

Consumer Food Subsidies in India: Proposals for Reform

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In recent years, an important item on the agenda of economic reformers in India has been to reduce the scale of food subsidies, by means of targeting the system of public distribution of food (PDS). A recent World Bank study makes concrete suggestions for reform of the PDS and these are examined critically in this article. Specifically, I argue against narrow targeting and in favour of broad targeting or near-universal provision of the PDS. I also argue that a strong and effective system of procurement needs to be maintained and this requires the continuation of an organisation such as the Food Corporation of India. The lesson from Kerala is that strong political support is essential for establishing and maintaining an effective system of food security.

I. INTRODUCTION

The debate on consumer food subsidies is a very critical one as hunger and malnutrition persist on a large scale in India today, and there remain areas where deaths by starvation occur every year. While the country has been successful in averting large-scale famines, the problem of chronic food insecurity is enormous. New data from the National Sample Survey show that nutritional intake per person has fallen in the last two decades. In rural India, average calorie intake fell from 2,266 Kcals in 1972–73 to 2,153 Kcals in 1993–94. The reduction was smaller in urban areas: from 2,107 Kcals in 1972–73 to 2,071 Kcals in 1993–94 [NSSO, 1997].¹

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After the fiscal crisis of 1991, a reduction in food subsidies, by means of targeting, has been viewed as the only way to reform the public distribution system (PDS). This article enters the debate on the reform of the PDS and proposes alternatives to the orthodox measures. Although there is much talk of the "burden" of food subsidy,² it is worth noting that food subsidies as a share of GDP have not changed very much over the last 20 years. At its peak, food subsidy accounted for 0.67 per cent of GDP in 1993–94 and 0.6 in 1985–86. On average for the years 1966 to 1997, the food subsidy bill of the central government amounted to 0.31 per cent of GDP and 2.35 per cent of total central government expenditures. The food subsidy bill in India is not very high as compared to expenditures in other developing countries.³

As targeting is the panacea recommended for the problem of food subsidies, let me summarise briefly the theoretical debate on targeted transfers. The main argument in favour of targeting is that of a reduction in fiscal expenditure. This, however, is a one-sided argument as there are many other costs of targeting, and when all costs are taken in to account, the case for targeting becomes ambiguous. Targeting has many costs attached to it, and these depend on the following factors.⁴

- (1) Rights or entitlements. The provision of certain goods or services may be viewed as a universal right or entitlement. Targeting can lead to the loss of a basic right.
- (2) Targeting errors. There are two types of targeting errors: Type I errors (or errors of wrong exclusion) and Type II errors (or errors of wrong inclusion). A universal scheme has large errors of wrong inclusion (that is, including the rich). The more fine the targeting, however, the more the likelihood of Type I errors (that is, of wrongly excluding the needy).
- (3) Incentive and information distortions. To qualify for a targeted programme, participants may distort information or their incentives may be altered. Targeting can thus lead to incentive and information distortions.
- (4) Cost of administration. Targeting raises the costs of delivery and administration, as the target group has to be identified. The costs depend, of course, on the type of targeting.
- (5) Social stigma and cohesion. Participation in a targeted scheme may be associated with stigma and reduce social cohesion.
- (6) Loss of quality. Programmes for the poor tend to become programmes of low quality. Targeted programmes may end up being less desirable than universal programmes.

- (7) Participation costs: Initial costs are usually higher for participation in a targeted programme than in a universal programme.
- (8) Political support. Targeting may reduce political support for a programme, and reduced support can result in lower allocations for a targeted programme. To put it differently, if the budget support for a programme is made endogenous, then targeting may be worse for the poor than a system of universal transfers.⁵

The difficult issue is to weigh the costs and benefits of universal and targeted transfers, and specify a method for choosing between them. A review of the literature shows that there are some strong arguments for universal transfers. They come from the perspective of rights, from social concerns like cohesion, from concerns for political support, from concerns for participation and, most importantly, the costs of exclusion. If the goal of policy is to ensure food security to all vulnerable persons, it leads right away to an emphasis on lowering the errors of wrong exclusion, and hence to a preference for universal programmes. The main counter-argument is usually made in terms of fiscal savings. In the short run, there may be a trade-off between fiscal objectives and welfare objectives,⁶ as targeting narrowly can lower fiscal costs. In the long or medium-run, however, when all costs are measured and valued, universal transfers may be more cost-effective.⁷

An important point that is often missed is that a universal programme need not provide uniform benefits to all participants. A universal service, for instance, can be financed by selective taxes and when the total effect of taxes and transfers is examined the provision of the service is no longer uniform for all participants. In fact, when the costs of targeting are high, there is a good case for universal provision accompanied by tax claw-backs from the rich. Or, when the target group is large, it makes sense to provide benefits universally and then to claw-back benefits from the rich.

II. WORKING OF THE PUBLIC DISTRIBUTION SYSTEM (PDS)

There are four major forms of intervention by government in food grain markets in India. First, there is a system of public procurement of food grains. Secondly, the state manages food stocks through storage and buffer stock operations. Thirdly, there is a state-guided system of delivery of cheap food or the public distribution system (PDS). Fourthly, government intervenes in trade, and there are legal controls on hoarding and other aspects of internal trade and restrictions on external trade. Direct interventions in procurement and distribution are undertaken by the Food Corporation of India (FCI) on behalf of the central government.

The PDS is a rationing mechanism that entitles households to specified quantities of selected commodities at subsidised prices. In most parts of the country, the PDS is universal and all households, rural and urban, with a registered residential address are entitled to rations. Eligible households are given a ration card that entitles them to buy fixed rations (varying with household size and age composition) of selected commodities. The six essential commodities supplied through the PDS nationally are rice, wheat, sugar, edible oils, kerosene and coal. Additional commodities like pulses, salt, tea are supplied selectively. The commodities are made available through a network of fair price shops. In 1994, there were around 0.42 million fair price or ration shops in the country (0.32 million in rural areas and 0.099 million in urban areas). These shops were run by private agents, co-operatives and a few were state-owned. An important feature of the PDS is that the responsibility for implementation, monitoring and for enforcement of legal provisions relating to public delivery rests with the state governments. This article deals only with the distribution of food grains, namely rice and wheat.

TABLE 1

AVAILABILITY, PROCUREMENT AND PUBLIC DISTRIBUTION OF FOOD GRAINS, 1985 TO 1995

Year	Net availability (NA)	Procurement	Public distribution (PD)	PD/NA (%)
1985	124.8	20.1	15.8	12.7
1986	133.8	19.7	17.3	12.9
1987	134.8	15.7	18.7	13.8
1988	130.8	14.1	18.6	14.2
1989	147.2	18.9	16.4	11.1
1990	144.8	24.0	16.0	11.0
1991	158.6	19.6	20.8	13.1
1992	148.4	17.9	18.8	12.7
1993	149.8	28.0	16.4	10.9
1994	154.8	26.0	14.0	9.1
1995	169.8	22.6	15.3	9.0
1996	165.2	19.8	18.3	11.1
1997	177.2	23.6	17.5	9.8
1998	170.4	25.5	-	-

Source: Government of India, *Economic Survey*, different years

Note: All quantities are in million tonnes.

On average, between 1985 and 1997, annual procurement was 20.8 million tonnes and 17.2 million tonnes were distributed in the PDS (Table 1). Food grain distributed in the PDS accounted for 11.6 per cent of net availability, on average. In the first half of the 1990s, however, the amount

distributed through the PDS fell substantially, from 20.8 million tonnes in 1991 to 14 million tonnes in 1994. This fall in distribution was accompanied by a rise in stocks, and excessive holdings of stocks. One of the reasons for this fall in purchases from the PDS was the narrowing price differential between PDS and market prices. Although distribution of food grains through the PDS rose after 1994, it remains below the peak of 1991.

Failures of the PDS

There is little doubt that the PDS as it functions today has failed, in most parts of the country, in providing cheap food and food security to vulnerable households and individuals and needs to be restructured and strengthened. The major problems with the PDS are that the poor have very limited access to the PDS, the quantity of food grain transferred is small and prices of PDS commodities are neither low nor stable. Lastly, poor administration has resulted in wastage and leakage of food grains. Let me elaborate on each of the first three points, and in doing so, I shall bring out the regional contrasts, as there are significant variations across states.

(i) How many households use the PDS? Is coverage low? Is utilisation or participation progressive? At the national level, the only survey of the utilisation of PDS is that undertaken by the National Sample Survey (NSS) in 1986–87. Kirit Parikh analysed the data from the 1986–87 survey for all states and by household expenditure classes and reported the proportion of households who made no purchases of grain from the PDS [Parikh, 1994]. Among those who bought grains from the PDS, two categories were demarcated; those for whom PDS grain accounted for total purchase of grains and others for whom it accounted for only part of their purchase of grain.

Table 2, taken from his paper, shows the results for the rural population. In Uttar Pradesh and Bihar, around 98 per cent of the rural population did not purchase any grain from the PDS, that is, did not utilise the PDS. To put it differently, the PDS only reached around 2 per cent of the population. In Kerala, by contrast, over 87 per cent of the population purchased grain from the PDS. Eight per cent purchased only from the PDS store whereas 79 per cent purchased from the PDS and the open market. Among the smaller states, utilisation of the PDS was high in Mizoram (93.6 per cent) and Goa (79.6 per cent). In the two southern states of Andhra Pradesh and Tamil Nadu, around 55–60 per cent of the population was covered by the PDS. Table 3 shows the findings for the urban populations. Again, the picture is very similar with 87 per cent of the population in Kerala utilising the PDS and 93 per cent of the population in UP and Bihar not making any purchase from the PDS.

TABLE 2
DEPENDENCE ON THE PUBLIC DISTRIBUTION SYSTEM FOR PURCHASE OF GRAINS, RURAL
AREAS, 1986-87

(Percentage of all households)

State	No purchase from PDS	Partial purchase from PDS	All purchases from PDS
Mizoram	6.4	47.0	46.6
Kerala	12.3	79.0	8.6
Goa	20.4	69.1	10.5
Tripura	30.8	66.5	2.7
Karnataka	38.1	53.9	8.0
Andhra Pradesh	40.3	47.3	12.4
Tamil Nadu	46.5	44.9	8.5
Maharashtra	52.3	32.4	15.3
Gujarat	55.5	30.0	14.6
Meghalaya	61.2	31.5	7.4
Delhi	64.6	20.4	15.0
Sikkim	70.0	2.6	27.4
Himachal Pradesh	71.8	13.1	15.1
West Bengal	73.1	22.7	4.1
Assam	75.4	21.9	2.8
Jammu & Kashmir	76.7	10.2	13.2
Madhya Pradesh	90.9	4.8	4.3
Rajasthan	91.2	3.6	5.2
Manipur	94.6	4.5	0.9
Haryana	96.9	1.6	1.5
Uttar Pradesh	97.9	0.6	1.6
Orissa	98.3	1.2	0.5
Bihar	98.3	1.2	0.5
Punjab	99.9	0	0.1

Source: Parikh [1994: Table 2].

Two conclusions can be drawn from these findings. First, the PDS is highly differentiated across states and one has to be very careful about making generalisations at the national level. Secondly, the coverage of the PDS is very limited in most states of the country with the exception of Kerala, Goa and Mizoram. In other words, the PDS is not reaching the vast majority of the population.

Although overall coverage is low, there is some evidence from village studies that utilisation is progressive in states where coverage is more extensive.

There is some interesting evidence from a village study that I undertook in Maharashtra. Since data on incomes are not easy to collect, I used ownership of land to identify rich and poor. Data from Mohakal village of Pune district show that the richest households, defined as those with over 2.5 acres of irrigated land, did not make any purchases from the PDS in the

TABLE 3
DEPENDENCE ON THE PUBLIC DISTRIBUTION SYSTEM FOR PURCHASE OF GRAINS, URBAN
AREAS, 1986-87

(Percentage of all households)

State	No purchase from PDS	Partial purchase from PDS	All purchases from PDS
Mizoram	1.1	54.6	44.3
Kerala	13.0	83.8	3.3
Goa, Daman & Diu	18.3	70.6	11.2
Jammu & Kashmir	21.4	49.0	29.6
Delhi	26.3	17.1	56.6
Karnataka	37.3	58.9	3.8
West Bengal	40.2	51.2	8.5
Tripura	44.4	52.8	2.8
Tamil Nadu	44.6	52.8	2.7
Andhra Pradesh	48.6	47.9	3.5
Maharashtra	56.2	38.5	5.3
Assam	57.0	40.6	2.5
Meghalaya	64.1	28.6	7.3
Gujarat	68.0	24.5	7.5
Himachal Pradesh	74.7	14.1	11.3
Sikkim	79.0	5.3	15.8
Madhya Pradesh	82.6	12.1	5.3
Orissa	86.2	11.4	2.4
Haryana	92.9	4.3	2.8
Bihar	92.9	6.4	0.7
Uttar Pradesh	93.0	4.6	2.5
Rajasthan	94.4	2.2	3.4
Manipur	95.0	3.0	2.0
Punjab	95.4	3.6	1.0

Source: Parikh [1994: Table 2].

reference month. Among those with 1 to 2.5 acres, 61 per cent did not utilise the PDS as compared to 44 per cent among those with less than one acre. In other words, as land ownership rose, the proportion of households utilising the PDS fell. However, there was also exclusion at the lowest end: 47 per cent of landless household did not utilise the PDS.⁸ If we plot utilisation of the PDS against land ownership, the graph is like an inverse J (it rises slightly and then falls sharply). However, average quantity of cereals purchased from the PDS in the reference month fell as the size class of land holding rose.

I define the error of wrong inclusion as the proportion of rich who purchased cereals from the PDS in the reference month. For this, all households with more than one acre of irrigated land were classified as rich

(a rather generous definition of rich). Since the PDS is universal, we expect the error of wrong inclusion to be very high. However, the error of wrong inclusion was quite low, at 31.8 per cent. On the other hand, 45.9 per cent of the poor were excluded from the system. The scheme was universal in principle but in practice, the rich did not use it and some of the very poor could not use it, and the error of wrong exclusion was higher than the error of wrong inclusion.

A set of village studies was undertaken recently in four states as part of a UNDP project on human development [World Bank, 1996]. For Bihar, the study found that there was no purchase of cereals from the PDS in any of the villages surveyed. In Uttar Pradesh, a similar situation was observed in three out of the four villages studied. The situation was very different in the southern states of Kerala and Andhra Pradesh. In Kerala, monthly purchases of cereals per person ranged between 2.7 and 4.7 kgs in the four villages studied. In all but one Kerala village, households in the highest expenditure class did not buy any cereals from the PDS. In Andhra Pradesh too, there was some progressivity in the purchase of cereals from the PDS. In three villages, households in the highest expenditure class did not utilise the PDS, in a fourth village their purchases were quite small, and only in the fifth village, there were large purchases by households in this group. It is important to remember that even the highest expenditure class is defined at a relatively low cut off in terms of absolute level of expenditure. In short, in states with low coverage, such as Bihar and Uttar Pradesh, neither poor nor rich had access to the PDS. In states with high coverage, such as Kerala and to some extent Andhra Pradesh, the PDS was utilised more by the poor than by the rich.

(ii) *Quantity distributed or purchased from the PDS:* Using state-level data, one can identify the total quantity of food grains sold through the PDS in different years, and calculate the per capita purchase (or 'offtake' in official language). Table 4 shows the total and per capita cereal offtake in 1993–94 for selected states. In terms of total quantities, the highest quantity of cereal distributed was in Andhra Pradesh followed by Kerala. In per capita terms, Kerala was the undoubted leader. Table 5 shows the per capita cereal offtake in 1981 and 1991 in selected states. Even in 1981, the food grain offtake per person was highest in Kerala (47 kgs) and lowest in Bihar (8 kgs). By 1991, there were some interesting changes. Kerala was still distributing the highest quantity per capita, over 70 kgs of grain per person per year. In Andhra Pradesh, there was a huge increase in offtake, of 234 per cent, between 1981 and 1991, from 11 kgs to 37 kgs per person per year. In Uttar Pradesh and Bihar, there was a decline in per capita offtake, of around 13 per cent, between 1981 and 1991.

TABLE 4
DISTRIBUTION OF FOOD GRAINS THROUGH THE PDS IN SELECTED STATES, 1993-94

State	Total cereals distributed, 1993-94 (million Tons)	Per capita offtake, 1993-94 (kgs)	Per capita SDP, 1993-94 (Rupees)
Kerala	1.936	62.9	6524
Andhra Pradesh	2.543	33.0	6900
Tamil Nadu	1.304	19.1	8051
Maharashtra	1.412	13.4	11799
Uttar Pradesh	1.582	4.3	4783
Bihar	0.793	5.6	3417

Source: *Bulletin on Food Statistics and Economic Survey 1998-99*.

TABLE 5
A COMPARISON OF THE ANNUAL PER CAPITA FOOD GRAIN DISTRIBUTION UNDER PDS IN SELECTED STATES IN 1981 AND 1991

State	Food grains per capita, 1981 (kgs)	Food grains per capita, 1991 (kgs)	Percentage change, 1981-91
Kerala	46.6	70.8	+51.9
Andhra Pradesh	11.0	36.8	+234.5
Tamil Nadu	24.1	40.6	+68.5
Maharashtra	25.6	28.8	+12.5
Uttar Pradesh	8.5	7.4	-12.9
Bihar	7.9	6.8	-13.9

Source: *Economic Survey 1998-99* and Ministry of Civil Supplies, *Annual Report*, different years.

Parikh [1994] estimated purchases for different expenditure fragile groups for selected states using the NSS data for 1986-87. His estimates for the population in the lowest two expenditure deciles are shown in Table 6. In Andhra Pradesh, Kerala and Tamil Nadu, the share of food grains distributed to the lowest 20 per cent of households was close to their population share. In Uttar Pradesh and Bihar, however, persons in the lowest 20 per cent got a disproportionately low share of cereals sold in the PDS. As the PDS is a universal programme in most states, we expect the ratio of share of cereals to share of population to be one. The ratio was around one or greater than one in 15 of the 24 states surveyed (including Kerala and Andhra Pradesh).

TABLE 6
SHARE OF BOTTOM 20 PER CENT OF POPULATION IN QUANTITY OF FOOD GRAINS
DISTRIBUTED THROUGH THE PDS, 1986-87

State	Rural % of population	% of quantity distributed	Urban % of population	% of quantity distributed
Andhra Pradesh	26	24.6	24	28.2
Assam	24	28.4	30	33.3
Bihar	24	16.9	24	14.4
Delhi	27	56.6	26	28.1
Goa, Daman & Diu	30	31.4	25	24.7
Gujarat	23	26.6	25	37.6
Haryana	24	33.2	30	21.0
Himachal Pradesh	29	21.6	31	29.4
Jammu & Kashmir	24	30.4	26	22.3
Karnataka	24	20.8	25	21.8
Kerala	25	25.1	29	28.2
Madhya Pradesh	24	20.9	24	22.9
Maharashtra	23	22.2	26	23
Manipur	22	21.4	26	2.4
Meghalaya	25	28.6	30	25.5
Mizoram	26	26.2	24	23.4
Orissa	21	7.1	26	6.8
Punjab	23	100	27	20.5
Rajasthan	24	33.3	27	36.9
Sikkim	30	25.4	32	0
Tamil Nadu	26	24.3	24	23.6
Tripura	26	27.0	21	25.9
Uttar Pradesh	24	10.8	27	19
West Bengal	23	19.3	26	23.6

Source: Parikh [1994: Table 6].

A survey of users of PDS in Kerala, conducted in 1987, showed that dependence on ration shops was higher among relatively poor households. Beneficiaries who earned less than Rs 100 a month purchased 71 per cent of the amount of rice that they were entitled to from the ration shop, while beneficiaries with monthly incomes over Rs 3,000 purchased only six per cent of their quota [Ramachandran, 1996]. In other words, the dependence on the PDS was higher among the relatively poor in Kerala.

(iii) *Prices*: In the early 1990s, the objective of providing cheap food was undermined by the steep increase in prices of food grains sold through the PDS. Between 1990 and 1994, the central issue price of the common variety of rice rose 86 per cent and that of wheat rose 72 per cent (Table 7). During the same period, the Consumer Price Index for Agricultural Labourers (CPIAL) rose by 53 per cent. In other words, the cumulative increase in prices of major food grains sold in the PDS was higher than the increase in general price indices. In some states like Maharashtra, the inflation in PDS

prices was even higher.⁹ Not surprisingly, the price difference between the open market and the PDS narrowed. The rise in issue prices was checked after 1994. Prices were held constant from 1994 to 1996 when a dual price regime was introduced as part of the Targeted PDS.

TABLE 7
CENTRAL ISSUE PRICES OF RICE AND WHEAT, 1990 TO 1998

(Rupees per quintal)

Effective Date	Rice, common variety	Rice, fine variety	Rice, superfine variety	Wheat
June 1990	283	349	370	234
Dec. 1991	377	437	458	280
Jan. 1993	437	497	518	330
Feb. 1994	537	617	648	402
June 1997				
(i) BPL	350	350	-	250
(ii) APL	-	650	750+	450
Feb. 1999*			905+	650

* A hike in BPL prices was announced and then revoked.

+ The average price for Grade A rice (fine and superfine varieties) was Rs 700 in 1997 and was raised to Rs 905 in 1999.

Source: Government of India, *Economic Survey*, different years.

To conclude, it is evident that the PDS has failed in large parts of the country, and that it needs to be restructured to be an effective tool of food security. Large numbers of poor are excluded from the PDS. The quantities supplied are generally inadequate and prices have risen rapidly in recent years. Several studies have documented the administrative problems with the PDS and shown that in many states there is large-scale diversion of grain, wastage, low quality and unreliability of provisioning.¹⁰

The critical issue, thus, is the exclusion of the poor from the PDS. This exclusion is on account of many factors, most importantly, the lack of employment and incomes among the poor. Since food grains have to be purchased from the ration shop, adequate income is essential for gaining access to the PDS. My fieldwork in Maharashtra showed that utilisation of the PDS was limited due to both the general income-poverty of the households as well as the lack of cash on the few days of the month when goods were available in the ration store. The mismatch between availability of cash and availability of food in the shops also reflects the weaknesses of

the distribution system. Ration shops, in most places, are not well-stocked and ration commodities are available, if at all, for a few days each month. The poorest – those with low and irregular incomes – face the greatest problems of access to the PDS in its present form.

*The Kerala experience*¹¹

Before turning to reform of the PDS, it is worth dwelling on the experience of Kerala, the state with the most effective public distribution system in the country. Kerala is in a class of its own both in terms of utilisation of the PDS and in terms of the quantity of food grain distributed.

The establishment of an effective PDS in Kerala was the outcome of a strong people's movement for food. Rationing was first started during the Second World War. The government action came in response to the food crisis of 1942–43 and public demands for action. As E.M.S Namboodiripad stated in an interview a few years ago, 'we, through our *kisan sabhas* (peasant organisations), trade unions and other mass organisations, insisted on procurement from landlords and distribution through fair price shops. Because of our pressure, and because of the administrative need of the British Government itself, they set up ration shops' [Ramachandran, 1998]. Large sections of the population, including women, joined the struggle for food. Kerala was the first state where rural rationing was established.

Although begun in the 1940s, the expansion of the PDS took place in the mid-1960s. In 1964, there was an acute shortage of food in Kerala; prices rose sharply, and there was a 'state-wide people's protest movement' [Ramachandran, 1996: 246]. The central government agreed to supply Kerala with an adequate quantity of food for the PDS.¹² The demand for food and, specifically, for distribution of cheap grains through ration shops, was an important political demand raised by the Left in Kerala, and even the Congress (I) government at the Centre agreed to support the policies and demands of the government in Kerala. The political demand for food, reflected in mass protests and struggles, was thus critical in establishing and strengthening the PDS.

In Kerala, the rationing system is almost universal. All families that do not produce grain adequate to meet their consumption requirements are eligible for a ration card. In practice, about 90 per cent of households possessed ration cards in 1991 [Ramachandran, 1996]. The network of ration shops is well developed with one shop for every 389 households [*ibid.*]. The extensive utilisation of the PDS has been noted in the previous section. The Kerala government has an additional chain of stores that sells a wide range of consumption goods at a regulated price. As Ramachandran noted, 'the system of comprehensive food subsidy in Kerala ... provides crucial income and nutrition support to its people' [*ibid.*: 250].

The diverse experience of states and the relative success of Kerala show that strong political support is essential for establishing and maintaining an effective system of food security. They also point to differences in the quality of governance, and the importance of good governance in the sense of effective provision of public goods and services for implementation of a programme such as the PDS.¹³

III POLICY REFORM

Since 1991, several unsuccessful attempts have been made to reform the PDS. The Revamped PDS introduced by Prime Minister Narasimha Rao in 1992 was a failure and the Targeted PDS introduced by Prime Minister Deve Gowda in January 1997 is likely to worsen food security among the poorest of households.¹⁴ I have discussed these changes in detail elsewhere [Swaminathan, 1996, 1997]. In this article, my concern is with proposals for further reform of the PDS. A recent paper from the World Bank 'India's Public Distribution System: National and International Perspective' summarises much of the current thinking on the problems with the PDS in India and also makes concrete suggestions for reform (World Bank [1996]; reprinted as Radhakrishna and Subbarao [1997]). This is a useful starting point for my discussion of ways to reform the PDS.

Targeting

The authors of the World Bank study recommend that the PDS be targeted to the very poor. As the report puts it, 'distinguish between the very poor and the moderately poor and improve efficacy of PDS in transferring food to the ultra-poor' [*ibid.*: 16]. The very poor are those households that have expenditures less than three-fourths of the official poverty line level of expenditure. The moderately poor are the remaining households with expenditures below the poverty line. In short, an extremely narrow form of targeting is being propagated: not just targeting to those below the official poverty line, a very low absolute level of expenditure, but to a group within the 'poor'.¹⁵

Although in favour of targeting, the World Bank study is unclear on the criteria for targeting and inconsistent too. In terms of criteria for inclusion of the poor, the report suggests slums in urban areas, persons working on employment programmes or widows in rural areas. In terms of exclusion of the non-poor, it suggests criteria like payment of income tax, ownership of more than five acres of irrigated land. The exclusionary criteria would roughly exclude 10-20 per cent of the population. The criteria for inclusion, however, are quite strict.

I shall argue that there is a strong case against narrow targeting and in

favour of broad targeting or near-universal provision in India. The first argument against narrow targeting is based on the scale of food poverty and insecurity. When food insecurity is widely prevalent, the leakage from a universal programme will be small and the benefits of targeting will be limited.¹⁶ However, if food insecurity is low, and food subsidies need to be provided to a small section of the population then targeting may be useful. Secondly, when there is mass hunger, priority must be given to welfare in terms of nutritional outcomes, and the errors of wrong exclusion and associated costs of targeting can be high in such circumstances. Broad targeting is more inclusive and likely to lower the costs of wrong exclusion.¹⁷

If the objective is reducing food insecurity, we need to be concerned with those currently undernourished as well as those who are at the risk of undernourishment. To identify the food insecure, I suggest the use of the food share.¹⁸ Let us consider the food share or food expenditure as a proportion of total expenditure for different household expenditure deciles for 1993-94 (the latest year for which survey data are available; Table 8). First, the rural data show that for the bottom half of the population, food shares were over 70 per cent. For the next four deciles, food shares were between 60 and 70 per cent. It is only in the top five per cent that the food share falls below 50 per cent. By any standard, food is the most important item of expenditure for the overwhelming majority of rural households. In urban areas, the food shares were lower in every decile. Food shares were higher than 60 per cent for the bottom six deciles and above 50 per cent for the next three deciles.

TABLE 8

FOOD SHARE OR FOOD EXPENDITURE AS A PROPORTION OF TOTAL EXPENDITURE (%), ALL INDIA, 1993-94

Decile	Rural	Urban
0-10	73.1	70.6
10-20	73.1	69.6
20-30	72.3	67.6
30-40	71.6	65.8
40-50	70.3	63.9
50-60	69.3	62.1
60-70	67.4	59.4
70-80	65.5	55.8
80-90	61.9	52.3
90-95	57.0	48.3
95-100	42.4	34.5
Computed average	67.4	60.8
Simple Mean/All	63.1	54.6

Source: Computed from National Sample Survey Organisation [1997], *Consumption of Some Important Commodities in India, NSS 50th round, 1993-94*.

Note: Deciles are based on households ranked by total consumer expenditure.

If we use a generous cut-off point of a food share of 50 per cent to identify the food insecure, then the top 10 per cent of the urban population and the top five per cent of the rural population would classify as non-eligible in 1993–94. In other words, using the food share criterion, a programme of food security should be targeted to the bottom 95 per cent of the rural population and bottom 90 per cent of the urban population. Alternatively, if a cut-off food share of 60 per cent is used then the bottom 90 per cent in rural areas and the lower 60 per cent in urban areas would have to be included (that is, about 80 per cent of the total population). By way of comparison, households defined as ‘poor’ and eligible for the food stamps programme in the United States are those who spend more than one-third of total expenditure on food [Kuhn *et al.*, 1996].

To put it differently, food security in households that spend a very large proportion of their incomes on food is likely to be very sensitive to small changes in prices and incomes. For a household that spends 50 per cent of its expenditure on food, a doubling of food prices, as happened during the early 1990s, could have significant adverse effects on food consumption. From a welfare perspective, all such households should have access to some form of food security.¹⁹

The lesson from Kerala is also that if a near-universal system of distribution works well it can effectively reach poor households. Further, by choice of commodities and quality (or even differentiated prices and quantities), the system can achieve a progressive incidence. The decision on targeting versus universal transfers should be based on the costs of excluding around 20 per cent of the population. In practical terms, it may be easier to provide universal benefits and then claw-back benefits from the rich via other means such as taxes.

A related suggestion, for improving targeting and delivery, is to link PDS with other welfare programmes such as employment programmes or nutrition programmes.²⁰ Some of the poorest households are unable to utilise the PDS because they lack income to buy food. For such households, employment or other welfare programmes (such as pensions for old/retired persons) are required to enable them to buy minimum quantities of food. Such social security programmes, however, should be complementary to the PDS, and not seen as a way of restricting food distribution only to households participating in employment or other welfare programmes.

Procurement and the Food Corporation of India

A crucial suggestion in the World Bank study is to remove restrictions on the grain trade and to privatise or at least reduce the role of the Food Corporation of India (FCI) in the grain trade. The FCI, it is suggested, ‘go out of the operations of procurement and supply to the PDS’ [World Bank,

1996: 77]. It is argued that restrictions on the grain trade should be removed and the private sector allowed to participate fully in the trade so as to free procurement policy from pressure groups. It is recognised, however, that the FCI may still be required to maintain some buffer stocks and stabilise prices within a certain band. The assumption underlying this argument is that private trade is more efficient than the FCI.

It is important to recognise that one of the major contributors to the rising costs of the FCI is the procurement price.²¹ The total economic costs of the FCI comprise the procurement price, procurement related costs and distribution costs. Data for the 1990s show that procurement prices were one of the fastest growing components of economic costs [Swaminathan, 1999]. Consequently, for both rice and wheat, the share of procurement prices in total economic costs rose during the 1990s. Furthermore, the ratio of economic cost to procurement price declined for wheat after 1991–92 and was more or less unchanged for rice during the 1990s. This ratio is an indicator of operational efficiency as it measures the costs of acquisition and distribution relative to the costs of purchase. By this criterion, operational efficiency improved in the case of wheat and showed no change in the case of rice.²²

In India's parliamentary system, the procurement price is a political decision over which the FCI has no control. The central government announces procurement prices based on the recommendations of the Commission on Agricultural Costs and Prices (CACP). The CACP recommendations are based on costs of production in different parts of the country. As data in Table 9 show, there has been a tendency in recent years to announce prices that are higher than recommended prices, due to pressures from the rich farmer lobby.

TABLE 9
MINIMUM SUPPORT PRICE (MSP) OF WHEAT, RECOMMENDED AND ACTUAL,
1984–85 TO 1996–97

Year	MSP Recommended	MSP Actual
1984-85	157	157
1985-86	162	162
1986-87	165	166
1987-88	173	173
1988-89	183	183
1989-90	200	215
1990-91	225	225
1991-92	245	275
1992-93	305	330
1993-94	350	350
1994-95	360	360
1995-96	380	380
1996-97	415	475
1997-98	455	510

Source: CACP [1998: Table 4.18].

Prior to privatising the FCI or removing all restrictions on the grain trade, we also need to examine issues of production and procurement. On procurement policy, the World Bank argument is that India has moved from a situation of a deficit to that of surplus in grain production and therefore it is appropriate to 'phase out government controls as well as procurement policies' [*World Bank*, 1996: 40]. This is a rather short run view. If all the hungry and undernourished consumed adequate amounts of food grain then present production would barely suffice to meet demand. One set of projections of cereal demand for 2020 shows that 278 million tonnes may be demanded if per capita income grows at three per cent annually [*Bhalla and Hazell*, 1997]. In addition, if poverty were eliminated, cereal demand would rise to 292 million tonnes, and if the entire population were well fed, cereal demand would be 301 million tonnes [*ibid.*]. Clearly, domestic production needs to expand rapidly to meet this demand. In other words, for supply to keep pace with future increases in demand, it is necessary to expand the production base. In particular, there is need to raise productivity and production in more backward regions, in dryland areas, etc., and this will require appropriate producer incentives.

There is no doubt, however, that the system of procurement needs to be reoriented. At present, procurement is highly concentrated in a few regions. In 1989–90, for example, Punjab and Haryana accounted for 23 per cent of all-India rice production and 63 per cent of rice procurement. In the case of wheat, Punjab and Haryana generated 69 per cent of the total output and nearly all of procurement. We need a scheme of procurement that ensures some equity between states and across cultivators within a state.²³ A more widespread production base with local and regional procurement can also lower the costs of procurement and distribution (and perhaps, also lower the pressures of the rich farmer lobby).

There is clearly scope for streamlining operations and lowering the operational costs of the FCI. In this context, the recommendations made by the BICP [1991] such as deferred procurement and decentralised storage should be discussed seriously. Implementing some of the suggestions requires not only greater autonomy for the FCI but also major organisational changes. I thus argue that we should improve the functioning of the FCI by building on its strengths (such as the impressive all-India distribution network) rather than dismantling it along the lines suggested by the World Bank study.

Food Stamps and Size of Real Transfers

A suggestion that has been made frequently in the last few years, and that is also voiced in the World Bank study, is to shift from rations to a system of food stamps or coupons.²⁴ The biggest weakness of food stamps is that they

are usually not indexed and reduce the real value of the subsidy. This is, of course, the reason why they are recommended by orthodox reformers. An important question in this context is whether food stamps can be designed so as to provide a fixed real transfer.²⁵ The international experience does not provide much help on this issue but it is an area for further research.²⁶ Secondly, there are huge problems of administration both in respect of issuing of food stamps regularly and in respect of retail stores accepting stamps and being able to reimburse them easily. These are not necessarily problems that would vanish with greater local control over the programme.²⁷

Adequacy of Ration Quotas

A related issue, and one that 'reformers' are silent on, is that of the ration scale, the quantity of ration allocated per person, or equivalently, the value of the food stamp. If the system of food subsidy (say rationing) has to contribute significantly to household nutrition and food security then a reasonable minimum subsidy (or quantity of grain) needs to be distributed.²⁸ Table 10 shows the scale of rationing under a range of schemes. International comparisons show that China and Sri Lanka (before 1980) had very generous ration quotas.²⁹ In India, one of the most generous ration quotas is in Uttar Pradesh but, of course, in practice, very little reaches the poor. Excluding Uttar Pradesh, Kerala has the highest ration scale of 13.2 kg per person per month or 158 kg a year. This scale is adequate in a nutritional sense in that if a person bought her entire quota it would meet her total grain requirements.³⁰ In practice, the per capita purchase from the PDS is about 70 kg a year in Kerala. In other words, PDS purchases meet roughly half the consumption requirements of people in Kerala. In most other states including Andhra Pradesh, the ration scale is smaller and far from adequate.

TABLE 10
RATION QUANTITIES UNDER DIFFERENT SCHEMES

State or Country	Foodgrain quota per month (in kg)
Kerala	13.2 kg per person
Andhra Pradesh: white cards	5 kg per person (ceiling: 20/25 kg)
Tamil Nadu	7 kg per person (ceiling: 27 kg)
Maharashtra	10 kg per person (ceiling: 20/30 kg)
Uttar Pradesh	14–18 kg per person
Bihar	8 kg per person
China: Beijing	15–29 kg per adult
China: Chengdu	14 (office worker) – 25 kg (manual labourer)
Sri Lanka	7.2 kg per person

Source: Anand and Kanbur [1991], GOI [1994] and Riskin [1987].

If a ration of 70 kg, the achievement in Kerala, were to be provided to all hungry and undernourished households, the PDS would have to be expanded. If this were provided to the bottom 60 per cent (or 600 million) of the population, the annual requirement of the PDS would be 42 million tonnes (or 25 per cent of net availability). Is this feasible? For a country that produces around 200 million tonnes of food grain, surely public policy can ensure that about one-fifth is procured and distributed through the PDS. It is clear that policies of procurement have to be designed in conjunction with policies of distribution.

Decentralisation of Food Delivery

The proposal to assign the task of targeting and delivery of the PDS to Panchayati Raj Institutions (PRIS) is essentially a good one. Decentralisation of the delivery system may improve control and accountability of the delivery system.³¹ The precondition, however, is the presence of genuine democratic *panchayats*. The nature and composition of *panchayats* is very different in states such as West Bengal, where there has been land reform and where local power structures have been altered, and states such as Bihar, where feudal landlords continue to dominate rural society. In West Bengal, traditionally deprived communities now have a voice in the functioning of the *panchayat* institutions.³² In such cases, the *panchayats* may be expected to ensure that the delivery system meets the needs of the poor. In cases where members of the traditional land-holding hierarchy of a village dominate the *panchayat*, the control of *panchayats* over delivery is not going to change how the system works. Without genuine land reform and changes in village social and power relations, it is difficult to ensure genuine democracy in *panchayat* institutions.

IV. CONCLUDING REMARKS

To conclude, I have tried to argue that in the Indian context, there is need for systematic state intervention to ensure household food security. Undoubtedly, the existing system of distribution of food, the PDS, has many weaknesses and requires genuine policy reform. To ensure food security, however, I argue that we need to pursue a strategy different from that recommended by orthodox reformers (as exemplified in the World Bank study). A summary of recommendations from the World Bank study and alternative proposals is shown in Table 11.

First, given the scale of hunger and undernutrition, I argue in favour of broad targeting or near-universal provision. If the food share is used to identify persons vulnerable to food insecurity, the vast majority of the population becomes eligible for a programme such as the PDS. Secondly, a

TABLE 11
A COMPARISON OF PROPOSALS TO REFORM THE PDS

ORTHODOX REFORMERS	ALTERNATIVE
Narrow targeting or target to the very poor; Use income to identify the poor and very poor (below 75 per cent of poverty line).	Broad targeting or target to 80% of population; use food share as indicator of poverty. Prefer near-universal PDS.
Restrict PDS to beneficiaries of other welfare programmes like employment programmes.	Need other welfare programmes like employment programmes for the poorest; Employment programmes should complement rather than substitute PDS
Remove restrictions on grain trade; privatise FCI; Free procurement from pressure groups.	Problem of supply remains; Expand production base; Extend procurement to all regions; Lower costs of FCI by greater autonomy.
Introduce Food Stamps.	Keep rations. Ensure that ration scale provides a reasonable quantity of food. Stamps are complicated administratively and do not protect against inflation.
To improve delivery, use Panchayat Raj Institutions and NGOS.	Use Panchayat Raj Institutions but note that their performance varies and depends crucially on land reforms.

Note: The orthodox view is represented here by suggestions in World Bank [1996].

strong and effective system of procurement needs to be maintained and this requires the continuation of an organisation such as the Food Corporation of India (FCI). Rather than privatisation, I argue that the FCI needs to be reorganised and given greater autonomy to function better. Thirdly, an adequate quantity of grain needs to be distributed to make a sizeable contribution to household food security. Fourthly, and in this I concur with the World Bank and other studies, decentralisation can improve the workings of the PDS but it requires genuine participation by the poor in organisations at the local level. Lastly, the lesson from Kerala, the only state in India with a comprehensive and well functioning public distribution system, is that strong political support and political awareness is essential for establishing and maintaining an effective system of food security.

NOTES

1. It is interesting that the only two exceptions to this trend were Kerala and West Bengal.
2. See, for example, recent issues of the *Economic Survey*.
3. In Sri Lanka, for example, food subsidies accounted for 1.3 per cent of GDP in 1984 even after the introduction of means tested food stamps [Swaminathan, 1996].

4. See, for example, Burgess and Stern [1991], Cornia and Stewart [1993] and Sen [1992, 1995].
5. The counter-factual to a universal transfer may not be the same budget targeted to the poor but a lower budget or even no transfers at all.
6. On the formulation of this trade-off, see Sen [1996].
7. Although the literature on comparisons of alternative welfare programmes is limited, the conclusion of most studies is that the benefits of targeting over universal transfers are quite limited, if any [*Lipton and Ravallion*, 1995].
8. It is unlikely that landless households had non-market access to food grains. Wages are usually not paid in kind. Even for workers that received wages in kind, it is unlikely to have been picked up in the reference month as the survey was undertaken before the harvest.
9. The prices in each state differ from the central issue prices [*Swaminathan*, 1996].
10. See, for example, Mooij [1999], BICP [1991] and Ahluwalia [1993].
11. This section draws heavily on Ramachandran [1996].
12. The food question became an important political issue and was, in fact, one of the central issues in the run-up to the elections of 1967 [*Mooij*, 1998].
13. I thank Meghnad Desai for drawing attention to this point. See also Chen and Desai [1997].
14. See *GOI* [1993b, 1997] on the reforms introduced.
15. The poverty line in India is recognised even in official documents to be a very low level of expenditure. The Perspective Planning Division of the Planning Commission described the norm as "too meagre to sustain a level of living which would be considered tolerable in the modern context" [cited in Srinivasan and Bardhan [1974: 12].
16. See, also, van de Walle [1995].
17. In his review of the World Bank study, Mahendra Dev [1998] also points out that the authors have been excessively concerned with excluding the rich and less concerned with including the poor.
18. In the literature on poverty, the inverse food share has been discussed as a measure of poverty [*Anand and Harris*, 1990].
19. As we are concerned not only with those that have currently inadequate levels of intake of food and nutrition but also with those at the risk of undernutrition.
20. This suggestion has been made earlier too, for example, Parikh [1994].
21. A large part of the literature on food subsidies (with a few exceptions) ignores the issue of producer prices and looks only at consumers.
22. Data on marketing costs show that the FCI is not unambiguously worse than private traders. Comparisons of prices indicate that the FCI can provide rice more cheaply than private traders, whereas private traders have an edge in the case of wheat, particularly in the surplus states [*Swaminathan*, 1999].
23. It is worth thinking through the scheme for equitable procurement to meet the needs of the PDS that was made by I.S. Gulati and T.N. Krishnan [1975]. The basic elements of their scheme were a system of graded producer levy, procurement at reasonable prices and equity in the distribution of burden across states and across farmers. For example, basic levy rates varied by size of operational holding, and rates in different states were weighted to take account of productivity differences.
24. See, for example, Bhagwati and Srinivasan [1993].
25. Even with rations, the real value of the subsidy has eroded in recent years, as quantities supplied were reduced and prices charged were raised.
26. At least two countries (China and more recently, Iraq) have used coupons as part of their rationing system. These, however, were substitutes for ration cards and not similar to food stamps.
27. The World Bank study suggests that local government organisations distribute food stamps that can be exchanged for grain at private retail stores by eligible households.
28. The Targeted PDS started in 1996 has actually lowered ration entitlements [*Swaminathan*, 1997].
29. See Riskin [1987] on China and Anand and Kanbur [1991] on Sri Lanka.
30. The minimum grain consumption recommended by the Indian Council of Medical Research is about 135 kg a year.

31. Also, as Meghnad Desai pointed out, local variations in the system of food subsidies and food delivery need to be explored.
32. See, for example, Lieten [1996].

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