

Food security concerns in India as buffer stocks plummet

Sabyasachi Mitra

Fluctuations in buffer stocks

While the total foodstocks in the Central Pool have remained above the buffer stocks in recent years, there have been significant fluctuations in the amount by which actual stocks exceeded buffer requirements. For example, on 31 July 2000 foodstocks actually lying in FCI godowns amounted to 37 million tonnes, against the buffer requirement of 24 million tonnes. About a year later, on 16 June 2001 actual stocks amounted to 44.7 million tonnes against the buffer requirement of 24 million tonnes. Actual stocks with the FCI reached a peak in June 2002 when it exceeded 64 million tonnes (64.8 million tonnes), a surplus of more than 40 million tonnes over the buffer requirement. However, actual stocks have come down since then, and on 30 August 2003 actual stocks amounted to 30.1 million tonnes against the buffer requirement of 24.3 million tonnes. While this might appear to be a satisfactory level of buffer, and might be stated as a success of the government which had been desperately trying to get rid of the excess stocks lying in government godowns, the situation actually merits a more cautious monitoring. Instead of looking at the total buffer requirements, if we consider the requirements separately for rice and for wheat, actual stocks of rice (8.1 million tonnes) on 30 August 2003 has actually been at a level less than the buffer requirement (10 million tonnes) at that point of the year.

The three tables below gives the buffer requirement of rice and wheat at different points in a year, foodgrains stocks in the central pool between 1998 and 2003, and offtake of foodgrains from the PDS and under other welfare schemes.

Buffer Requirements under current norms (in million tonnes)¹

Date	Rice	Wheat	Total
1 April	11.80	4.00	15.80
1 July	10.00	14.30	24.30
1 October	6.50	11.60	18.10
1 January	8.40	8.40	16.80

¹ Foodgrains Bulletin (April 2003), Department of Food and Public Distribution, Government of India

Foodgrains Stocks in the Central Pool, 1998 to 2003² (in million tonnes)³

Year	Rice	Wheat	Total
1998	13.04	5.07	18.11
1999	12.18	9.65	21.83
2000	15.71	13.18	28.89
2001	23.19	21.50	44.69
2002	24.91	26.03	50.94
2003	17.15	15.64	32.79

Offtake of Foodgrains under PDS and Welfare Schemes (in million tonnes)⁴

Year	PDS	Welfare Schemes	Total Offtake
1997-98	17.0	1.9	18.9
1998-99	18.7	1.4	20.1
1999-2000	17.1	1.4	18.5
2000-01	12.0	3.2	15.2
2001-02	13.8	7.2	21.0
2002-03	19.1	11.3	30.4

It can be seen from the above tables that actual stocks continued to rise even as offtake hardly showed any increase till 2001-02. Offtake actually fell between 1998-99 and 2000-01 as issue prices rose drastically in January 1999. Offtake from the PDS was at its peak of 19.6 million tonnes in 1996-97, the last year of the Universal PDS. As we will see in the table below, despite decreasing offtakes from the central pool, issue prices kept going up, erasing any possibility of those needy buying from the PDS. During this period the government even scrapped the Universal PDS and launched the Targeted PDS (TPDS) aimed at only the poor population, and later introduced differential pricing, a lower one for those below poverty line (BPL) and a higher one for those above it (APL). Further the amount of foodgrains people with BPL ration cards could draw from PDS shops were also restricted initially to 20 kilograms per family per month (as against 10 kilograms per adult member prior to the introduction of TPDS), and later to 25 kilograms per family per month. All these contributed to the actual stocks in the central pool far exceeding the buffer requirements.

² 2003 figures are as on 1 April 2003

³ Foodgrains Bulletin (April 2003), Department of Food and Public Distribution, Government of India

⁴ Foodgrains Bulletin (April 2003), Department of Food and Public Distribution, Government of India

Central Issue Prices of Rice (Rupees per quintal)⁵

Period	APL		BPL
	Common	Grade A	Common/Grade A
01.12.1997 to 28.01.1999	550	700	350
29.01.1999 to 24.07.2000	1135	1180	590
25.07.2000 to 11.07.2001	1087	1130	565
12.07.2001 to 31.03.2002	795	830	565
01.04.2002 to 30.06.2002	695	730	565
01.07.2002 till date	795	830	565

Central Issue Prices of Wheat (Rupees per quintal)⁶

Period	APL	BPL
	01.06.1997 to 28.01.1999	450
29.01.1999 to 31.03.1999	650	250
01.04.1999 to 31.03.2000	682	250
01.04.2000 to 24.07.2000	900	450
25.07.2000 to 11.07.2001	830	415
12.07.2001 to 31.03.2002	610	415
01.04.2002 to 30.06.2002	510	415
01.07.2002 till date	610	415

As is evident from the tables giving details of issue prices, we observe that issue prices of both rice and wheat were initially raised substantially for both APL as well as for BPL consumers. Even though prices for both BPL and APL card holders were reduced a bit in July 2000, such reductions weren't enough, particularly for BPL consumers to be able to purchase grains from the PDS. In contrast the reduction in issue prices of rice and wheat for APL consumers was much more significant, although it was raised a little again on 1 July 2002.

While the government has said that rising costs have led them to hike issue prices, this argument needs a careful examination. Rising costs to a great extent are attributable to the expenses incurred in holding excess buffer stocks, which in turn is a result of falling offtake from the PDS. Higher the issue prices, lower would be the offtake, higher would be the stocks, and hence higher would be the storage costs.

Fluctuations in food output in the country

Indian agriculture has been marked by its volatility, and foodgrains output in particular has fluctuated widely between years. While the trend growth rate of food output went up from a dismal 1.4 per cent in the 1980s (it was 1.7 per cent during the decade before that) to 1.9 per cent during the 1990s, even then the rate barely managed to offset the population growth

⁵http://www.fcamin.nic.in/civil_ind.htm

⁶http://www.fcamin.nic.in/civil_ind.htm

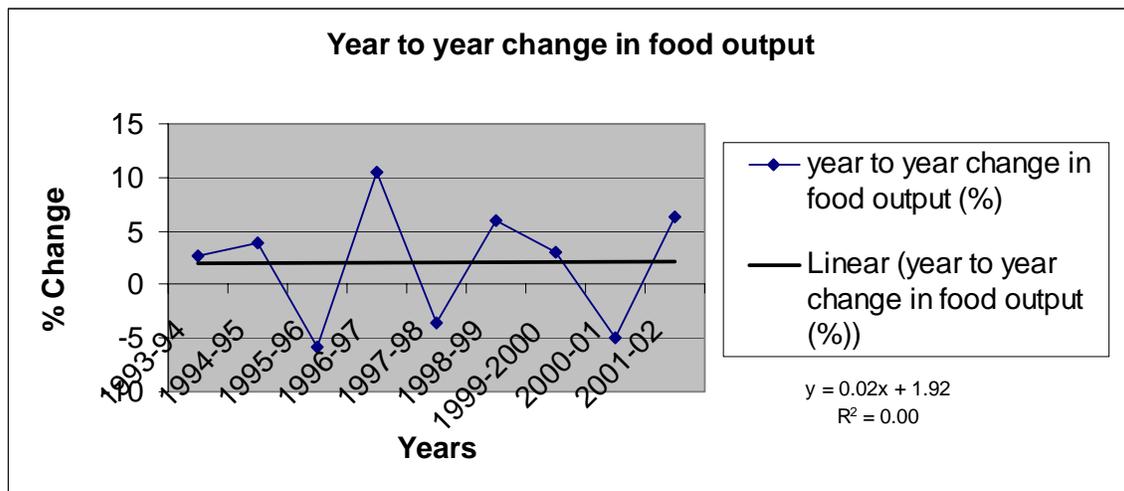
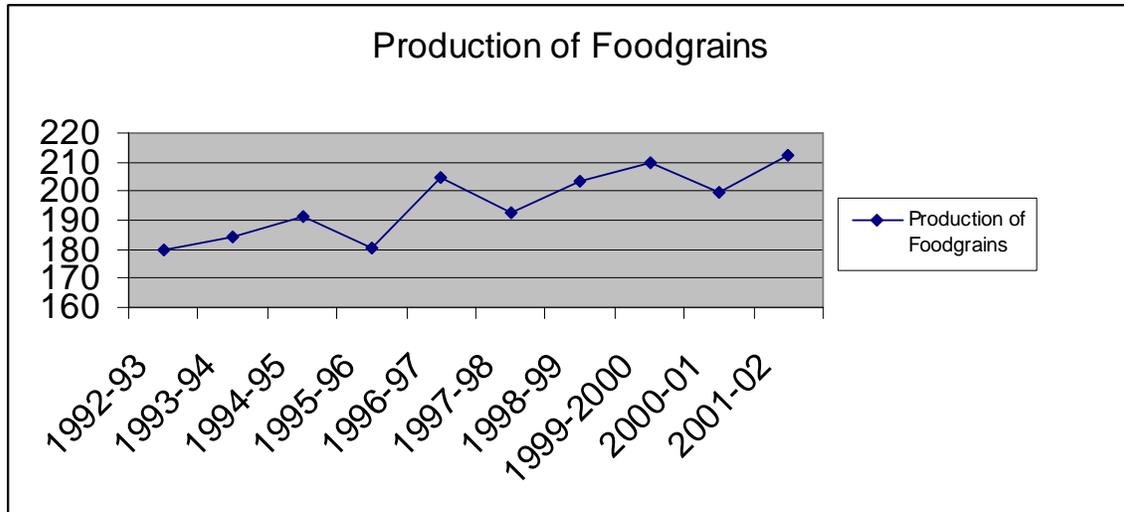
rate during the decade. While the output in 1987-88, a severe drought year, was three million tonnes lower than the output in the very next year, the production in 1997-98 was seven million tonnes lower than the food output in 1998-99.

Since India opened up its agricultural sector to trade, there has been a marked reduction in the growth of foodgrains output. It is difficult to even assign a consistent decadal rate of growth of food output except on a year to year basis as production has widely fluctuated from one year to another.⁷ And this trend has continued even during the current decade. While gross foodgrains output in the year 2000-01 was about 196 million tonnes, it rose sharply to more than 211 million tonnes in 2001-02, an increase of over 7.5 per cent. However, the estimated gross foodgrains output in 2002-03 shows a marked reversal, with production of cereals and pulses taken together pegged at only below 183 million tonnes, a drop by over 13 per cent from the previous year's output.⁸ In fact only in two years since 1992-93 has food output been lower than the estimated output in 2002-03.

A major factor behind the fluctuations in cereal output in India during the 1990s is that the area under coarse cereals declined considerably in this decade, much of the sowing was relegated to inferior land, even as yields of rice and wheat failed to compensate for the decline in the growth of output of coarse grains. Pulses also did not register any significant rate of growth in its output to offset the decline in production of coarse grains. Both coarse grains and pulses being important items of consumption for the poor, inadequate growth or worse a decline in production of these items can adversely affect the country's drive to provide adequate nutrition to all. Hence the recent talk about excess foodstocks in the country cannot be a reason for complacency not only because the surplus is largely because of rising issue prices and mass income deflation, but also because food output in the 1990s has remained volatile, and has not shown a continuous rise as many would like to believe. As is evident from the graphs below, while food output has shown a rising trend, the rise hasn't been continuous. Also, there had been years in which food output had gone down by almost five to six percent from the previous year's output. As the trend line in the graph below shows, there is hardly any positive relation between year to year change in food output and time.

⁷ See The Economic Times 27 October 2003 for annual food production figures for Indian states and the national output since 1992-93 till 2001-02.

⁸ Patnaik, Utsa (2003): Food Stocks and Hunger: The Causes of Agrarian Distress; Social Scientist Vol. 31, No. 7-8, July-August, p 15-41



The sharp drop in food output in 2002-03 is a direct result of the failure of monsoon, on which Indian agriculture is almost entirely dependent. The high food output in almost all years during the 1990s has been solely due to the successive good monsoons, something the country has not enjoyed regularly. And as has been already mentioned, rising issue prices of foodgrains sold through the public distribution system has resulted in demand not matching rising supplies adequately enough resulting in burgeoning foodstocks rotting in government godowns.

Fluctuations in buffer stocks a cause for worry

The government, instead of looking into the causes for declining offtake from the PDS, patted itself on the back thinking that the country has successfully fought back food shortages for good, and considered the declining share of agriculture in GDP alongside increasing food output as signs of the country's graduating into the next step of the development ladder. Instead of utilising the excess foodstocks with it in food for work programmes to create rural infrastructure and irrigation facilities, the government decided to dispose of the food reserves at below poverty line prices in the world market.

Of late, however, there has been a concerted effort by the government to get rid of the excess foodstocks. It raised the amount of foodgrains that one can draw from the TPDS to 35 kilograms per family per month across all categories of consumers. It also lifted the quantitative restrictions on export of rice, wheat, and wheat products, and launched and implemented certain programmes which required distribution of foodgrains (e.g. Antyodaya Anna Yojana, Sampoorna Gramin Rozgar Yojana, etc.). As a result of these measures foodstocks in the Central Pool came down to 33 million tonnes by April 2003.

However, while there were initial signs of relief at the lowering of foodstocks, recently there have been growing signs of worry as the 2003-04 kharif marketing season had begun with rice stocks in the Central Pool at only 5.24 million tonnes on 1 October 2003, an 11-year low and below the prescribed minimum buffer norm of 6.50 million tonnes as is required to be maintained on that date. While the wheat stocks on that date (18.43 million tonnes) were higher than the buffer requirements (11.60 million tonnes), total inventories on that date (23.68 million tonnes) were still the lowest for that date since 1997, when it reached 15.34 million tonnes, lower than the total buffer requirement of 18.10 million tonnes on that date.

Any possibility of rice stocks reaching buffer norms will now depend on how much Andhra Pradesh can contribute to the central pool this time. Last year's acute drought resulted in the state contributing only 2.6 million tonnes as against the normal 6.5-7 million tonnes the state contributes to the central pool every year. The reduction in rice stocks to below buffer levels resulted in the FCI not issuing fresh allocations or release orders for exports since 11 August 2003.

Thanks to the failure of the last monsoon all illusions about an agricultural revolution of sorts having been achieved are fast disappearing. The 29.5 million tonnes decline in foodgrains output in a single year has contributed to a reduction in food stocks in the central pool. But while all the time that foodstocks were 'burgeoning', the policy makers had been constantly worried about how to get rid of the 'excess' reserves, now it is their turn to worry as stocks have suddenly come down to danger level. Such stocks have come down to only 30.5 million tonnes, a decline of about 53 per cent from the June 2002 level of 64 million tonnes. Only the fairly good monsoon in the current year has raised hopes of a recovery in agricultural output, which might offer the policy makers a sigh of relief. But they cannot breathe easy, and should use this as an opportunity to promote food for work programmes to boost irrigation and water storage and harvesting facilities in the country so that the dependence India has on the monsoon rains every year can be minimized.

The focus of the policy makers should now shift to boosting irrigation in states where hardly any investment in this direction has so far been made. There is a limit to which productivity in the already irrigated fields, like those in the states of Punjab and Haryana, can be stretched. And indeed, Punjab did witness a fall in foodgrains production thrice during the last ten years.⁹ In Haryana food output declined twice, remained unchanged in another couple of years, and registered a mere 1 per cent rise in another during the same period.

⁹ The Economic Times, 27 October 2003

Indian agriculture is still predominantly dependent on good monsoon rains. While continuous good monsoons in successive years resulted in high food outputs in the country, and rising issue prices and lack of purchasing power lowered offtakes from the PDS, resulting in surplus stocks in the Central Pool much exceeding buffer requirements, fluctuations in output owing to failure of the rains, and lowering of issue prices to enable more people to buy adequate amounts of grains have led to a fall in rice stocks to below buffer levels, and lower wheat stocks as well. Indian agriculture cannot even now entertain the idea of shifting away from food production claiming attainment of food self-sufficiency, but try to step up investment in areas like irrigation, and raise food production in the country. Unless irrigation facilities are spread to all states in India, agricultural output in the country will remain hostage to the whims of the monsoon, and food security of the country can never be ensured.