved in the wake of food grain shortages of the sixties. It was mainly confined to urban and food deficit areas with its emphasis primarily on price stabilization till the late seventies. The welfare dimension of the PDS has gained importance since the early eighties and its coverage has been extended to rural areas in some states as well as to areas with a high incidence of poverty. The food subsidy of the Central Government at Rs.17 612 crores, accounted for 0.89 per cent of GDP in 2001-02. In the wake of economic reforms, the PDS is perceived to be the main safety net to protect the poor from potential short-run price-induced adverse effects of economic reforms.

TABLE 2 Public Distribution System - Procurement, Off-Take and Stocks

Year	Procurement		Off-Take			Stocks			
2000-01	21.28	16.36	37.64	10.42	7.79	18.21	23.19	21.50	44.98
2001-02	22.13	20.63	42.76	15.32	15.99	31.30	24.91	26.04	51.02
2002-03	16.41	19.03	35.48	24.85	24.99	49.84	17.16	15.65	32.81
2003-04	22.90	15.80	38.70	25.04	24.29	49.33	13.34	6.93	20.65
2004-05	24.67	16.80	41.47	23.20	18.27	41.47	13.68	4.07	17.19
2005-06	27.58	14.79	42.36	25.08	17.17	42.25	13.17	2.01	16.62
2006-07	25.11	9.23	34.34	25.06	11.71	36.77	13.84	4.70	17.93
2007-08	28.74	11.13	39.86	25.23	12.21	37.44	21.60	5.80	17.75
2008-09	34.10	22.69	56.79	24.62	14.88	39.50	26.71	13.43	35.58
2009-10	32.03	25.38	57.42	27.34	22.35	49.72	28.82	16.13	43.31
2010-11	34.20	22.51	56.74	29.93	23.07	53.00	33.35	15.36	44.31
2011-12	35.04	28.34	63.38	33.12	24.26	56.38	35.47	19.95	53.40
2012-13	34.04	38.15	72.19	32.64	33.21	65.85	30.55	24.21	59.76
2013-14	31.85	25.09	56.94	29.21	30.62	59.83	23.82	17.83	49.52
2014-15	31.55	28.02	59.57	30.73	25.22	55.95	28.81	17.22	41.34
2015-16	34.14	28.09	62.23	31.82	31.84	63.66	28.80	14.54	43.60
2016-17	36.48	23.63	60.11	31.45	30.65	62.11	27.70	14.50	43.60
2017-18	6.23	30.10	36.33	8.50	5.70	14.20	21.50	30.10	57.80

Source: Ministry of agriculture & Farmers Welfare, Government of India

TABLE 3 The Share of the PDS in Rice and Wheat Consumption in Different States from 1993-94 to 2015-2016

State	Rice		Wheat		Rice and Wheat	
Andhra Pradesh	20.6	29.7	9.1	4.0	20.4	28.5
Assam	3.2	10.4	2.7	1.3	3.1	10.0
Bihar	0.2	4.7	0.3	4.8	0.3	4.7
Chhattisgarh	2.2	38.8	2.4	28.7	2.3	37.7
Gujarat	20.1	13.7	0.4	10.5	6.6	11.4
Haryana	4.3	0.5	0.0	12.4	0.4	11.4
Himachal Pradesh	32.5	43.3	0.3	44.3	12.3	43.9
Jammu & Kashmir	5.5	53.4	0.3	32.5	2.2	46.9
Jharkhand	0.3	12.7	1.9	15.4	0.7	13.5
Karnataka	14.5	34.5	1.4	26.1	12.5	32.9
Kerala	44.4	26.2	13.7	27.1	41.8	26.3
Madhya Pradesh	3.6	17.2	0.2	19.7	2.0	19.2
Maharashtra	13.4	22.4	0.3	21.4	7.2	21.8
Odisha	0.8	22.9	5.1	12.6	0.9	22.3
Punjab	2.3	0.1	0.1	12.7	0.3	11.5

Rajasthan	7.4	0.3	0.1	9.3	0.3	9.0
Tamil Nadu	17.9	47.6	2.8	51.8	17.1	47.9
Uttar Pradesh	3.2	16.1	0.0	6.8	0.9	10.0
Uttarakhand	45.90	19.6	0.2	13.2	20.6	16.0
West Bengal	1.7	5.3	2.0	28.3	1.7	8.3

Source: Estimates of Anjani Kumar, et al. 2012, using NSS Data.

The PDS in states such as Assam, Bihar and Uttar Pradesh have not performed well and provided limited access to households. The PDS in these states require to be made more effective as these states account for a large population of poor households who still lack access to affordable food grain. However, in general the penetration of the PDS has increased in most states over the time and the share of household requirements of food grain accessed has improved though to varying degrees. The PDS has thus proved to be one of the most effective policy instruments in providing greater access and food security. The increased supply of food grains to the rural areas has contributed to crop diversification especially in the southern, western and the northeastern regions. Though the system is poorly targeted and suffers from widespread leakages and the diversion of grain to the open market it has still gone a long way in protecting and covering a large number of poor consumers. With the proposed NFSA, the improved functioning of the PDS would become most essential and concerted efforts would have to be made in effectively plugging leakages and ensuring a streamlined functioning of the PDS.

5. Suggestions for improvement

There are several measures that are required to be taken for improving the effectiveness of the procurement and distribution system. The most critical among these are:

- 1. The decentralization of procurement and distribution has become necessary to improve and strengthen the PDS.
- 2. A greater and more active involvement of the Panchayats in the PDS can significantly improve access at the village level.
- 3. A comprehensive review of the functioning of the FCI and the modernization of its operations is overdue and the greater involvement of co-operatives, Self- Help Groups, and other community organizations in procurement as well as distribution should be a top priority.
- 4. Improving the turnover and margins of fair price shops, provision of credit to enable regular lifting and sale of supplies and the regular monitoring of retail sales is necessary for effectively tackling and plugging diversion as well as other malpractices such as adulteration.

5. Improving storage space and the introduction of properly and regularly calibrated weighing equipment in fair price shops has become essential both for maintaining regular and uninterrupted supplies and efficient sale.

6. Conclusion

Food security is determined by the availability of food, the access to food and the absorption of food in the system. These three conditionalities for food security are closely interrelated and thus availability and access to food can increase absorption or nutritional levels among the households. The study found out that in spite of India having achieved self-sufficiency in cereals, it is still lagging behind in the production of pulses and oilseeds. It is also observed that there has been a significant increase in the production of fruits, vegetables, dairy products, meat, poultry and fishery products. However, per capita availability of these still far lower than international and national norms and standards. The trends in availability appear not to be improving as required solely on account of the stagnation of the agricultural sector. Hence, an attempt has been to identify the major constraints and deficiencies in agricultural growth and specific suggestions have been put forward for improving the performance of the agricultural sector and to enhance the growth rate so that it is capable of meeting the food and nutritional requirement that have been projected in the next decade. Among the suggestions made to lift the agricultural sector from its present slowdown and stagnation, it is highlighted to increase public investment and a serious review of subsidies provided to farmers.

7. Reference

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