



A Study on Productivity and Availability to Food Secure India- An Approach through Public Distribution System

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ABSTRACT

After the adoption of green revolution, India has achieved an impressive growth rate in food production. Still security to food and deprivation from the same stands out as the prime topic of discussion. Lack of food is the basic issue related to food security. Even after 71 years of independence, people are struggling for their basic entitlement. To feed 1.2 million population of the country a nutritional diet, it is important that a good stock of food is available. Therefore, this paper attempts to analyse the food production and availability in the country. As a huge number of people the country is poor to serve their basic needs, therefore the study is done by focussing on Public Distribution System, which tries to ensure food for all and eradicate the problem of hunger and malnutrition in the country.

Keywords: Food Security, Public Distribution System, Production, Availability

I. INTRODUCTION

Attaining food security is of prime importance for a country like India where more than one third of its population is absolutely poor as estimated. Even after 71 years of its independence, with a population of about 1.21 billion, the country still faces serious issues of poverty and malnutrition. Food security is a multi-dimensional concept and it's beyond production, availability and demand for food. The concept is discussed in terms of four entitlements, viz. availability, accessibility, sustainability and absorption of food. Though it has attained self-sufficiency in food production, yet large section of them are food insecure. The government has been continuously undertaking different policies,

programmes and schemes to tackle those challenges and for ensuring food for all. In this context, GOI introduced the Public Distribution System (PDS) under the Ministry of Consumer Affairs, Food and Public Distribution. So, the objective of PDS is to eliminate food insecurity and alleviate poverty by making the essential commodities available for all, especially food grains at an affordable and uniform price. PDS is operated jointly the central and state government.

II. OBJECTIVES:

1. To analyse the percentage share of food grains allotted to PDS over the years.
2. To analyse the variations in allocation and offtake of food grain by different sections at the national level.

III. METHODOLOGY:

This paper contains mainly secondary sources of data regarding the net production and availability at all India level, is collected from the various annual reports of "Department of Food and Public Distribution, Ministry of Consumer Affairs, Food and Public Distribution, Government of India", data from 68th round of NSSO, the 10th five-year plan document, issues by the Planning Commission, Statistics from Food Corporation of India, Economic Survey Report(2012-13) and various research articles. The study is concentrated upon the BPL, APL families and beneficiaries of the AAY.

IV. REVIEW OF LITERATURE:

In her work titled “India’s Public Distribution System: Utilisation and Impact”, Reetika Khera (2001) made an analysis on India’s PDS as a mechanism to food security in Rajasthan through primary data collected from field survey. It was seen that the utilisation of PDS is low in Rajasthan and most of the households even before exhausting their PDS quota purchase wheat from the daily market at a higher price than the PDS fair price. This puzzle was analysed by the dual price mechanism to examine the demand and supply side constraints. The data suggested that for supply constraint, under purchase is basically responsible.

Suryanarayana. M.H (2008) in his article on “Inflation and the Public Distribution System”. In this article analysed that the demand for “Universalisation” of the public distribution system for all when the prices are rising, in the rural areas four-fifths of households and two-thirds in the urban centres are already covered by the system. Yet, a very small less number of the households actually purchase either rice or wheat from the fair price shops; which shows an negligible amount of consumption is met by ration shop purchases. It is evident that the issue is not universalisation but improved functioning and greater efficiency of PDS.

Debes Mukhopadhyay (2011) in the study titled “Public Distribution System – A Poor Delivery System” observed that right to food is a human right and denial of such leads to break down of freedom. So this human right needs to be protected at any cost. Unfortunately, PDS/TPDS in the country has jeopardized the security of food to the target group not only in the recent years but also in the early 2000. The level of hunger and starvation is linked to the attempt of maintaining food security. So targeting the poor section is very important. Livelihood security and right to food have to be the policy focus of any government in power.

Ratan Lal Basu (2011) in the study of “Public Distribution System in India and Food Security” observed that the basic causes of food security in our country are not only by supply failure but declining income of the households and employment in the unorganised sector is also responsible for the same. In case of introducing TPDS, it can be said that the policy is not that unsound but the real problem lies in its implementation.

In the study of “Food Security and the Targeted Public distribution System in India” Ruth Kuttumuri (2011) observed that the annual food production is sufficient to feed the world population. Even hunger prevails owing to a poor distribution mechanism and thus making food security a global challenge. The organisations such as Food and Agricultural Organisations (FAO), World Food Convention (WFC) and other organisations provides food to the needy in emergencies. But the efforts to raise the country’s capacity to fight with hunger is not adequate. The targeted Public Distribution System launched in 1997 in India therefore seeks to attain food security basically for the poorer section of the country. If TPDS works adequately, it can erase the problem of food starving and malnutrition among the people and will be beneficial to fulfil the nutritional needs.

i. ELEMENTS OF FOOD SECURITY:

1. Food Availability:

Food availability is the existence of food either through its own production or from the market. At national level, food availability derives the domestic food stocks, commercial food imports, food aid and domestic food production.

2. Access to food:

It is the assurance that all households sufficient sources to obtain appropriate food. It depends on the level of household resources (capital, labour and knowledge), food prices and the existence of social safety net. Therefore, adequate access to food can be obtained without being self-sufficient in production of food.

3. Use and utilisation of food:

Use here requires not only an adequate diet, but also a healthy environment, including availability of adequate drinking water and sanitation and an understanding of proper health care, food preparation and storage processes.

ii. STATUS OF FOOD SECURITY OF THE COUNTRY:

Food Grain Production and Availability:

It was always been said that India is predominately an agricultural country and therefore it received the highest priority in the first five year plan. When planning started in India in 1951-52, the total food grain production was just 51 million tonnes. But within four decades, in 1990s, it reached to 143.6 million tonnes. In between it showed a huge

fluctuation. Therefore, government resort to import of 1.8% of its total net availability. The agricultural production again revived in 1992-93, which led to a production of 183.6 million tonnes in 2000-01.

Food insecurity is essentially caused either because of production or price fluctuation. Only a small abnormality or spread of rains in the monsoon can create heavy swings in agricultural production. The challenge therefore lies in stabilizing the production process and solution is to expand the irrigation facilities and making optimum use of the irrigation facilities that we already have.

Table1: Trends of Production of Food Item(Million tonnes)

Year	Rice	Wheat	Total
2003-2004	82.2	68.7	150.9
2004-2005	83.1	68.6	186.2
2005-2006	91.8	69.4	173.6

2006-2007	93.3	75.8	182.5
2007-2008	96.7	78.6	190.1
2008-2009	99.2	80.6	210.2
2009-2010	89.1	80.7	205.2
2010-2011	96.0	86.9	190.8
2011-2012	105.3	94.9	214.2
2012-2013	104.2	92.5	259.3
Total	938.9	796.7	1963

Source: Economic Survey (2012-2103), Agricultural Statistics at a glance (2013)

The production of rice and also of wheat shows a positive growth rate. But the growth rate of rice production is higher than the production of wheat over the years. But the overall growth of wheat is higher (from 68.7 MT in 2003-04 to 92.5 MT in 2012-13) than rice (82.2 MT in 2003-04 to 104.2 in 2012-13).

With the fluctuation in production, the per capita availability also fluctuates as seen in the following table

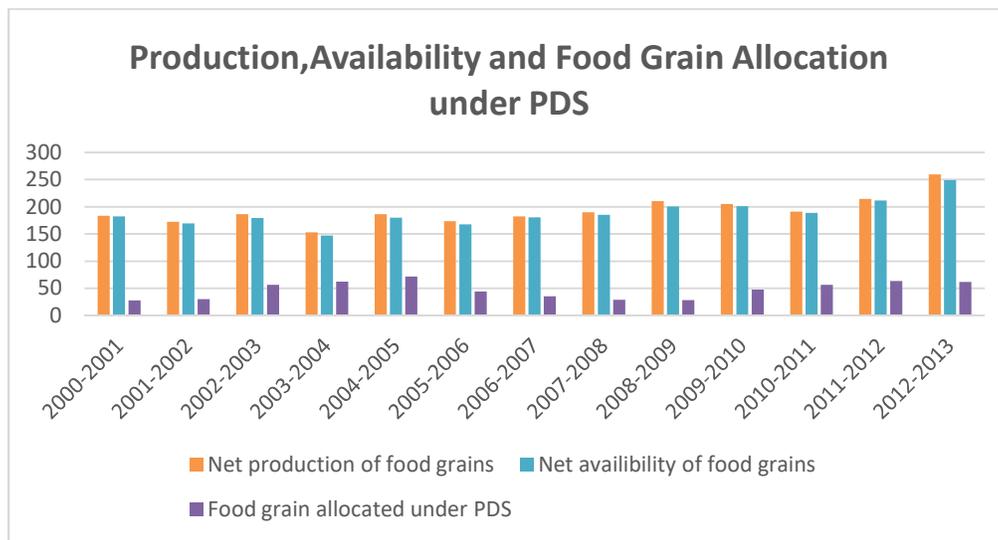
Table 2: Production and Availability of Food grains at all India level(Million tonnes)

Year	Net production of food grains	Net imports	Net availability of food grains	Food grain allocated under PDS	% of food grains allocated under PDS	Per capita availability per day(in gms)
2000-2001	183.6	(-)1.4	182.2	27.8	15.2	454.4
2001-2002	172.2	(-)2.9	169.3	30.3	17.9	416.2
2002-2003	186.2	(-)6.7	179.5	56.8	31.6	494.1
2003-2004	152.9	(-)5.5	147.4	62.5	42.2	437.6
2004-2005	186.5	(-)6.5	180.0	71.8	39.9	462.7
2005-2006	173.6	(-)6.0	167.6	44.4	26.5	422.4
2006-2007	182.5	(-)2.3	180.2	35.3	19.6	445.3
2007-2008	190.1	(-)4.7	185.4	29.3	15.8	441.8
2008-2009	210.2	(-)9.7	200.5	28.4	14.5	444.0
2009-2010	205.2	(-)4.1	201.1	47.6	23.7	437.1
2010-2011	190.8	(-)2.2	188.6	56.7	30.1	453.6
2011-2012	214.2	(-)2.9	211.3	63.3	30.0	450.3
2012-2013	259.3	-	248.6	61.9	24.9	510.8

Source: 1. Department of Food and Public Distribution

3. Directorate of Economics and Statistics, Ministry of Agriculture.

Fig 1 : Production availability and food grain allocation



Trends in production:

The increase in production of food grains in India over the years cannot be considered insignificant. From a figure of just 51 million tonnes during the planning period to an increase of 259.32 in 2012-13 million tonnes is a great achievement. During this period, as we can see from the import figures that there is negative rate of import. India was in such a position in its production that it could export a fair portion of its production instead of importing food grain from others. The highest figure of import was (-) 9.7 MT in 2008-09 after (-) 6.7 in 2002-03.

Net availability of food grains is the lowest in 2003-04 which is 40.4 MTs less than the average figure and in 2012-13, the net availability is 60.8 MTs more than the average figures. The production was also lowest in 2003-04 and highest in 2012-13. But, the per capita availability was lowest in 2005-06 where the net availability was 10.2 MTs more than in the year 2003-04, and the import figure also differs by (-)0.5 in 2005-06. The availability in per capita shows a constant rate over the 12 years from 2000-01 to 2011-12. But in 2012-13 with the rise in net production and availability, the per capita availability also went to 510.8 in 2012-13 from 450.3.

Table3: Food Grain Allocation and Offtake under Public Distribution System (Million tonnes)

Year	Allocation			Offtake		
	Wheat	Rice	Total	Wheat	Rice	Total
2000-2001	11.5	16.3	27.8	4.0	7.9	12.0
2001-2002	13.1	17.2	30.3	5.6	8.1	13.8
2002-2003	29.5	27.4	56.8	5.8	7.4	13.2
2003-2004	30.2	34.4	64.6	6.1	7.2	13.3
2004-2005	37.3	34.5	71.8	18.9	16.5	35.4
2005-2006	16.7	27.7	44.4	12.2	19.2	31.4
2006-2007	9.2	26.3	35.3	10.4	21.2	31.6
2007-2008	8.7	20.6	29.3	10.9	22.6	33.5
2008-2009	11.0	17.4	28.4	12.5	22.1	34.6
2009-2010	22.8	24.8	47.6	19.0	23.4	42.4
2010-2011	22.5	34.2	56.7	23.1	29.9	53.0
2011-2012	28.3	35.0	63.3	24.2	32.1	56.3
2012-2013	38.1	23.8	61.9	30.1	20.7	50.8

Source: 1. Economic Survey 2012-13

2. Handbook of Statistics on Indian Economy 2012-13

iii. Trends in Allocation and Offtake of Food grains under Public Distribution System:

Total allocation of rice and wheat together accounts for 27.8 MTs in 2000-01. And after this also it shows an increasing trend up to 2004-05 which is 71.8 MT. After this, it continuously declined for four years. It again raised to 47.6 in 2009-10. Till 2012-13, it showed an increasing trend. The allocation and off take of both wheat and rice shows fluctuation over the years

Table 4: Allocation and off take by BPL, AAY and APL Families (Million tonnes)

YEAR	Allocation			Offtake			% of off-take		
	BPL+AAY	APL	total	BPL+AAY	APL	total	BPL+AAY	APL	Total
2000-2001	21.5	6.2	27.7	9.8	2.2	12.0	45.6	35.2	43.3
2001-2002	19.8	10.5	30.3	11.7	3.2	14.9	59.2	30.5	49.2
2002-2003	26.8	30	56.8	17	5.4	22.4	63.4	18.0	39.4
2003-2004	27.1	30.6	57.7	19.9	5.9	25.8	73.4	15.4	44.7
2004-2005	27.4	44.4	71.8	22.8	6.4	29.2	83.2	14.4	40.7
2005-2006	27.2	30.2	57.4	22.9	8	30.9	84.2	26.5	53.8
2006-2007	27.3	11.8	38.8	24.6	8.5	33.1	89.1	72.0	85.3
2007-2008	27	11.1	38.1	25.2	8.7	33.9	93.0	78.4	90.0
2008-2009	27.6	16.3	43.9	26	9.4	35.4	94.2	57.7	80.6
2009-2010	28.2	19.9	48.1	26.3	16.0	42.3	93.3	47.2	87.9
2010-2011	28.3	20.3	48.6	26.9	16.4	43.5	95.0	78.8	90.4
2011-2012	29.6	21.2	50.8	27.1	17.2	44.3	93.1	77.4	87.2
2012-2013	29.8	23.6	53.4	27.4	17.4	44.8	92.6	72.9	84.2

Source: Ministry of Consumer Affairs, Food and Public Distribution

The table shows that in every year under study, the allocation and the percentage of off-take under BPL and AAY is higher than APL category. The total allocation of all the three sections shows increasing trend till 2004-05, but after that there is a fall by 14.4 MT. after that, it declined for two consecutive years, 38.8 and 38.1 in 2006-07 and 2007-08 respectively. Then it holds a momentum of growth and the allocation increases from 43.9 MT IN 2008-09 TO 53.2 MT in 2012-13 which is almost an increase of 10 MT. The allocation for BPL and AAY families is much lower than the allocation to the APL families for four years-2002-03, 2003-04, 2004-05 and 2005-06. The total allocation for all the three sections together shows a rising trend starting from 2000-01 to 2012-13. But the total off-take figure gives us a clear picture. The total off-take increases throughout the years from 12 MT initially to 44.8 in 2012-13. Offtake by BPL+AAY and APL families shows a positive growth throughout the years. The percentage of off-take shows a very clear picture of growth from only 43.3% in 2000-01 to 84.2 in 2012-13. The percentage of offtake is highest in 2010-11 which is 90.4% followed by 90.0 in 2207-08 and 87.9 in 2009-

10. In 2002-03, the percentage of off-take is the lowest which is only 39.4% of the total allocation. The percentage of off-take by APL families always stands lower than the BPL+AAY.

V.CONCLUSION:

Public Distribution System plays a significant role in providing food security to all the needy people of our country. It is one of the major welfare programme of the government for providing food entitlement. It helps the poor people to a great extent in acquiring food for them and thereby to channelize their income to other productive purpose also. It also helps the farmer in gaining fair price for the produce. Thereby it helps in reducing poverty also. But since the process of production to the reach of the beneficiaries involves many steps, the programme still has to go a long way to achieve complete success. In the study, it is seen that there is a gap in allocation under the scheme and its off-take by different sections of the people, when the percentage allocated under the scheme is also low compared to the net availability of food grains. Even, there is not complete lifting of food grain by the BPL card holders and the people those

come under the AAY. There might be problem from both the sides, say in the delivery mechanism and the demand by the people for food grain under the scheme. People may prefer purchases from open market, in the hope of better quality. And they may in the need of such items which are not provided by the scheme. For improving food security in the country, there should be correct identification of the BPL and families under AAY, with an improved delivery mechanism. A debate is already going on upon the mode of transfer – some say that instead of kind transfer there should be cash transfer, so that people can have whatever they want or not consume only out of compulsion. This paper does not go into the death of this issue but the government should try to find out which one will carry good results. Despite, sufficient amount of food grain production, India is still to achieve food security at the micro level. Till 2013, India followed a welfare scheme but after that the government passed the National Food Security Act in 2013 with the objective to provide food and nutritional security by ensuring access to adequate quantity of quality food at affordable prices (Government of India, 2013). With the implementation of NFSA, best results in PDS is expected soon.

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