

Project on
MONITORING AND ANALYSIS
OF BUDGETS IN
MAHARASHTRA STATE

RESEARCH
BRIEF - 4

Is a Universal PDS Financially Feasible in India?

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The Committee is of the view that the Targeted PDS has failed and tinkering with it further will not help... We believe that given the balance between grain supply and demand, the persistence of regions of surplus and deficit grain production in the country, the underdeveloped nature of food grain markets in parts of the country, and undernutrition on a mass scale, there is still need for price stabilization nationally... This goal is best achieved by reverting to a system of allocations of grain at uniform issue prices with universal coverage.

(High Level Committee on Long Term Grain Policy, Government of India, 2002)

The Context

Malnourishment is an everyday reality in the underbelly of “shining” India. Dubbed by Utsa Patnaik (2007) as the “Republic of Hunger”, India today has a vast majority of population that suffers from poverty and lack of adequate calorific intake.¹ For instance, in 2005-06, almost half the children under age 5 were stunted and 43 per cent were underweight. Among children between 6 months and 59 months, 70 per cent were anemic (IIPS, 2006).² According to Madhura Swaminathan (2004), “no country in the world comes close to India, in the absolute number of people living in chronic hunger”.³ Not surprisingly, in terms of depth and extent of the problem of malnutrition and hunger, India not only stands worse than other developing countries but even Sub-Saharan Africa (Dreze and Sen, 2002).⁴

¹ See Patnaik, Utsa (2007), “The Republic of Hunger”, in *The Republic of Hunger and Other Essays*, Three Essays Collective, New Delhi.

² See IIPS (2006), ‘NFHS-3 Factsheets’, *National Family Health Survey 2005-06 (NFHS-3)*, International Institute of Population Sciences, Mumbai.

³ See Swaminathan, Madhura (2004), “Ending Endemic Hunger”, *Social Scientist*, 32 (7/8), pp. 42-47.

⁴ See Drèze, Jean and Sen, Amartya (2002), *India: Development and Participation*, Oxford University Press, New Delhi.

The declared objective of the UPA-II government's proposed Food Security Bill is to address the acute problems of hunger and malnutrition in India.⁵ This Bill, drafts of which are doing the rounds, is yet to be presented in the Parliament. The important feature of the Bill is that it tries to ensure 35 kg of rice and wheat to all the Below Poverty Line (BPL) households in India at Rs 3 per kg. There is no general provision for supply of subsidized food grains for the Above Poverty Line (APL) households in the Bill. In other words, the proposed public distribution system (PDS) under the Bill would continue to follow the BPL-APL division, and further, eliminate the APL sections from its purview.

The argument has been put forward by many official quarters that a universal PDS is not financially affordable for a large country like India. In this brief, our effort is to analyse this argument and estimate how much it would cost if the PDS has to be universalized in India.

The PDS in India

Till 1997, the PDS in India had universal coverage in all the States. The PDS was institutionalized in the 1960s and its major objectives were declared to be:

- (a) maintaining stability in the prices of essential commodities across regions and in periods of price inflation;

- (b) ensuring the entitlement of basic commodities at reasonable and affordable prices, especially to the poor;
- (c) introducing rationing during scarcity; and
- (d) keeping a check on private trade, hoarding and black-marketing (Swaminathan, 2000).

With all its problems of leakage and inadequate coverage, the PDS was successful in bringing a large section of our population under a food security net. As Isaac and Ramakumar (2009) argue using NSS data for 1986-87:

...subsidised purchases from the PDS acted as an important supplement to other sources of purchase of the major food items. The share of purchase from PDS in the total quantity purchased was higher in urban areas compared to rural areas. The fact that, *with all its infirmities, the PDS played a role in keeping in check regional disparities in food grain consumption shows its potential as an instrument of welfare* (p. 4).⁶

Thus, what was needed in the PDS by the 1980s was its further expansion, to regions and sections not covered (*ibid.*). However, official policy in the 1990s took the PDS onto a completely different trajectory. Under economic reforms, primacy was accorded to the logic of fiscal prudence, which entailed drastic reductions in subsidies, including food subsidy. This phase marked an important reform in the PDS, wherein the system was converted from a universal to a targeted system in 1997.

⁵ The Rome Declaration at the World Food Summit (1996) defined food security as "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". Similarly, the *Report on the State of Food Insecurity in Rural India* puts it, "food security has three components a) availability of food in the market; b) access to food through adequate purchasing power; and c) absorption of food in the body"; see MSSRF and WFP (2008), *Report on the State of Food Insecurity in Rural India*, M. S. Swaminathan Research Foundation, Chennai.

⁶ See Isaac, T. M. Thomas and Ramakumar, R (2009), "The Assault on Food Security: A Critique of the Food Security Bill in the Context of Kerala", Paper presented at the National Meeting of Food Ministers, Government of Kerala, Trivandrum, September 19, available at <http://www.agrarianstudies.org/UserFiles/File/isaac_and_ramakumar_The_Assault_on_food_Security.pdf>.

Following the introduction of the Targeted Public Distribution System (TPDS), the population had to be classified into Above Poverty Line (APL) and Below Poverty Line (BPL) categories. Only those households classified as BPL were eligible for subsidised purchase of commodities from the ration shops. In the first phase of TPDS, the APL households were eligible to purchase commodities from ration shops, but had to pay the full “economic cost” of the handling of commodities.

Errors of Exclusion under TPDS

Most contributions to the poverty debate in India employ NSSO surveys that estimate household consumption expenditures. If we take the nutritional status of the population to define the poverty line, a larger number than those identified as “not poor” by the NSSO fall in the category “nutritionally poor” (see Patnaik, 2010 on the validity of the nutrition norm).⁷ While not going into the ensuing debate, it is clear that Deaton and Dreze (2009) also conclude that nearly 80 per cent of the rural and 76 per cent of total population was below the nutritional consumption norm of 2400 calories in 2004-05.⁸ They also highlight an increase in poverty, according to the nutrition norm, from around 68 per cent in 1993-94 to 76 per cent in 2004-05.

The Arjun Sengupta committee estimated using the NSS data itself that around 77 per cent of the Indian population could be classified into what the committee calls the “poor and vulnerable” category (with a per capita consumption expenditure of less than Rs 20 per day).

⁷ Patnaik, Utsa (2010), “A Critical Look at Some Propositions on Consumption and Poverty”, *Economic and Political Weekly*, 45(6), pp. 74-80. See also Patnaik, Utsa (2008), “Re-conceptualising Poverty”, *The Hindu*, September 3.

⁸ Deaton, Angus and Dreze, Jean (2009), “Food and Nutrition in India: Fact and Interpretations”, *Economic and Political Weekly*, 44 (7), pp. 42-65.

On the other hand, the Suresh Tendulkar committee, which abandoned the calorie norm method of estimating poverty and substituted it with an arbitrary poverty line, estimated the share of the income poor population to be 41.8 per cent in the rural areas and 25.7 per cent in the urban areas (for critiques, see Ramakumar, 2010 and Swaminathan, 2010).⁹

All the above estimates of poverty are based on sample survey data, and do not aid in the identification of who the poor are. As Ramakumar (2010) noted:

Errors of “wrong exclusion” in targeted programmes in India are due to the separation of the processes of (a) the estimation of the number of poor and (b) the identification of the poor. It is for the absence of a reliable and feasible method of combining estimation and identification that political and social movements have been demanding universalisation of welfare schemes like the PDS. It is, thus, essential that sample-based poverty estimates from the NSS are not mechanically linked to the eligibility to access welfare programmes.¹⁰

After 1997, there has been a massive exclusion of the needy households from the PDS. There have been major mismatches between households classified as BPL by the government and their actual standard of living (Swaminathan, 2000; Gol, 2002; Ramachandran, Usami and Sarkar, 2010).¹¹ As

⁹ See Ramakumar, R (2010), “The Unsettled Debate on Indian Poverty”, *The Hindu*, January 2, available at <<http://beta.thehindu.com/opinion/lead/article74196.ec>>; and Swaminathan, Madhura (2010), “A Methodology Deeply Flawed”, *The Hindu*, February 5, available at <<http://www.hindu.com/2010/02/05/stories/2010020554300800.htm>>.

¹⁰ Ramakumar (2010), cited above.

¹¹ See Swaminathan, Madhura (2000), *Weakening Welfare: Public Distribution of Food in India*, LeftWord Books, New Delhi; Government of India (Gol) (2002), “*Report of the High Level Committee on Long Term Food Grain Policy*”, Department of Food and Public Distribution, Ministry of Consumer Affairs, Food and Public Distribution, New Delhi; and Ramachandran, V. K., Usami, Y. and Sarkar, Biplob

noted in report of the “High Level Committee on Long Term Grain Policy” (chaired by Abhijit Sen), “the narrow targeting of the PDS based on absolute income-poverty is likely to have excluded a large part of the nutritionally vulnerable population from the PDS” (Gol, 2002).¹²

Swaminathan and Misra (2001), based on a survey conducted in Mohakal village in Thane in Maharashtra, identify numerous issues with the actual operationalisation of TPDS including the fact that the persons responsible for the task of identification of BPL households are often untrained.¹³ This, in turn, gave rise to many errors in the field during

TPDS. The remaining 70 per cent of the rural population was classified into the ‘de facto APL’ category and hence not covered under TPDS. Further, in poorer states like Bihar and Rajasthan, this figure was even lower at less than 20 per cent (see Swaminathan, 2008).¹⁴

Let us now consider agricultural laborers, who form the most marginalised section of the Indian society. Only 48 per cent of the agricultural laborers in rural India possessed BPL or Antyodaya cards (Table 2). Further, in states like Bihar, the share of households that possessed BPL or Antyodaya cards was lower at less than 30 per cent.

Table 1 *Distribution of households by type of ration card possessed, rural areas, India, 2004-05, in per cent*

State	Share (%) of households with cards of type:			
	Antyodaya	BPL	APL	No Card
India	2.9	26.5	51.8	18.7
Bihar	2.3	15.1	60.1	22.5
Rajasthan	2.8	15.7	77.9	3.6
Chhattisgarh	4.4	34.9	32.1	28.6
Nagaland	0.4	6.3	3.0	90.4
Orissa	2.0	42.4	22.5	33.1

Source: Swaminathan (2008).

process of identification of ‘poor’ households. It is also clear that since the poverty estimates are not dependent on any objective criteria, they are often prone to erroneous judgments.

In this context, Table 1 presents the distribution of households by types of ration cards possessed; it shows that less than 30 per cent of the rural population was classified as BPL in 2004-05, and thus eligible for the

It is thus clear that while the TPDS is ostensibly aimed at reducing the Type I error in targeting, it invariably enhances the Type II error with heavy human and social costs. The results of the study in Mohakal village indicate that the Type I errors in entitlement reduced from 34.6 per cent to 10.1 per cent in the TPDS interim period (1995-2000) and further to 2 per cent in the final TPDS period (after 2000). On the other hand, the Type II errors in entitlement increased from 5.5 per cent to 25.7 per cent during the interim period and

(2010), “Lessons from BPL Censuses”, *The Hindu*, April 21, available at <<http://www.hindu.com/2010/04/21/stories/2010042153701000.htm>>.

¹² Gol (2002), cited above.

¹³ See Swaminathan, Madhura and Misra, Neeta (2001), “Errors of Targeting: Public Distribution of Food in a Maharashtra Village, 1995-2000”, *Economic and Political Weekly*, 36 (26), pp. 2447-2454.

¹⁴ See Swaminathan, Madhura (2008), “Programmes to Protect the Hungry: Lessons from India”, DESA Working Paper No. 70, United Nations Department of Economic and Social Affairs, available at <http://www.un.org/esa/desa/papers/2008/wp70_2008.pdf>.

further to 54 per cent in the final TPDS period.

Debates have been raging in learned journals on the misplaced contours of 'poverty lines' and 'efficient targeting' as integral to public programmes while summarily ignoring pleas

Universal PDS: How Much Would It Cost?

As fiscal rectitude is given as the primary reason for not having a universal PDS, it is important to look at how much a universalized PDS would actually cost.

Table 2 *Distribution of agricultural labour households by type of ration card possessed, rural areas, India, 2004-05, in per cent*

State	Share (%) of households with cards of type:	
	BPL/Antyodaya	APL/No Card
India	48.0	52.1
Bihar	29.1	70.9
Rajasthan	32.4	67.7
Chhattisgarh	54.3	45.8
Nagaland	0.0	100.0
Orissa	59.8	40.2

Source: Swaminathan (2008).

for appropriately applying nutritional norms instead of arbitrary 'normative' estimates. Universal PDS has been the prime victim of this misplaced academic and policy emphasis.

On the one hand, we have numerous studies attempting to estimate 'true poverty' on the basis of the nutrition norm and coming up with significantly higher incidence of poverty than officially acknowledged.¹⁵ On the other, with the ever more conservative social policy stance of the ruling UPA-II regime, we have seen a progressive increase in the arbitrary nature of TPDS with the almost complete removal of APL allocations from the central quota to States and the whimsical 'fixing' of the number of BPL and Antyodaya households. The hope raised by the proposed Food Security Bill would amount to nothing if it follows the current APL-BPL-Antyodaya model and shies away from the fundamental question of universalizing PDS.

The M. S. Swaminathan Research Foundation (MSSRF), in its recently released *Report on the State of Food Insecurity in Rural India*, attempts to analyse the economic feasibility of a universalized PDS (MSSRF and WFP, 2008).¹⁶ The calculations in this report are attributed to Madhura Swaminathan, and are reproduced from the final report of the National Commission for Farmers (NCF). The analysis has following assumptions:

- a) Universalisation implies coverage for at least 80 per cent of the population of India.¹⁷ The universal PDS should exclude (through self-selection) the richest 20 per cent of the population.
- b) Universal PDS would provide the prevailing BPL allocations of 35 kg of wheat and rice at Rs 4.15 per kg and Rs 5.65 per kg respectively to 80 crore persons.

¹⁵ The term "true poverty" is used by Patnaik (2008).

¹⁶ See MSSRF and WFP (2008) cited above.

¹⁷ The figure of 80 per cent is close to the proportion of population classified into 'poor and vulnerable' by the Arjun Sengupta Committee.

- c) The current economic cost borne by the FCI and an average family size of 5 (NFHS-3 estimates the average size to be 4.8).

The Centre for Budget and Governance Accountability (CBGA) attempts a similar estimation (CBGA, 2010; also see Jha and Acharya, 2009).¹⁸ The assumptions in this analysis are:

- a) Coverage of all the 23.96 crore households of the country with 35 kg of

food grains at the Central Issue Price (CIP) of Rs 3 per kg.¹⁹

- b) The prevailing Minimum Support Price (MSP) and economic costs of wheat and rice with provisioning of rice and wheat in the ratio of 2:1.

We adopted these two methodologies and calculated the amount of financial resources required for universalizing PDS today. Table 3 shows the estimates as per the NCF approach i.e., assuming 80 per cent coverage and CIP

Table 3 *Estimated Costs for Universal PDS with 80 per cent Coverage and BPL-CIP*

Item	Amount/Quantity
Annual total amount of food grains required @ 35 kg per month per household	805.1 lakh tones
CIP Proposed (BPL Rice)	Rs 5.65 per kg
CIP Proposed (BPL Wheat)	Rs 4.15 per kg
Total Amount of Rice to be distributed	536.7 lakh tones
Total Amount of Wheat to be distributed	268.4 lakh tones
Amount Recovered through CIP (Rice)	5650*536.7 = Rs 30,323.5 crore
Amount Recovered through CIP (Wheat)	4150*268.4 = Rs 11,138.6 crore
Total Amount Recovered	Rs 41,462.1 crore
Economic Cost of Rice (Budget Estimate 2010-11)	Rs 18.94 per kg
Economic Cost of Wheat (BE 2010-11)	Rs 14.01 per kg
Total Economic Cost for the proposed amount (Rice)	18937*536.7 = Rs 1,01,634.9 crore
Total Economic Cost for the proposed amount (Wheat)	14025*268.4 = Rs 37,643.1 crore
Total Economic Cost for proposed amount of food grains	Rs 1,39,278 crore
Annual Food Subsidy required (Budget Estimate 2010-11)	Rs 97,815.9 crore
Annual Food Subsidy required as share of GDP (BE 2010-11)	1.48 per cent
Present Food Subsidy (BE 2010-11)	Rs 55,578 crore
Present Food Subsidy as share of GDP (BE 2010-11)	0.84 per cent
Additional Annual Food Subsidy required (2010-11)	Rs 42,237.9 crore
Additional Annual Food Subsidy as share of GDP (2010-11)	0.64 per cent

Source: MSSRF and WFP (2008); Gol (2010a) and authors' own calculations.

¹⁸ See CBGA (2010), *Union Budget 2010-11: Which Way Now?*, Centre for Budget and Governance Accountability, New Delhi; and Jha, Praveen and Acharya, Neelachal (2009), "Universalising PDS: How Much does it Cost Anyway?", *People's Democracy*, 33 (44), November 1.

meant for BPL population applied to the entire covered population.

¹⁹ The assumption here is a population of around 115 crore and an average family size of 4.8.

With the current population estimated at 115 crore, 80 per cent coverage would imply 92 crore individuals. With an average family size around 4.8, total number of households to be covered would be 19.17 crore and the total

Thus, to provide 35 kg of food grains to 80 per cent of households in India, at the currently applicable BPL central issues prices (CIP) for rice and wheat, would require an additional amount of only about Rs 42,237.9

Table 4 *Estimated Costs for Universal PDS with 100 per cent Coverage and Antyodaya-CIP*

Item	Amount/Quantity
Annual total amount of food grains required @ 35 kg per month per household	1008 lakh tones
CIP Proposed	Rs 3 per kg
CIP Proposed	Rs 2 per kg
Total Amount of Rice to be distributed	672 lakh tones
Total Amount of Wheat to be distributed	336 lakh tones
Amount Recovered through CIP (Rice)	3000*672 = Rs 20,160 crore
Amount Recovered through CIP (Wheat)	2000*336 = Rs 6,720 crore
Total Amount Recovered	Rs 26,880 crore
Economic Cost of Rice (Budget Estimate 2010-11)	Rs 18.94 per kg
Economic Cost of Wheat (BE 2010-11)	Rs 14.03 per kg
Total Economic Cost for the proposed amount (Rice)	18937*672 = Rs 127,256 crore
Total Economic Cost for the proposed amount (Wheat)	14025*336 = Rs 47,124 crore
Total Economic Cost for proposed amount food grains	Rs 174,380 crore
Annual Food Subsidy required (Budget Estimate 2010-11)	Rs 147,500 crore
Annual Food Subsidy required as share of GDP (BE 2010-11)	2.23 per cent
Present Food Subsidy (BE 2010-11)	Rs 55,578 crore
Present Food Subsidy as share of GDP (BE 2010-11)	0.84 per cent
Additional Food Subsidy required (2010-11)	Rs 91,922 crore
Additional Food Subsidy as share of GDP (2010-11)	1.39 per cent

Source: CBGA (2010); GoI (2010a) and authors' own calculations.

amount of food grains required would be 805.1 lakh tonnes. The offtake of food grains under TPDS was only 348 lakh tones in 2008-09 (GoI, 2010a).²⁰ We also assume a provisioning of rice and wheat at the ratio of 2:1. The estimates are given in Table 3.

crore (assuming MSP and economic costs remaining constant). This additional amount would amount to only 0.64 per cent of India's GDP. The total food subsidy required would amount to just 1.48 per cent of the GDP.

If we calculate the total financial allocation required for universal PDS according to the CBGA approach, making some simple modifications, we get a slightly different picture. The added assumption here would be that food grains are supplied at CIP for Antyodaya households, since we want to arrive at a reasonably practical range of calculations for various possible arrangements under a 'truly' universal PDS. In other words, through

²⁰ See Government of India (2010a), "Agriculture and Food Management", Chapter 8 in *Economic Survey 2009-10*, Ministry of Finance, New Delhi. However, the proposed amount of required food grains as well as financial allocation would be overestimated since all 19.17 crore households are not expected to purchase 35 kg of the allocated food grains (MSSRF and WFP, 2008, cited above).

these two sets of calculations, we attempt to present the upper and lower limits of expenditure required for universalizing PDS.

Table 4 attempts to calculate the total food subsidy required accordingly. It turns out that the additional food subsidy required would amount to Rs 91,922 crore, which amounts to 1.39 per cent of India's GDP. The total food subsidy required would amount to 2.23 per cent of the GDP.

Table 3 and Table 4, if viewed together, present a 'range' for the possible financial commitment that the government would need to make with regard to a universal system of PDS in the country. Table 4 shows a higher cost of Rs 91,922 crore for universal PDS since it assumes that all 24 crore households of the country would buy 35 kg of food grains. Further, if the CIP is assumed to be Rs 3 per kg for both rice and wheat, the total amount of food subsidy required over and above the present subsidy comes to Rs 88,563 crore (CBGA, 2010).²¹

On the other hand, the UPA-II government has foregone an amount of Rs 414,099 crore in terms of tax revenue and other exemptions for 2008-09 and Rs 502,299 crore for 2009-10, which amounted to almost 79 per cent of the aggregate tax collection in the fiscal year 2009-10 (RE) (GoI, 2010b) and nearly 8 per cent of the GDP of India.²² Further, the effective tax rate of the corporate sector, at 22.78 per cent, (in itself much below the statutory tax rate of 33.99 per cent) was significantly less than of the public sector companies. Even the said amount of revenue foregone is an underestimate since the concerned budget exercise operates only on a sample of 90 per cent companies.

In Conclusion

Given the huge human and social costs associated with the TPDS owing to the errors of exclusion, along with serious issues of leakage and efficiency, the cost of a universal PDS is negligible. If the government could divert a part of the revenue foregone from the corporate houses this fiscal year, a universal PDS can be easily established in the country.

In this context, the debate on the proposed Food Security Bill has seriously missed the mark in many respects.

First, the framework of the debate almost absolutely rests on BPL-APL-Antyodaya division of households, which itself, in turn, is a direct product of the rollback of universal PDS and introduction of targeting.

Secondly, it is easily discernible that even if the debate restricts itself to the framework of targeting, the question of procurement policy remains. Is the current polity, with its associated ideological orthodoxy, prepared to increased procurement to support a universal PDS?

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²¹ CBGA (2010), cited above.

²² See Government of India (2010b), *Union Budget of India, Annexure on Revenue Foregone*, available at <indiabudget.nic.in/ub2010-11/statrevfor/annex12.pdf>.



This 'Research Brief' was prepared at the School of Social Sciences as part of the project titled **MONITORING AND ANALYSIS OF BUDGETS IN MAHARASHTRA STATE**, internally funded by the Research Council of the Tata Institute of Social Sciences, Mumbai. Corresponding email: rr@tiss.edu.

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