Revival of the Public Distribution System: Evidence and Explanations

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Contrary to a common belief that India's public distribution system is irreparably dysfunctional, a nine-state survey of the PDS finds that the respondents received 84-88% of their full entitlement. The implicit subsidy for households below the poverty line from PDS foodgrains alone is roughly equivalent, in many states, to a week's NREGA wages every month. The revival of the PDS can be traced, in large part, to a renewed political interest which manifests itself in state initiatives such as expanded coverage, reduced prices, computerisation of stock management, etc.

A large majority of the respondents preferred to receive in-kind food transfers rather than cash transfers, except in Bihar where the PDS is still in very poor shape. Their testimonies, and the survey findings, point to many good reasons to be wary of a hasty transition to cash transfers. Further improving the PDS seems like a more sensible way forward.

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1 Introduction

The public distribution system (PDS) is among the most important food security programmes of the Government of India. Since the introduction of the Targeted PDS (TPDS) in 1997, most field-based studies of the PDS have focused on inclusion and exclusion errors (see, e g, Swaminathan and Misra 2001; Hirway 2003; Khera 2008; Mahamallik and Sahu 2011). Using National Sample Survey (NSS) data, others have focused on leakages from the PDS (see, e g, Jha and Ramaswami 2010; Himanshu and Sen 2011; Khera 2011c, among others). Several other equally important questions, e g, the nutritional impact of the PDS, policy changes in the past decade (especially at the state level), the role of the PDS in providing food security, have remained neglected.

To address some of these gaps, and understand the ground realities, a survey of the PDS in nine Indian states was undertaken in May-June 2011 (hereafter "PDS Survey"). This exercise is important for two reasons: one, there have been few independent evaluations of the PDS in recent years, and, two, the PDS is expected to play an important role in the proposed National Food Security Act.¹ Given that cash is also being discussed as an alternative to the PDS, this survey included an effort to understand people's views on cash transfers.

Contrary to a common belief in policy debates (and academic circles) that the PDS is an irreparably dysfunctional scheme, this survey finds that many state governments have undertaken a series of measures that have made the PDS functional. By providing assured supply of foodgrains at nominal prices, the PDS has become an important source of food security for rural households, or more precisely for eligible rural households. With the notable exception of Bihar, below the poverty line (BPL) households in the nine sample states reported receiving almost their full entitlement of grain (rice and wheat) on a regular basis. In the three months preceding the survey, households reported receiving 84-88% of their full entitlement of PDs grain – up to 40 kg of grain per household per month. Further, the implicit transfers associated with these food entitlements are now quite substantial due to the combined effect of an increase in market prices and reduced PDS prices.

The main weakness of the current system is that it is restricted to certain categories of households and that there are large exclusion errors. Until recently, the PDS was targeted mainly at BPL households in most states. In many states, increasing dissatisfaction with this approach has led to a move towards a more inclusive, if not a universal, system. As discussed below, the

revival of the PDS in many states appears to be linked with this expanded coverage.

Along with foodgrain, the PDS provides sugar and kerosene in most states. In addition, several states have started providing pulses and edible oil at subsidised prices. However, PDS supplies of non-foodgrain commodities (pulses, oil, kerosene, sugar, salt, etc) were not the main focus of this survey.

Drawing on the survey, this report examines different aspects of the PDS: its role in ensuring food security, corruption and other complaints, state-level diversity in the way it works and reform measures undertaken by state governments. We also discuss people's views on cash transfers as an alternative to subsidised food from the PDS. The reasons that were given for preferring cash or food are enlightening and they help us understand rural realities from the perspective of those who are directly affected. While people's preferences are not the last word on this issue, they do need greater attention than they have received so far.

1.1 The Survey

The nine sample states are: Andhra Pradesh, Bihar, Chhattisgarh, Himachal Pradesh, Jharkhand, Orissa, Rajasthan, Tamil Nadu and Uttar Pradesh.² In an earlier paper based on secondary data for 2004-05 (Khera 2011c), the major Indian states were grouped into three categories based on the performance of the PDS: "functioning", "reviving" or "languishing".³ The selection of states for the PDS survey relied on that grouping of states. We chose three functioning states (Andhra Pradesh, Himachal Pradesh and Tamil Nadu), three reviving (Chhattisgarh, Orissa and Uttar Pradesh) and three languishing (Bihar, Jharkhand and Rajasthan). This survey finds further support for this categorisation, except

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Table 1: Socio-economic Characteristics of Sample Households

Table 1.30clo economic characteristics of Sample	All States	AP	BI	СН	НР	JH	OR	RJ	TN	UP
Female respondents (%)	48	63	37	44	45	42	50	43	63	44
Illiterate respondents (%)	66	58	86	79	33	67	79	70	54	62
Living in kachha homes (%)	49	24	50	76	53	73	62	38	13	50
Proportion (%) of										
Dalits	28	22	46	17	49	10	10	48	15	43
Adivasis	24	17	6	52	1	68	59	7	2	1
OBCs	35	46	27	29	3	20	30	36	80	40
Other	12	15	20	2	47	2	1	9	3	16
Proportion (%) of households with No land	36	29	73	43	7	22	25	59	36	26
Less than one acre of land	61	62	99	69	70	70	56	76	56	81
Main occupation										
Self-employed in agriculture	37	37	13	38	56	34	55	12	41	53
Casual labour	49	41	76	50	31	53	36	72	40	33
Regular employment	3	1	1	0	5	1	1	7	11	2
Other	11	21	10	11	8	13	9	9	8	12
Standard of Living Index ^a										
Low (SLI<=10)	70	30.2	96.0	86.7	41.5	95.7	85.2	81.5	18.0	92.5
High (SLI>20)	4	10.3	0.0	1.4	7.6	0.0	0.7	0.0	12.2	0.8
Per capita (Rs/month) expenditure, non-food	450	524	375	289	649	289	356	663	631	342
NREGA employing in the preceding 12 months										
% getting no employment (0 days)	37	20	62	31	22	30	46	52	22	50
% getting 100 days	7	8	0	5	9	2	4	23	13	0
Average days per household	29	39	12	25	41	28	19	33	55	14

^aThe "Standard of Living Index" has been created by weighting the ownership of assets in this manner: four for a pucca house, two for a semi-pucca house and zero for kachha; four for a flush toilet and zero for none; two for electricity and zero for none; two for piped water supply and one for public sources of water supply; four for five or more acres of land, three for two to five acres of land, two for up to two acres of land and zero for no land; four for ownership of a four-wheel vehicle and three for ownership of two-wheel vehicle; three each for ownership of a pressure cooker.

that two more states from the languishing category (Jharkhand and Rajasthan) seem to be "reviving".

Two blocks in each of two sample districts in each state were visited by the survey teams. A Sample districts and blocks were selected to maintain a balance between more and less developed areas of the state, and also between different agro-climatic regions. For instance, in Bihar, Nalanda (in "south Bihar" and two hours from the state capital) and Katihar districts (in "north Bihar", on the border with Nepal) were selected. In Tamil Nadu, both sample districts (Dindigul and Dharmapuri) are known as "backward" districts. Given Tamil Nadu's exceptional PDS performance, we were interested in seeing how the scheme fared in the worst areas of the state.

In each of the 20 sample districts, six villages (three each in two different blocks) were selected for investigation. Selected villages were a random sample from the list of census villages with a population of 500-1,500.⁵ Investigators were supposed to interview 12 randomly selected households in each village.

In six out of nine sample states, surveyed households were a random sample selected from the BPL list. In the remaining three (Andhra Pradesh, Himachal Pradesh and Tamil Nadu), where the PDS is universal or quasi-universal, the voter list was used for sampling. As discussed below, the BPL lists are far from reliable, but they were good enough for our purposes, with the partial exception of Jharkhand. If a household on the BPL list (or voter list) happened to have an above poverty line (APL) card or no card at all, investigators were instructed to skip that household; households with Antyodaya cards, meant for the poorest of the poor, were included (these households are generally, but not always, selected from the BPL list). The survey (hereafter "PDS

Survey") covered 1,227 households in the nine states.

Along with the household questionnaire, the survey collected information on basic socio-economic features of the sample village. This included information on connectivity, basic amenities, access to local markets and so on. The village questionnaire also included an interview with the fair price shop (FPS) dealer who was asked about the running of the shop.⁷

The survey was conducted by students from the University of Delhi and other universities, along with local volunteers, after careful training. Many of them had also participated in a series of earlier surveys of the PDS and other social security programmes such as the National Rural Employment Guarantee Act (NREGA), Mid-Day Meal Scheme and Integrated Child Development Services (see, e g, Drèze 2001, 2002a; Bhatia and

Drèze 2002; Drèze and Goyal 2003; Khera 2002, 2006, 2008, 2011b, 2011c; Sinha 2008; Citizen's Initiative for the Children under Six 2006, among others). Each of the nine states covered by the PDS survey was also covered in one or more of these earlier surveys. This, along with secondary data, helped to understand how things have changed over time in these areas.

1.2 Socio-economic Background of Respondents

This section briefly describes the socio-economic characteristics of the respondents and their households. Nearly half (48%) of all respondents were women (Table 1, p 37): the highest proportion (63%) of female respondents were interviewed in Andhra Pradesh and Tamil Nadu; the Bihar sample had the lowest (37%). Two-thirds of all respondents were illiterate, though there are large interstate variations. For instance, Himachal Pradesh had the lowest proportion of illiterate respondents (33%) and Bihar had the highest (86%). Just over half (52%) of all respondents were dalits (scheduled castes) and adivasis (scheduled tribes), one-third belonged to the "Other Backward Classes" and 12% belonged to other communities.

Table 1 provides further details of the socio-economic background of sample households. A large majority of households were poor, with a small asset base (e.g., more than one-third were landless and 61% owned less than one acre of land); a quarter of the households lived in kachha homes without electricity.

A "Standard of Living Index" (SLI) along the lines of the index used in the National Family Health Survey (NFHS) has been created using asset data collected in the PDS Survey.9 Households score between 1 and 30 on the SLI constructed here. In six survey states, more than 70% of the households had a "low" SLI score (i e, SLI less than 10, see Table 1 for details). The two southern states (AP and TN) and Himachal Pradesh in the north are economically better off with 18-42% of households with a low SLI.

2 The Public Distribution System

Under the TPDS introduced in 1997, households are provided APL, BPL, or Antyodaya (introduced in 2001) cards. ¹⁰ Antyodaya cards, which enjoy a larger subsidy than BPL households, are meant for the "poorest of the poor". APL households were effectively excluded from the PDS in 2001 when the central government raised the APL issue price above market prices. However, they gradually re-entered the system in recent years, in many states, as market prices shot up while the issue price remained unchanged (some states have also used the APL quota to expand the coverage of the PDS – see below).

The proportion of BPL families that the central government is willing to subsidise in each state is fixed in accordance with the Planning Commission's poverty estimates. The 1993-94 poverty estimates are still used for this purpose, on account of a Supreme Court order in the "right to food" case (*PUCL vs Union of India and Others*, Writ Petition Civil, No 196 of 2001). To take into account the increase in population, in 2000 the centre revised the BPL figures for each state by applying the 1993-94 poverty estimates to the projected population in 2000. ¹¹ Note that, Andhra Pradesh and Tamil Nadu never really adopted the central government's

BPL caps, and do not have a BPL category for the PDS. 12 In Andhra Pradesh, those who are entitled to PDS commodities are given "white" cards and in Tamil Nadu these cards are referred to as "rice cards". 13

Since 2003, many state governments have felt that the caps on BPL cards imposed by the central government are too stringent. In response to this, many have initiated state schemes (e g, the Mukhya Mantri Khadya Sahayog Yojana in Chhattisgarh, Rajasthan and Madhya Pradesh) to issue more BPL cards (these are referred to as "state BPL cards" in this paper). Household entitlements of state BPL cardholders tend to be the same as those of regular BPL households. In our sample, 62% of sample households had BPL cards, and nearly one-tenth (8%) had state BPL cards. Just over a quarter (27%) of the sample households possessed Antyodaya ration cards. ¹⁴

2.1 PDS Entitlements

There have been two important developments with respect to the PDS at the state-level in the past few years. One, there has been a renewed political interest in the PDS, especially since 2007. There are two manifestations of this: (a) a rejection of the APL-BPL distinction imposed on state governments by the centre for the purpose of the PDS; and (b) a reduction in PDS prices in many states, including free grain in Tamil Nadu since June 2011. A second, more recent and less widespread development is the inclusion of pulses and edible oils among the commodities distributed at subsidised prices.

There are wide state-wise variations in the list of commodities supplied by the PDS. Table 2 (p 39) presents state-wise entitlements of BPL cardholders including non-grain commodities that are supplied through the PDS in each of the survey states. While wheat and rice are generally provided only to BPL or Antyodaya households, kerosene is meant for all households. Sugar is another commodity provided through the PDS. As mentioned earlier, this survey focused primarily on the supply of wheat and rice.

Another point worth noting is that given the massive build up of foodgrain stocks with the Food Corporation of India (FCI) in 2010, the Supreme Court ordered that excess stocks be reduced by increasing PDS entitlements. Some states have taken advantage of the additional allocation of grain by providing an additional 5 kg/month per BPL household.

2.1.1 Towards Universalisation

An encouraging trend observed in the states was one towards a much more inclusive (even universal, in some cases) PDS. Tamil Nadu has had a universal PDS for some time. Himachal Pradesh also has a universal PDS, albeit with a difference – APL households pay a higher price than BPL households, though the entitlements (in terms of commodities and quantities) of all households are the same. In Andhra Pradesh and Chhattisgarh, the system is "quasi-universal" with nearly 80% of the population entitled to PDS commodities.

This trend towards universalisation of the PDS could be seen in other states too. In Orissa, the PDS has been universalised in the hunger prone "KBK region" (originally the Kalahandi-Bolangir-Koraput districts, now divided into smaller districts). ¹⁵ Rajasthan,

ahla 2.	· PDS Nor	mcfor RPI	Cardholdersa

	Grain Entitlements	Other PDS Commodities
Andhra Pradesh ^b	Rice: 4 kg/capita (Rs 2/kg) Wheat: Fortified atta	Kerosene, sugar, salt Pulses (1-2 kg, Rs 34-50/kg) Oil (1 litre, Rs 35/litre)
Bihar	Rice: 15 kg (Rs 6.7/kg) Wheat: 10 kg (Rs 5.22/kg)	Kerosene
Chhattisgarh ^c	Rice: 25 kg (Rs 2/kg) Wheat: 10 kg (Rs 2/kg)	Kerosene, sugar, salt Chana dal on experimental basis
Himachal Pradesh	Rice: 15 kg (Rs 10/kg for APL and Rs 6.85/kg for BPL) Wheat: 20 kg (Rs 8.5 for APL and Rs 5.25 for BPL)	Kerosene, sugar, salt Pulses (1-3 kg, Rs 20-35/kg) Edible oil (1-2 litres, Rs 40)
Jharkhand	Rice: 35 kg (Re 1/kg) Wheat: Discontinued	Kerosene
Orissa	Rice: 25 kg (Rs 2/kg in KBK region; Rs 9.3/kg for APL elsewhere) Wheat: Unclear	Kerosene, sugar
Rajasthan	Rice: 0 Wheat: 25 kg (Rs 2/kg)	Kerosene, sugar
Tamil Nadu	Rice: 20 kg (free) ^d Wheat: Fortified atta (1 kg, Rs 11/kg)	Kerosene, sugar, salt Pulses (2 kg, Rs 30/kg) Oil (1 litre, Rs 25/litre)
Uttar Pradesh	Rice: 20 (Rs 6.15/kg) Wheat: 15 (Rs 4.65/kg)	Kerosene, sugar

^a Antyodaya cardholders get 35 kg/month/household in all states, and they pay Rs 3/kg for rice and Rs 2/kg for wheat. However, in Orissa rice is given to them at Rs 2/kg; Chhattisgarh and Jharkhand have reduced the prices further to Re 1/kg. In Tamil Nadu and for so-called "primitive tribal groups" with Antyodaya cards in Jharkhand rice is free.

Bihar and Jharkhand have all expanded their BPL lists to include more rural households (see Table 3 in Khera 2011c). Uttar Pradesh is the only exception among the nine sample states.

Expanded coverage has been made possible by using one (or both) of two measures: state governments pay for expanded coverage (e g in Andhra Pradesh, Chhattisgarh and Tamil Nadu) or central allocations to states are "spread thinner". The central government currently allocates 35 kg for each BPL household (so long as state governments adhere to the Planning Commission's poverty estimates). While Chhattisgarh, Himachal Pradesh, Jharkhand and Uttar Pradesh still give 35 kg per household per

Table 3: Purchase of PDS Grain

	Average Purchase (Kg/Month)								Average	Purchase-Entitlement		
			BPL			Aı	ntyodayaª		Entitlement for	Ratio (PER) in the Past		
	March	April	May	Average	March	April	May	Average	BPL Cardholders	Three	Months	
									(Kg/Month) ^b	BPL	Antyodaya	
Andhra Pradesh	14.8	15.1	14.9	14.9	35.3	35.3	30.9	33.8	15.1	100	97	
Bihar	11.5	10.8	11.4	11.2	19.3	14.9	14.6	16.3	25	45	47	
Chhattisgarh	33.1	34.0	32.8	33.3	34.1	33.1	35	34.1	35	95	97	
Himachal Pradesh	41.6	36.9	32.9	37.1	43.1	38.1	31.8	37.6	35-40 ^d	92-100 ^d	94-100	
Jarkhand	29.5	22.5	22.8	24.9	30.4	22.1	19.4	23.9	35	71	68	
Orissa	20.9	26.0	40.6°	29.2	31.6	32.7	40.6	35.0	25-30 ^d	97-100 ^d	100	
Rajasthan	25.6	25.3	27.1	26.0	35	35.3	35	35.1	25-30 ^d	86-100 ^d	100	
Tamil Nadu	17.3	18.6	17.8	17.9	33.5	28.5	30.3	30.8	19.5	92	88	
Uttar Praesh	31.2	31.0	29.8	30.7	33.7	34.4	33.9	33.9	35-40 ^d	77-88 ^d	85	
All states	23.7	23.5	24.7	24.0	32.6	29.6	29.1	30.4	27.3-28.7	84-88	87	

^aFor Antyodaya the entitlements are 35 kg/month everywhere except in Uttar Pradesh where it is 40 kg (temporarily) on account a Supreme Court Order in the right to food case (see text).

month, in other sample states household entitlements are lower than 35 kg per month (Table 2). Two states (Andhra Pradesh and Tamil Nadu) have moved to per capita entitlements whereas in Bihar, Orissa and Rajasthan BPL households are entitled to 25 kg per month.

2.1.2 Reduction of PDS Prices

Along with increasing the number of households entitled to PDS grain, six out of nine state governments have reduced issue prices below the centrally fixed issue prices for BPL households – Rs 4.65/kg for wheat and Rs 6.15/kg for rice. In Tamil Nadu, the government provides 20 kg of free grain; in Chhattisgarh, Rajasthan, Orissa and Andhra Pradesh, grain is provided at Rs 2/kg; in Jharkhand the price is Re 1/kg (and free for Antyodaya households belonging to the "primitive tribal group" category). Meanwhile market prices have increased, so that there has been a sharp increase in the implicit subsidy from the PDS.

To illustrate, consider the case of Chhattisgarh, where BPL households are entitled to 35 kg of rice at Rs 2/kg (much the same as in Jharkhand, Orissa, Andhra Pradesh and Tamil Nadu). The value of this monthly ration at local market prices, net of what people pay for it, is around Rs 600. This, in turn, is the equivalent of about five days of NREGA wages every month, or 60 days per year. To put this in perspective, the sample households in Chhattisgarh had worked for 25 days on NREGA in the preceding 12 months, on average. The PDS is doing more than twice as much as NREGA for them, and the two together now give them a very important protection from poverty and hunger.

2.1.3 Beyond Rice and Wheat

Another positive trend is the tendency to expand the list of commodities made available through the PDS to include more nutritious items. In Himachal Pradesh, all ration cardholders (irrespective of whether they are APL or BPL) can buy at least 1 kg of dal and 1 kg of oil each month. Larger households can buy up to 3 kg of dal and 2 kg of edible oil. Andhra Pradesh and Tamil Nadu also provide dal and edible oil. In Uttar Pradesh, households reported intermittent supply of "matar ki dal" (split peas); in Rajasthan too, households reported getting dal and oil briefly during 2009-10,

when market prices suddenly jumped. There was an expectation among respondents that these would be reintroduced. The Chhattisgarh state government has introduced chana dal on a pilot basis in Bastar district.

2.2 BPL Lists

Two BPL censuses (in 1997 and 2002) have been conducted so far by state governments. BPL lists prepared on the basis of the 2002 Census were held up on account of a stay order from the Supreme Court in the "right to food" case. The Supreme

 $^{^{\}rm b}$ In Andhra Pradesh entitlements are specified in per capita terms, with each person entitled to four kg/month, with a maximum of 20 kg per family.

In Chhattisgarh, there are three additional state-specific of ration cards. Grey cards (for STs and SCS) and Saffron (DBCs) enjoy the same entitlements as BPL cardholders. Widows and senior citizens are also given saffron cards, but with smaller entitlements (10 kg rice at Rs 2/kg). Persons with disabilities are given green cards with the same entitlements as widows and senior citizens.
d Single-person households are entitled to 12 kg of rice and 16 kg for two-person households.

bEntitlements applicable to sample households, based on the norms given in Table 2.

^cDue to "clubbing" (e.g., several households getting nothing in March and April, and then getting 100 kg in May).

^dEntitlements are reported as a range to account for the five kg extra due to a Supreme Court order in the right to food case (see text). The range gives the lower and upper limit for entitlements as well as PER.

Court lifted the stay in 2005, with the proviso that names of households on the 1997 BPL list could not be struck off the 2002 BPL list and that effective appeal procedures should be put in place for all households. Even after the stay was lifted, not all states adopted the new BPL list. Meanwhile, as noted earlier, state governments began to spend resources on expanding the PDS with the introduction of state BPL cards. ¹⁶ As a result of this chain of events, in each of the states where the BPL list was used for sampling (with the notable exception of Chhattisgarh), there was confusion regarding to which BPL survey the BPL list corresponded (1997, 2002 or something more recent).

In Jharkhand the situation was particularly messy. The distribution of BPL cards was largely based on the 1997 survey. However, the distribution of PDS rations was on the basis of a separate list (let us call it the "PDS list") which the FPS dealer had, and did not quite coincide with the BPL list. During the survey, we came across households whose names were on the BPL list and who had a BPL card, but who did not get rations. On the other hand, a few households did not have a ration card, but were getting rations because their names appeared on the PDS list! This situation is the result of expansion of the PDS beyond the BPL list in recent years and of poor governance in the state. The lack of clarity in terms of who is entitled to PDS rations opens the door to corrupt practices on the part of dealers and other officials.

The misclassification of households (inclusion and exclusion errors) on BPL lists is well established (e g, Drèze and Khera 2010a and the literature cited earlier). Documenting such errors was not explicitly part of the survey, yet the investigators came across serious inclusion and especially exclusion errors.

On the brighter side, the BPL lists are becoming more transparent (see section 7.3 below). Most BPL lists are online. In Chhattisgarh and Orissa, the teams found that an exercise to update and verify BPL lists had been conducted recently. However, even this exercise has had some negative fallouts – the ration cards of those who were not available during the verification drive (e g, migrants) have been cancelled. The drive has also given the FPS managers an additional excuse to deny some people their ration.

Further, since BPL lists were used for sampling purposes it gave us a chance to investigate the presence of "ghost" cards on the BPL list. The teams found hardly any bogus names on the BPL lists. Across all states, there were less than 10 names (out of 1,227) on the BPL lists that the survey teams were unable to locate. Nearly all households (93%) possessed only one ration card. A small proportion (6%) of households had two; of these, one-third were joint families. This is significant in the light of claims that bogus and/or duplicate cards are a major source of corruption in the PDS. A possibility remains that bogus cards are floating "outside" the official BPL lists; this could be verified by checking whether actual PDS allocations (say, at the state or district level) exceed what one would expect based on the official BPL lists.

2.2.1 Poor Coverage

In Bihar, Jharkhand and Uttar Pradesh, the BPL lists were very patchy and there were enormous "exclusion errors". For instance, in Jharkhand, the team found entire hamlets that did not have BPL cards. In Uttar Pradesh, the survey team sometimes found it

difficult to locate 12 BPL households in one village. In Orissa's Nuapada district (in the KBK region), many households complained of having no ration card at all. Often, younger households – i e, newly married couples – did not have any ration card.

Aside from well-known general problems associated with the entire BPL identification exercise, one important source of exclusion errors is the absence of arrangements to update the BPL list over time. The current system of issuing ration cards is inflexible – centrally imposed caps on the permissible number of BPL cards combined with population increase (in many states, the last BPL census was held about 10 years ago) lie behind the rigidity in the system. The block supply officer in Nuapada's Sinapalli block told us that the order for issuing new cards has to be given from Bhuwaneshwar, the state capital. The district or block administration does not have the authority to do so. In many states, a satisfactory system for issuing new cards needs to be put in place (e g, whereby names for new ration cards could be sent from the gram panchayat to the district or state capital for approval).

2.2.2 Supreme Court Order on Antyodaya Cards

The Supreme Court has issued an interim order in the right to food case directing certain groups to be included compulsorily on the Antyodaya list. The team found several violations of this – e g, many eligible widows did not have Antyodaya cards. There were 34 landless widows in the sample with BPL cards, although by virtue of being landless alone they should have been on the Antyodaya list. Another group that is entitled to Antyodaya card is that of so-called "primitive tribal groups" (or, PTGS). In the case of PTGS, there has been some attempt to cover all households, but even here the team found exclusion errors, e g, in Gopikander block of Jharkhand several Parhaiya households (classified as PTGS) did not have any ration card.

3 Corruption and the PDS

As mentioned earlier, corruption in the PDS has been one the biggest concerns in recent years (see, e g, Jha and Ramaswami 2010; Himanshu and Sen 2011; Kotwal, Murugkar and Ramaswami 2011; Khera 2011c), including in this survey.

The survey questionnaire included a very careful accounting of purchases of PDS grain by sample households. Respondents were asked three complementary questions to arrive at a reliable estimate of the extent to which they were able to secure their full entitlements: (1) how much they "normally" get from the FPS; (2) how much they got the last time they bought PDS grain; and (3) how much they bought, month by month, from March to June 2011.

3.1 Improvement in 'Purchase-Entitlement Ratio'

The purchase-entitlement ratio (PER) refers to the proportion of full entitlement that is purchased by BPL households. A low PER could be due to corruption in the system or lack of demand (possibly related to low quality of PDS grain). One of the major findings of the survey is that as far as BPL and Antyodaya cardholders are concerned, there has been a marked improvement in the PER, except in Bihar (Table 3, p 39). ¹⁹ As Table 3 shows, average purchase in the past three months ranged between

24.0 and 30.4 kg/month (for BPL and Antyodaya cards respectively). The average entitlement of BPL cardholders (averaged over all states) is between 27.3 and 28.7 kg/month.²⁰ The average PDS purchase in the past three months (24 kg/household per month) is at least 84% of the monthly entitlement (28.7 kg/household per month).²¹

A more demanding benchmark is to look at the proportion of households for whom PER equals 100, i e, the proportion of households who get their full entitlement normally. Three-quarters of respondents reported getting their full quota in the nine survey states.²² This rises to 80-81% if we exclude Bihar from the sample. The two important exceptions to this general pattern of high PERS are Bihar and Jharkhand. In Bihar, the situation remains grim (even though it seems to have improved even there, at least by Bihar's standards).²³ Only 18% of BPL households reported getting their full quota in Bihar, followed by Jharkhand where 25% get their full entitlement (Table 6, p 42).

NSS data on PDS purchases from 2004-05 onwards show a similar revival in the PDS (Himanshu and Sen 2011; Khera 2011c).²⁴ Some of the measures that have contributed to this turnaround are discussed below. Many household respondents and others (the ration dealer, village head, etc) attributed the improvement in the PDS to the increase in the gap between market and PDS prices mentioned earlier. The increase in implicit subsidy has had the effect of enhancing voice, and no one seems willing to forego their ration any more.

Leakages in wheat supply among "rice states" has perhaps not been properly captured in the survey.²⁵ For instance, in Tamil Nadu, respondents complained that the supply of wheat/atta is irregular. Respondents in other rice states (Andhra Pradesh, Chhattisgarh and Orissa) also voiced such complaints. Much of this is also linked to uncertainty among both dealers and cardholders regarding their wheat entitlements. However, wheat distribution in these rice-eating states is relatively small.

3.2 Corruption in Other Commodities

The PDS survey did not include a similar careful accounting for other PDS commodities (e g, sugar, dal, edible oil and kerosene). Sample households often complained about corruption in the distribution of kerosene and sugar. In Tamil Nadu, some cardholders complained of irregular supply of dals and pulses. This survey did not match kerosene and sugar entitlements of households with actual purchase. There are two reasons why this is difficult to do: one, entitlements of these commodities are not clear, not even to FPS managers in some cases. Two, interviews with the FPS managers and block supply officers suggested that the supply of these commodities to the district/block is irregular. In such cases, it is not clear whether cardholders do not get these commodities because of supply issues or because commodities have been siphoned off.

3.3 Awareness of Entitlements

As far as awareness of grain entitlements is concerned, generally people knew what they were entitled to. For instance, in the case of Antyodaya cardholders, less than 3% were unable to answer the question on grain entitlement correctly. Among BPL cardholders,

the correct answers ranged between 84% and 100%.²⁶ However, in the case of other commodities such as sugar, kerosene, dals and oils there was a lack of clarity and irregularity in the supply of these commodities.

3.4 Overcharging

There were hardly any instances of "overcharging" (charging more than the official issue price) for PDS grain. In Jharkhand (where BPL households now pay Re 1/kg for rice) we heard some complaints of people paying Rs 35 each month, even though they were given only 32 kg of rice. One factor that has helped to prevent overcharging is the reduction in prices (e g, from Rs 4.65/kg of wheat to Rs 2/kg in Rajasthan) and the use of round figures. It is much easier for people to calculate the total amount due when, say, wheat is priced at Rs 2/kg for 25 kg, than to multiply Rs 4.65 by 35.

Here again, as far as other commodities are concerned, there was a lot of confusion and also more reports of overcharging. Among the worst cases were FPS managers in Dumka (Jharkhand) who openly told us that though the official price of kerosene is Rs 13.50/litre, they charge Rs 16/litre as this was the "norm".

4 Assessment of the PDS

Respondents were asked about the importance of the PDS in their lives. A large majority (80%) considered it "very important". If one includes those who said it was "quite important" the proportion increases to 98%. This sentiment is also conveyed in the qualitative data from the survey, especially the responses to cash transfer as alternative to the PDS. Many respondents pleaded that the FPS not be closed ("Society nahi band honi chahiye"). Respondents in Warangal district (Andhra Pradesh) said "even if you give me Rs 1 lakh, I will opt for rice", or "you want to deny us our food?" A female respondent in Tamil Nadu followed the survey team to persuade them that closing down the ration shop was a bad idea. Similar sentiments were echoed in most states (see e g, Nag 2011 and Puri forthcoming).

People's perception of the overall change in the PDS over the past five years were also recorded. In Himachal Pradesh, Jharkhand, Orissa and Tamil Nadu, half or more respondents felt that things had improved. One-tenth of all respondents said that things had become worse over the past five years.²⁷

Table 4: Main Complaints with Fair Price Shops

	Proportion (%) of Respondents
Quality related concerns	
Poor quality of grain at the time of last purchase	15
Lack of predictability	
Days of opening are not fixed	38
Inadequate information regarding the opening of FPS	20
Access to FPS	
Distance to FPS more than two km (3 km)	19 (9)
Last visit (travel + queuing) took more than	
two hours (three hours)	45 (30)
Days of opening are not adequate	48
Reasons for not buying full ration in the past three months	
No supply to the ration shop	10
Supplies ran out by the time respondent went to the FPS	10
FPS dealer refused to give full quota	18
Dealer's attitude is unhelpful	18

4.1 Quality

Overall, 38% of respondents reported getting good quality grain at the time of their last purchase; nearly half (47%) said it was of "fair" quality and 15% said that the grain they received was of poor quality (Table 4, p 41). In Andhra Pradesh and Himachal Pradesh there were hardly any complaints about the quality of PDS grain. In Bihar, however, close to one-third (33%) of the respondents reported getting poor-quality grain at the time of their last purchase.

The qualitative data, however, suggest that perhaps the quantitative data do not capture grain quality issues adequately. Many interviews were interspersed with complaints regarding quality. This was especially true in Pali district (Rajasthan) where some households reported finding 2-3 kg of stones in the wheat out of the 25 kg they bought each month. In Chhattisgarh, respondents had clear preferences with respect to "usna" (parboiled) and "arwa" (fine) rice. The complaints in these areas often related to getting the less preferred type of rice. In Tamil Nadu, some households said that they prefer to pay more and get better quality rice than get free or cheap rice of poor quality. They said that the rice they get has to be mixed with other rice to be edible and is suitable only for making idlis and dosas. Further evidence of the quality of grain being an issue comes from the fact that when people were presented with the option of buying PDs grain or getting cash, one-fourth of all sample households cited grain quality among the relevant considerations.

4.2 Regularity and Predictability

There has been much improvement in the predictability and regularity of PDS distribution and opening of FPSS. Most state governments have now instituted a system of pre-announced and fixed dates for distribution of PDS rations. For instance, in Rajasthan, FPSS are open from the 15th to the 22nd of each month.

Regularity and predictability in opening days and hours is a major convenience for rural households, and also important to prevent diversion of PDS quotas. In many of the sample states, it used to be common for private dealers to open the FPS whenever they liked. This meant that households may or may not hear about the FPS being open. By the time they did get to hear of it, the dealer would tell them that stocks are over. Further, when opening days are predictable, households can plan their budgets better and arrange to have cash in hand on those days. Reports from households of being told that their quota had "lapsed" have certainly gone down. More than 70% of sample households said that their quota had not been diverted to the open market even once in the past six months (others either said it had or were not sure). This simple and effective reform measure needs to be enforced strictly in all states.

This step was welcomed by the sample households and yet it was clear that this rule needs better enforcement. Though FPSS are supposed to remain open throughout the month (as per Supreme Court orders) or at least for a week (as per the newly instituted schedule in many states), respondents complained that shops would be open only for two to three days. This also resulted,

in some areas, in long waiting hours (sometimes the whole day to buy the month's quota).

It was not uncommon to find FPSS that remain open throughout the month in Himachal Pradesh and Tamil Nadu. Even in states such as Chhattisgarh and Orissa, some outlets remain open through the month. In many places, respondents said that dealers were willing to sell them their ration even if the opening days of the FPS were over. Some households also said that they could buy two months' ration together, if they had been unable to purchase it in the previous month.

Table 5 brings out the association between the PER and regularity of opening of the FPS. The pattern is striking (more regularity, less diversion) and is not coincidental. Bihar is the state with highest levels of reported under-purchase (82%) and lowest levels of predictability in the opening of the FPS – only 7% of respondents felt that opening hours were predictable. In Jharkhand, similarly, reported under-purchase is relatively high along with lack of predictability in the opening hours of the ration shop. Rajasthan lies at the other end of the spectrum where 91% of respondents said that the opening days of the FPS were known to them in advance; in Rajasthan, most sample households reported getting their full ration "normally".

Table 5: Predictability of Fair Price Shops

	Average "Purchase- Entitlement Ratio" (PER) in the Past Three Months ^a	Proportion (%) of Respondent Who Report That They "Normally" Get Their Full Entitlement	Proportion (%) of Responden Reporting That Days of Opening of FPS Are Fixed		
Rajasthan	86-100	100	91		
Tamil Nadu	92	85	95		
Chhattisgarh	95	97	72		
Orissa	97-100	98	73		
Himachal Pradesh	92-100	86	71		
Andhra Pradesh	100	79	70		
Uttar Pradesh	77-88	77	56		
Jharkhand	71	25	9		
Bihar	45	18	7		
All states	84-88	75	60		

^a "Purchase-entitlement ratio" refers to the proportion of full entitlement purchased by households (see Table 3 for further details).

4.3 Accessibility

Generally, the accessibility of the PDS is quite remarkable: the local FPS was 1.4 km away from the respondent's house on average, and within 3 km for 91% of respondents (Table 6). Respondents reported that, on average, the last round-trip to the FPS (including commuting and waiting time) took two hours. Distance to the FPS remains an issue in some of the remoter regions of the sample areas.

Table 6: Access to Bank or Post Office vs PDS

	Average	Average Time	Proportion (%) of Respondents Who Reported				
		Taken on Last Visit ^a (Hours)	Availability within 2 km (3 km)	Taking More Than One Hour at Last Visit			
Bank/post office	5.2 ^b	3.25	37 (53)	76			
Fair price shop	1.4	2.10	81 (91)	53			

 $^{^{}a}$ "Time taken on last visit" includes travel and queuing time. b If one includes two outliers, the average distance to the bank increases to 5.4 km.

The accessibility of the PDS is a major convenience for rural households. This is not an insignificant achievement given the earlier literature on urban bias in the PDS (Dev and Suryanarayana 1991; Howes and Jha 1992; Suryanarayana 1995).

5 Hunger and Food Intake

5.1 Hunger in the Survey Areas

An important function of the PDS is to ensure food security in a limited sense, viz, protection from hunger. Survey respondents were asked if any member of the household had to skip a meal or sleep hungry in the three months preceding the survey.²⁸ More than one-fifth (22%) said yes (Table 7).

Table 7: Hunger and Dietary Diversity

	Monthly					
	Cereal	Reported Any	Reported	Did N	e the Following	
	Consumption	Member Having	Eating Only	Items	Even Once i	in the Past Week
((Kg, Per Capita)	Skipped Meals in	Rice or	Dal	Fruit	Eggs or Meat
		the Preceding	Roti at the			
		Three Months	Last Meal			
		Preceding				
Bihar	18.5	70	13	15	88	66
Rajasthan	17.7	36	29 ^a	15	90	91
Jharkhand	13.9	26	3	12	47	55
Chhattisgarh	17.2	17	5	9	82	56
Andhra Pradesh	11.7	16	4	1	54	9
Himachal Prade	sh 13.2	6	1	3	66	87
Orissa	15.8	9	2	4	72	41
Tamil Nadu	12.1	6	5	1	34	36
Uttar Pradesh	13.4	7	2	14	79	84
All states	14.9	22	7	8	68	58

 $^{^{\}mathrm{a}}$ ln Rajasthan, the questionnaire did not capture certain frequently consumed food items, such as buttermilk (see text).

The interstate contrasts are striking. The proportion reporting hunger is very low in Himachal Pradesh (6%), Orissa (9%), Tamil Nadu (6%) and Uttar Pradesh (7%). In Andhra Pradesh and Chhattisgarh, it is around 15%. In the other states, the figures are not negligible: over a quarter of the households in Jharkhand reported skipping meals. In Rajasthan, the proportion rises to 36% and a whopping 70% in Bihar! It is perhaps not an accident that the highest levels of incidence of hunger (by a long margin) were in Bihar, where the PDS is in bad shape. Bihar is of course very poor, too, but so are, say, Chhattisgarh and Orissa. At the other end, the two states with an exemplary PDS (HP and TN) report very little hunger. While the state of the PDS may not be the only factor behind these contrasts, they are certainly consistent with the idea that the PDS has become an important tool of food security in rural India.

5.2 Diversification of Diets

Diets in many survey areas remain heavily cereal-based (Table 7). Per capita monthly cereal consumption, as reported in the survey, is nearly 15 kg on average.²⁹ Not only is cereal consumption high, there does not seem to be much dietary diversity in people's meals. Overall, 7% of sample households ate only rice or roti for their evening meal on the day before the survey. The figures for Bihar and Rajasthan are alarmingly high – 13% and 29% respectively.³⁰

Half of all sample households reported eating vegetables every day in the week preceding the survey the corresponding proportions for fruit, eggs and meat are negligible: 5.4%, 0.7% and 0.4%, respectively.

The last three columns of Table 7 report the proportion of households which did not consume dal, fruit or eggs and meat

on even once in the week preceding the survey. The state patterns are interesting: not surprisingly, in states where the PDS supplies subsidised dal, this proportion is negligible (1-3% for Andhra Pradesh, Himachal Pradesh and Tamil Nadu). The lowest consumption of dal is reported in Bihar, Jharkhand, Rajasthan and Uttar Pradesh. Consumption of animal proteins (eggs and meat) is abysmally low in Himachal Pradesh, Rajasthan and Uttar Pradesh.³¹

5.3 On Millets

It is a common perception among policymakers that people are not interested in buying cereals other than wheat or rice from the PDS.³² Contrary to this perception, a majority of respondents (79%) said that they would buy millets or maize should they be provided at subsidised prices under the PDS. In Tamil Nadu, some respondents even said that they would be willing to take ragi in lieu of rice.

There is a strong case for the introduction of millets and maize in the PDS. First, these grains are nutritionally superior to "fine" grains such as wheat and rice. Second, these crops are suited for dryland farming conditions that prevail in large parts of the country. Third, there is a huge potential for procurement of millets – in 2008-09, only 4% of total millet production was procured by the government. Fourth, procurement of millets/maize would also be cheaper than buying wheat and rice. For instance, the economic cost of bajra in Rajasthan was half of that of paddy in 2010-11. Finally, the introduction of these grains would also impart a "self-selecting" character to the PDS as these grains are known to be more popular among the poor than richer rural households.

6 Cash vs Food

In each of the sample households, the investigators had detailed discussions with the respondents regarding their views on cash and food. The question posed to the respondents was, how they would feel if the FPS was closed and instead of PDS grain, the government opened an account for them and deposited cash each month in that account. The amount deposited would be equal to the market value of the commodities they currently purchase from the FPS (i e, whatever it would cost them to buy these commodities on the market).³³ It was clarified that this amount would be adjusted with price increases, so that it always enables people to buy from the market whatever they are getting today from the PDS.

Based on the experience of pilot testing the questionnaire, we were prepared for some respondents being unable to engage easily with this hypothetical question. Given that our interest was as much in learning about people's preferences as with understanding how they think about these issues, investigators were told to play the "devil's advocate" if need be, presenting the advantages of the other option to the respondent. We were, however, pleasantly surprised to find that a large majority of households were able to articulate their preferences. Only 7.5% of all respondents were unclear or gave inconsistent replies. The remaining 92.5% were able to state clearly whether they preferred food or cash, or expressed a "conditional preference" for one of those two options

(e g, "I prefer food if good quality of grain is assured" or "I prefer cash if we are assured of the money being deposited on time every month"). Most of the respondents were also able to explain why they preferred one or the other, and in many cases the explanations were very insightful. Their thoughtfulness is also reflected in the fact that about one-fifth of the respondents were able to list at least one problem with both cash and food.

People's preferences depended on a combination of pragmatism, shrewdness and deep understanding of the local circumstances. For example, a widow in a remote Maoist-affected block of Nuapada district (Orissa) with no local transport but with a functional PDS was as likely to opt for food as a widow from a Bharatpur village (Rajasthan) with easy access to banks and markets where she suspected the PDS dealer was cheating her was to opt for cash.

When some households were asked what they would opt for if the cash amount was double the market value of their current PDS entitlements, those who switched from food to cash made mental calculations about whether the additional hassles associated with taking cash would be compensated for by the larger amount being offered. A mid-survey informal review (conducted when teams had concluded the survey in the first of the two districts in each state) suggested that most households were in favour of food over cash transfers. To get a sense of whether and to what extent this decision was linked to the amount of cash offered, investigators were asked to offer double the market value of their current PDS entitlement, as a follow-up question.

6.1 People's Preference between Cash and Food

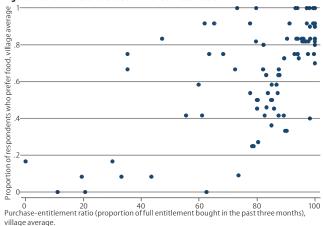
There is a very clear pattern in the preference between cash and food – in states where the PDS is functional, most people did not want to hear of cash transfers (Table 8 and Figure 1). However, in areas with a dysfunctional PDS, notably Bihar (where the system functioned so poorly that some households had received their entitlements only three times in the past 12 months), many respondents were quite open to the idea of cash transfers. The general sentiment in these villages was, "give us *something*, so long as it reaches us".

Overall, more than two-thirds of the respondents expressed a clear preference for food over cash; less than one-fifth (18%) were in favour of cash over food (Table 8).³⁴ Clubbing conditional

Table 8: Cash vs Food

			Proportion (%) of Re	espondents Who:	
	Prefer Food	Prefer Cash	Have a "Conditional Preference" for Food	Have a "Conditional Preference" for Cash	Were Undecided, Unclear or Inconsistent
Andhra Pradesh	91.3	5.6	0.8	0	2.4
Bihar	20.8	54.2	18.1	1.4	5.6
Chhattisgarh	90.3	2.1	2.1	1.4	4.2
Himachal Pradesh	81.4	9.3	1.7	0	7.6
Jharkhand	66.0	22.2	3.5	1.4	7.0
Orissa	88.3	5.8	0.7	0	5.0
Rajasthan	59.6	14.7	7.4	8.1	10.2
Tamil Nadu	70.6	10.5	8.4	2.1	8.4
Uttar Pradesh	41.5	34.1	6.7	0	17.7
All states	67.2	17.9	5.6	1.6	7.5
See text for details.					

Figure 1: Performance of the PDS and Views on Food vs Cash



and unconditional preferences for food, the proportion who prefer food rises to 73%. State-wise preferences are reported in Table 8.

Another interesting finding is that even in states where the proportion of respondents preferring food over cash is comparatively "low" (e g, 60% in Rajasthan), the converse preference (i e, for cash over food) remains uncommon. In Rajasthan, only 15% of respondents were in favour of cash over food. A related point is that many of those who were in favour of food felt very strongly about it. As mentioned earlier, some respondents were quite agitated when the cash proposal was discussed with them.

Interestingly, the responses of men and women were quite similar. Among female respondents, 71% opted for food compared to 63% among male respondents. While men were more favourably disposed to the cash option (21% said they preferred cash), the corresponding figure for women is only slightly lower (15%). Among the social categories, adivasis in the sample were most favourably disposed to food (83%) with only 8% in favour of cash.

6.2 Readiness of the System

One very basic indicator of readiness of the system for a transition to cash transfers is whether people have bank or post office accounts. Nearly three-quarters of sample households already had a bank or post office account – most of them were opened for NREGA wage payments. The lowest coverage was in Bihar (46%) and the highest in Himachal Pradesh (87%). Of those households that had a bank or post office account, nearly two-thirds (68%) had an account either in a nationalised bank (46%) or in "other banks" (22%). Post office accounts were also common – 30% reported having a post office account. Only 5% of households had more than one account.

In the light of the relatively high rates of "financial inclusion" already achieved, the overwhelming preference for food in most sample states is all the more interesting. It suggests that the preference for food is not just a reflection of playing safe (i e, the rejection of cash is not just on account of being completely unfamiliar with the new system). Further, this also suggests that "readiness" to transition to cash transfers goes beyond opening bank or post office accounts, as suggested by some commentators.

For instance, readiness is also a question of accessibility, convenience and efficiency of the banking or post office systems.

6.3 Reasons for Preferring Food

Respondents had a range of reasons for preferring the PDS to cash transfers: food security, poor access to banks and post offices, unimpressive record of other cash transfer programmes, underdeveloped rural markets, apprehensions regarding possible misuse of cash, and familiarity with the existing system, among others. Some of these are elaborated below.

Food security was a major concern among sample households. The sense of security that poor households derive from getting an assured quota of grain every month through the PDS was palpable among many of those who expressed a preference for food.³⁵ This was especially true for single women (often widows), the elderly and also poor households.

Respondents expressed a range of reasons for being apprehensive about dealing with banks and post offices. The first among these is the distant location of banks and post offices, exacerbated by the lack of public transport facilities in most of the survey areas (Himachal Pradesh and Tamil Nadu are exceptions to this). Second, households were also concerned with overcrowding at banks and post offices. This is because of the poor density of branches in rural areas as well as poorly staffed offices. Third, in some parts many respondents were scarred by their bitter experience (delays, overcrowding, repeated trips, etc) with banks and post offices in the context of NREGA wage payments. Since 2008, NREGA wages have been paid through bank and post office accounts and that transition has resulted in delays of up to one year (Khera 2011d). Apart from delays, in some areas respondents had encountered corrupt practices in the payment of NREGA wages even through banks and especially post offices. Fourth, respondents also said that the PDS provided greater flexibility in the sense that any household member, relative or neighbour could be sent to purchase the household's monthly quota. They were worried that this would not be possible if a transition to bank payments were to be made. Fifth, high rates of illiteracy among respondents makes them uncertain of their ability to deal with banking procedures.

Among respondents who had some experience with other forms of cash transfers (e g, social security pensions, Janani Suraksha Yojana or Indira Awas Yojana), many voiced another range of concerns, such as irregular payments and corruption (especially in the case of the Indira Awas Yojana) in the form of "cuts" being demanded by local officials.

Another set of concerns related to under-developed rural markets. Primary among these was the distance to the market. Households felt that combined with poor access to banks and post offices, this would increase the transaction costs substantially especially in comparison with the current PDS system. (As Table 6 shows, on average, the bank/post office is 3.8 km further away than the FPS.) Second, not only are markets far, but in some parts (especially Chhattisgarh and Orissa) respondents were concerned about where they would buy their rice, as it seems rice is not easily available in the markets of those regions and not throughout the year. Some people were also anxious that making

frequent retail purchases would raise their food budget. A third factor brought up often – directly or indirectly – was the lack of trust in local markets and traders. Respondents said that if the PDS shop closes down, there is every likelihood of local private traders taking advantage of the lack of that fallback option for poor households and raising prices. Even when respondents did not articulate this distrust of local traders directly, they expressed apprehensions regarding being entirely reliant on private traders. The current situation, where they are only partly dependent on private traders (with the rest of their needs being met out of home-produce and the PDS) seemed a source of comfort for them.

Note that these concerns were expressed in spite of the presence of more than one *kirana* shop in the village (on average each village had 3.6 kirana stores). The reason why the kirana shop does not count as a real alternative to the PDS or the local market is that they do not necessarily stock grains and pulses and households seem to resort to purchases from them in emergency situations (e g, when there are unexpected guests). As a result, the correct market alternative available to rural households seem to be bulk grocery stores generally located in the nearest market.

Those who preferred food were 2.8 km from the bulk grocery store and 5.6 km from the nearest market. Those who preferred cash were closer to the bulk grocery store (1.9 km) and the nearest market (3.7 km). The food-walas were 2.5 km from the post office, 5.7 km from the bank, and nearly 1 km from an all-weather road. The cash-walas were marginally closer to these facilities.

Apart from this, some respondents appeared to be "risk averse" in the sense that they were happier with the current situation — with its various faults discussed earlier — than with transitioning into a system which they only partially understood. While the payment of NREGA wages through banks and post offices has given them an opportunity to understand the banking system, that experience has not always been positive.

6.4 Reasons for Preferring Cash

Corruption in the PDS and dissatisfaction with the quality of grain were important reasons for preferring cash. While overall only 13% complained of corruption in the PDS, among those who preferred cash this proportion was much higher (47%). However, these proportions were very high in Bihar (54%) and UP (28%). Similarly, where respondents were unhappy with the quality of PDS grain, they were more likely to prefer cash: e g, compared with an overall average of 24% complaining about the quality of PDS grain, this proportion rises to 48% in Bihar, 39% in Tamil Nadu and 35% in Rajasthan. The only state where respondents preferred cash on account of irregularity of the FPSS was Bihar (50% of respondents reported that as a reason for preferring cash).

Some respondents also valued the fact that cash could be spent however they liked, including on diversification of diets and purchasing better-quality grain.

Based on a pilot survey, we expected those in favour of cash to generally be the better off households. This applies to some extent, but in many states the pattern was not particularly pronounced, perhaps because the survey was confined to BPL (or Antyodaya) households. However, in Tamil Nadu, where the PDS

is universal, this pattern was very clear. For instance, average per capita expenditure was almost twice as high among households preferring cash than among households preferring food. But interestingly, even the better-off households in Tamil Nadu often mentioned that while they preferred cash for themselves, the situation of poorer people, who might prefer food, should also be taken into account.

7 PDS Reforms

There is evidence of improvement in the PDS in most sample states. Some of the measures undertaken by state governments are discussed here (see also Drèze and Khera 2010b; Singh Sawhney 2011 for more on PDS reforms at the state level).

7.1 Management Practices in the PDS

This section discusses management practices in the PDS, covering the viability of outlets, changes in systems and the complaints of dealers.

7.1.1 Viability of Outlets

In the current system, the financial viability of FPSS depends on the volume of grain they handle and official commissions (Rs/quintal). In 1997, the number of ration cards handled by each FPS dealer shrank with the introduction of the targeted PDS. Low commissions combined with fewer cards made most FPSS financially unviable, a strong incentive (if not compulsion) to cheat.

In the past three years, barring Bihar, Jharkhand and Uttar Pradesh, official commissions that FPS managers earn from the sale of PDS commodities have been revised (increased). This has contributed to improving the viability of the FPS. Simultaneously, the number of BPL cards per FPS has also increased in Chhattisgarh, Orissa and Rajasthan, as the coverage of the PDS was expanded. These two measures (higher commissions and more ration cards), combined with earnings from the sale of empty gunny bags (boras) after the grain has been sold, seem to reduce the pressure on FPS dealers to indulge in corrupt practices. They also make it much easier to replace private dealers with collective management of FPS (e g, by gram panchayats or self-help groups), as many states have already done.

7.1.2 Management Practices

There have been several important changes in the policies for management of the FPSS. This includes, in some states, the handing over of FPSS to cooperative societies, gram panchayats, self-help groups and other community institutions. This was especially visible in Chhattisgarh, Himachal Pradesh, Orissa and Tamil Nadu. In Chhattisgarh, Himachal Pradesh and Tamil Nadu cooperative societies dominated; Orissa has taken the lead in handing over management of FPSS to gram panchayats, followed by Chhattisgarh and Andhra Pradesh. In Bihar and Uttar Pradesh all shops were run by private dealers. Private dealers were running most FPSS in Andhra Pradesh, Jharkhand and Rajasthan (between 67% and 75% of FPSS were managed by them). Andhra Pradesh is the only state in which the PDS works reasonably well in spite of the involvement of private dealers on a large scale.

In cases where FPSS are run by cooperative societies, salesmen are appointed to run the FPS. As employees, the salesman receives a reasonable monthly salary (more than Rs 4,000 in both Chhattisgarh and Tamil Nadu). This is an important step towards reducing corrupt practices at the FPS.

Another major change in policy has been the implementation of "door-step delivery" of grain to FPSS. Much of the diversion of PDS grain is known to happen between the lifting of grain from FCI godowns and the FPSS. When PDS dealers are responsible for this step, the chances of diversion are high. In many sample states, the food department has started making transport arrangements to deliver PDS commodities to the FPS. Half of the FPSS reported door-step delivery (either through state transport or contractors). Wherever this has been implemented, the PERS are high. A measure that has reduced the woes of FPS dealers is that commissions and transport reimbursements are adjusted at the time of depositing money for the grain. This reduces the risk of delays and harassment when private dealers try to recover their official commissions and transport reimbursements ex post.

Improvement in the physical infrastructure for FPS has also helped smoother functioning of these shops. Nearly 40% of FPS in the sample had their own dedicated space. Another 30% were either housed in gram panchayat buildings or rented spaces. The proportion of shops located in private houses (e g, of the private dealer) remains high – 25%. Most shops (71%) used weighing scales with standard weights (rather than using stones, etc) and one-third even had electronic weighing machines. Calculators and receipt books were found at two-thirds and one-third of all FPSS in the sample respectively. These basic facilities, especially separate buildings and standard weights, contribute to streamlining the running of the ration shop.

7.1.3 PDS Dealers' Complaints

PDS dealers have various complaints. In some states, dealers did complain about low commissions for certain commodities. Quite surprisingly, in many areas dealers did not complain of having to pay bribes at the FCI godown or while submitting their records at the block office.³⁶

Dealers also complained of under-staffing. For instance, in Tamil Nadu, each salesman is expected to make entries in several registers, make a bill, handle the cash, then bring out the five to seven commodities being purchased by each cardholder and weigh them. In other places, e g, Chhattisgarh and Orissa where many shops are run by gram panchayats, it becomes difficult for one person (panchayat secretary in Orissa) to handle all BPL cardholders over a short spell of three to four days. To deal with the work, in most survey areas, the practice is to hire one person (e g, a labourer) when the shop is open and pay him out of their own salary. However, these expenses are not reimbursed.

7.2 Computerisation of Records

One of the most significant initiatives to increase transparency in the PDS has been the computerisation of records. This has several advantages. One, it helps to streamline the entire chain of distribution (from lifting to distribution at FPSS) and adopt more effective management practices (e g, Chhattisgarh has been able to regularly update the list of cardholders in the state allowing them to weed out duplicates from the system). Two, it helps to maintain better records (e g, accurate, consistent, and tamperproof), even in real time in some cases. Three, the discipline of strict record-keeping makes corrupt practices more difficult.

However, the full potential of these computerised databases for reducing corruption and fostering transparency is yet to be realised. For instance, in Chhattisgarh and Tamil Nadu, details of purchases by each ration cardholder are available in a computerised database. However this database has not been made public, as the NREGA Management Information System has been.³⁷ If these were public access databases, it would help to bring greater transparency to the system.

7.3 Transparency Measures

7.3.1 Role of Ration Cards

Ration cards can play an important role in checking whether PDS commodities have reached intended beneficiaries. Ration cards also allow cardholders to keep track of their purchases.

In most states, ration cards were really old. The worst case perhaps was Jharkhand where almost all BPL respondents still had ration cards issued by the Bihar government in 1997! In Orissa, there was no space to record entries for current purchases because ration cards were outdated.

The teams found few instances of ration card hoarding either by dealers or by sarpanches. Overall, 93% of sample households were in possession of their ration cards. The two states in which ration card hoarding was an issue are Bihar and Uttar Pradesh.

The maintenance of ration cards varied quite a lot across states. In many survey areas, ration cards were legible and regularly updated. In others (e g, Orissa and Uttar Pradesh), while they were updated regularly, the entries were barely legible. In Bihar (42%), Jharkhand (51%) and Uttar Pradesh (42%), teams found that ration cards had some incorrect and inflated entries, especially in the case of non-grain commodities.

7.3.2 Coupons

Bihar recently introduced a coupon system in the PDS as a "last mile" tracking device. At the beginning of each year, each BPL household is supposed to get 12 coupons, one for each month of the year. Each time a household purchases grain they are expected to deposit the coupons for that month with the dealer. Each month, the FPS dealer can only get as much grain as the number of coupons he deposits.³⁸

However, far from acting as a transparency measure, the coupon system in Bihar was often creating more confusion (Dhorajiwala and Gupta forthcoming). One reason for this is the haphazard distribution and redeeming of coupons. What seems to have happened is that many BPL cardholders do no have the coupons, while some non-BPL households were given coupons. BPL households without coupons do not get rations. Further, the team found piles of undistributed coupons with *mukhiyas* (village heads). They also found that dealers were hoarding coupons. In one village, the team found that the FPS opens once every two

months; when BPL cardholders go to buy their ration, they are sold only one month's ration, but are expected to deposit coupons for two months.

In this and other ways, dealers are able to undermine the usefulness of coupons as an accountability mechanism. That, at any rate, seems to be the situation in Bihar at the moment. In the past, Rajasthan has experimented with the use of a similar coupon system – both for the PDs and in the context of food-for-work programmes – and the experience there has, apparently, been more encouraging.

7.3.3 Transparency of BPL Lists

In many states, we noticed that the names of BPL households are painted outside the panchayat bhawan or FPS. This serves the dual purpose of helping people to know whether or not they are on the BPL list, and also of identifying "ghost" and "duplicate" cardholders.

Chhattisgarh has gone a step ahead and painted a sign on the door frame of each rural house indicating the colour, type of ration card the household has, associated entitlements and the BPL census it was based on. This exercise has helped to clean up the BPL list, create awareness regarding entitlements and also shame richer households that were in possession of BPL or Antyodaya cards.

7.3.4 SMS Alerts in Tamil Nadu

In Tamil Nadu, the food department has put in place a system whereby any ration cardholder can send an sms with the FPS number to receive instant information regarding the stock of each PDS commodity available in that outlet. The survey teams tested this at several FPSS and found that the stock register matched the information received through the SMS alert. This is an impressive arrangement, which illustrates the scope for effective IT-based transparency measures using straightforward technology. In a similar vein, the Chhattisgarh government provides a service whereby mobile phone users can register themselves to receive an SMS alert whenever a truck with PDS grain leaves for their village. The SMS gives details regarding the truck, quantity of grain being transported, etc.

7.4 Grievance Redressal

In Tamil Nadu and Chhattisgarh, there is (at least partially) a functional system of grievance redressal. This includes providing phone numbers – or helplines – for ration cardholders to call in case of complaints. In Tamil Nadu, the phone numbers of concerned officials are painted outside each FPS. Local organisations in Chhattisgarh claimed that the helplines were effective and that complaints lodged there usually led to some effective action.

8 Performance of States

Before concluding, this section attempts an informal ranking of states on eight parameters: degree of inclusiveness, integrity of the system (assessed in terms of the PER, quality of PDS grain, physical access (distance and time), predictability (whether days of opening of the FPS are fixed), reliability (whether days of

opening are adequate), record-keeping (maintenance of ration cards and of the sales and stocks registers) and institutional arrangements (door-step delivery of grain and whether the FPs has its own physical space). Evaluated in this way, we place Himachal Pradesh at the top of the chart and Bihar at the bottom (Table 9).

The Himachal Pradesh model is of particular interest because it is based on the principle of a "universal, not uniform" PDS. The state has a BPL list and BPL households are entitled to PDS grain at a lower price than APL households. However, unlike other states, HP seems to have ensured APL quotas are lifted and supplied to APL households. Importantly, non-grain PDS commodities (pulses and edible oils) are provided to all households at the same price. Here the entitlements are linked to the number of members in the household, rather than ration card type. Finally, Himachal Pradesh has achieved all this without resorting to the practice of "spreading thinner".

Many would argue that Tamil Nadu, in fact, should be ranked first (even based on the indicators chosen in Table 9).³⁹ Indeed, it is ranked number one on half of the indicators used. There are two important reasons for placing Himachal Pradesh above Tamil Nadu: one, in terms of providing a nutritious basket of goods, the HP model is better than the TN model – there is a larger provision for pulses and edible oil and this is linked to household size. Two, the achievements of Himachal Pradesh have to be evaluated in the light of its difficult terrain.

A curious contrast between Himachal Pradesh and Tamil Nadu is that Himachal's performance has come about without strict checks and balances of the sort that one sees in Tamil Nadu. On the other hand, primary among Tamil Nadu's achievements, are the monitoring systems that have evolved there – be it the use of people-friendly and low cost technology, simple and cost-effective measures for ensuring transparency and accountability, no other state has invested so much careful thought into putting systems in place (Alamu 2011; Meenakshi 2011; Mary Joseph forthcoming).

The PDS in Andhra Pradesh is in large part inspired by the Tamil Nadu model – former Chief Minister N T Rama Rao realised early the advantages of reducing prices for winning votes as well as reducing corruption. Andhra Pradesh also never used BPL

lists prepared according to central government guidelines for the purpose of the PDS. They applied simple exclusion criterion and the state contributed to covering the additional households (over and above the central quota).

In more recent times, Chhattisgarh has applied some important lessons from Tamil Nadu: this includes an expansion of PDS coverage, reduction in PDS prices, computerisation, doorstep delivery of grain, "deprivatisation" of ration shops (handing over ration shops to community institutions such as the gram panchayats and self-help groups) and setting up proper channels for grievance redressal. These measures along with other PDS reforms put Chhattisgarh fourth among the nine PDS states included in this survey.

Since 2008, Orissa has been emulating the Chhattisgarh model (including universalisation of the PDS in the "KBK" region); it is ranked sixth. Its experiment with entrusting the management of the FPS to gram panchayat secretaries has had encouraging results (Aggarwal 2011).

More recently, since May 2010, Rajasthan too has implemented some of the reform measures. It is worth noting that Rajasthan was selected as it belonged to the category of states with a "languishing" PDS in 2007-08. However, the results of this survey suggest that the reforms introduced in 2010 have already had an impact on the functioning of the PDS there.

At the bottom of the rankings are Uttar Pradesh (ranked eighth), Jharkhand and Bihar. While there are some signs of improvement in Uttar Pradesh too (e g, respondents reported receiving 77-88% of their full entitlement of grain from the PDS), it is not yet clear whether, and to what extent, this is a broadbased improvement.

Jharkhand, though ranked last but one, is an interesting case: this is because since 2009, the state slashed PDS prices of rice to Re 1/kg. Along with this, other PDS reforms have also been initiated (somewhat half-heartedly), e g, instituting a timetable for the distribution of PDS grain to improve predictability in the system and door-step delivery. However, its record on actual implementation of these measures is at best mixed. Further, Jharkhand had possibly the most incomplete and outdated BPL lists among all sample states. The reason why Jharkhand does not do as badly

Table 9: Performance Indicators of PDS and State Ran	kina

State Type of PDS		Purchase-	Proportion of (%) Access to FPS F		Predictabilit	Predictability and Reliability		rangements ^b	Record-Keeping		
		Entitlement	Respondents	Distance (Km) Time Taken		Proportion (%) of		Proportion (%) of FPS		Agree with	Registers
		Ratio (PER)	Who Got "Poor"	to Ration	(mins) for the	Respond	lents Who	Reporting	Running	Rationcard	Available for
			Quality Grain at	Shop	Last Round Tripa	Said t	hat the	"Door-step	from a	Entries (% of	Inspection
			the Time of the			Openi	ng Days	Delivery"	Private	Respondents) ^d	(% of FPS)
			Last Purchase			of the	FPS Are	of Grain ^c	Residence		
						Fixed	Adequate				
Himachal Pradesh	Universal, not uniform	92-100	4	1.4	114 (50)	71	76	45	0	70	80
Tamil Nadu	Universal	92	17	0.6	109 (56)	95	67	100	8	85	100
Andhra Pradesh	Quasi-universal	100	5	0.7	50 (83)	70	61	92	10	NA	70
Chhattisgarh	Quasi-universal	95	14	2.3	233 (13)	72	39	100	0	94	75
Orissa	Expanded	97-100	14	2.4	194 (24)	73	44	8	9	96	53
Rajasthan	Expanded	86-100	19	1.7	122 (46)	91	39	35	28	87	100
Uttar Pradesh	Targeted	77-88	11	1.6	102 (55)	56	44	0	17	53	75
Jharkhand	Targeted	71	19	0.7	98 (47)	9	26	83	50	43	91
Bihar	Targeted	45	31	1.4	94 (54)	7	29	0	100	25	55

In brackets, proportion (%) of respondents who reported taking up to one hour for their last round trip to the FPS. Information on institutional arrangements and record-keeping is taken from the village questionnaire and is based on the visit to the FPS and interview with the FPS manager. Including direct (by government) or contracted door-step delivery. Excluding households where responses were "unclear" or missing.

as Bihar in spite of the lack of a proper system can be attributed to the reduction of the price of rice to Re 1/kg. The PDS survey and secondary data suggest that at least on one parameter (integrity of the system) there has been a substantial improvement in Jharkhand (Drèze and Khera 2011).

This leaves Bihar at the bottom of the pile, way down. It seems that in spite of the rhetoric of development and good governance, things have not changed all that much there at least insofar as the PDS and NREGA are concerned. 40 Bihar is at the bottom of the chart on seven out of eight indicators used in Table 9. Even here, though, it appears that things have improved in recent times.

9 Discussion and Concluding Remarks

An important lesson from the PDS Survey 2011 is the need for a careful and nuanced evaluation of the PDS. Coverage, entitlements and implementation of the PDS at the state level vary so much that it now makes little sense to evaluate it only at the national level. From a universal PDS that supplies grain, dals and edible oil in Tamil Nadu with hardly any leakages to Bihar's targeted PDS where much of the grain does not even reach the rural poor, in each survey state the PDS has unique features.

The most encouraging finding from the PDS survey is that there is a broad-based trend of improvement in the sample states, linked with recent initiatives to make the system work. Some of these measures (e g, computerisation of records, "de-privatisation" of FPS management, rationalising official commissions and so on) have been outlined here. An important part of the revival, without which perhaps the reform measures mentioned above would not have been undertaken, is a new political will to make the PDS work. In spite of these positive developments, there remains much scope for improving the PDS, especially in terms of better quality of grain, monitoring and grievance redressal systems.

Meanwhile, the PDS is already considered an important lifeline by many rural households. As we saw, for BPL households in many states, the implicit subsidy from PDS foodgrains alone is roughly equivalent to a week's NREGA wages (without having to work) every month. Combined with NREGA employment (another two days per month, on average, among sample households), the PDS has become one important foundation for India's much needed social security system.

An important caveat is that the PDS survey focused mainly on BPL (and Antyodaya) households. It is possible that serious corruption persists in the APL quota; indeed there is some tentative evidence to that effect from the 66th round of the NSS (on this see

Drèze and Khera 2011). One possible reason why the PDS works better for BPL households than APL households is the lack of clear entitlements for the latter and arbitrariness of the APL quota.

The PDS performs a very useful role in ensuring food security for the rural poor in another important sense: it ensures a regular supply of foodgrains even in the remotest parts of the country. As things stand, rural markets are under-developed and private markets seem to fail at the last mile in many areas. It is not easy to predict what would happen in the event of a dismantling of the PDS. This "stabilisation" role of the PDS is not adequately recognised today.

People's aversion to cash transfers must be read in the light of this observation. A hasty dismantling of the PDS in favour of cash transfers would expose rural households to considerable uncertainty and possibly exploitative transactions.

While this and related obstacles (such as the poor reach of the banking system) can be removed, this is a big challenge, and there is no "quick fix". For instance, one may suggest the use of business correspondents ("the BC model") to improve access to banks. In this context, Andhra Pradesh's experiment with the BC model for NREGA wage payments in some areas has been sobering. Four years after the model was introduced with a team committed to making it work, there are still major issues related to accountability, corruption and delays. The BC model comes with its own set of problems.

Similarly, some commentators suggest that the problem of maintaining the purchasing power of cash in times of inflation has an easy fix – viz, to link cash transfers to an appropriate price index. However, this deceptively simple solution raises difficult questions such as whether local prices can be tracked with adequate precision and speed. Apart from the "technical" issues, there is also a political aspect to indexation. The recent freeze on NREGA wages (in money terms), lasting two years at a time of double-digit food inflation, shows that political dimensions also need to be factored in.

In the end, it is worth recalling that the PDS infrastructure exists and in many ways performs a useful role. On the other hand, currently the infrastructure for cash transfers seems sorely lacking in rural areas. For those respondents who were dissatisfied with the functioning of the PDS, the correct question to ask seemed to be how to improve the PDS and reduce leakages further. In their view, the PDS, though a leaky ship, was nowhere close to sinking, and in fact, it helps them stay afloat. And therefore, to them, it seemed premature to jump into untested waters.

NOTES

- 1 There are two nationally representative surveys which asked about the PDS (NSS and the India Human Development Survey conducted by the National Council of Applied Economic Research), but neither goes much beyond possession of ration cards and PDS purchase.
- 2 As a follow-up activity, Wayanad and Palakkad districts of Kerala were also surveyed in July 2011. Those findings are not discussed here.
- 3 This classification of states is based on per capita monthly purchase of PDS grain. "Functioning" states are those where per capita purchase remained above 1 kg/month in the post-1999-2000 period; "Languishing" where it remained below 1 kg/month and "Reviving" states are those where
- per capita purchase was below 1 kg/month at the beginning of the period, but crossed that threshold at the end of the period (2007-08). Note that purchases were averaged over all households, not just BPL households.
- 4 The sample Districts are Chittoor and Warangal (Andhra Pradesh), Katihar and Nalanda (Bihar), Mahasamund and Surguja (Chhattisgarh), Mandi and Sirmaur (Himachal Pradesh), Dumka and undivided Ranchi (Jharkhand), Nuapada and Sundergarh (Orissa), Bharatpur and Pali (Rajasthan), Hardoi and Jaunpur (Uttar Pradesh) and Dharmapuri and Dindigul (Tamil Nadu).
- 5 The proportion of the sample district's rural population living in villages in the 500-1,500 population range varies from 9-17% Andhra Pradesh,
- 19-21% Bihar, 52-63% Chhattisgarh, 38-44% Himachal Pradesh, 42-45% Jharkhand, 49-60% Orissa, 29-35% Rajasthan, 5-13% Tamil Nadu and 26-36% Uttar Pradesh. The survey findings should be read in the light of these figures.
- 6 In Dumka (Jharkhand), we were unable to find the BPL list; he voter list was used.
- 7 The terms "FPS Dealer" and "FPS Manager" are used interchangeably in this article for different management types (self-help groups, private dealerships, cooperative societies, etc). Both survey instruments are available online at http:// web.iitd.ac.in/~reetika/.
- 8 As we sampled "Households" rather than individuals, investigators were requested to maintain a rough balance between male and female respondents.

- This is important in its own right, and especially in the context of their views on cash and food (see Section 6).
- 9 In the NFHS, the Standard of Living Index is the sum of scores assigned to the ownership of land, television sets, fans, pressure cooker, four- and twowheelers, type of house, toilet, energy and water source available to the household (see International Institute for Population Sciences 2000). A modified version of SLI is used here (see Table 1 for details).
- Annapoorna cards (entitled to 10 kg of free grain each month) are for the aged who do not get a pension. There were three Annapoorna cardholders in the sample. These have been excluded from the discussion.
- 11 It is not clear whether there have been further revisions to take into account the increase in population since then.
- 12 This does not preclude the possibility that these states have a BPL list which is used to identify households for other government schemes such as the Indira Awas Yojana and Rashtriya Swasthya Bima Yojana.
- 13 In Tamil Nadu, one can choose either a "Rice Card" or a "Sugar Card". The former entitles households to rice and other commodities; those with the "Sugar Card" forego their rice quota for an additional quantity of sugar. See http://www.tncsc. tn.gov.in/html/pds.htm for further details.
- 14 The remaining 3% were either APL or Annapoorna cardholders.
- 15 This was done by abolishing any differentiation of entitlements between APL and BPL households. An important caveat though is that many households in the KBK region do not have any (APL or BPL) ration card. According to some estimates nearly one-fifth of all households do not have any ration card, so the universalisation of the PDS in the KBK region remains incomplete.
- 16 Interestingly, the survey team in Chhattisgarh found that households brought under the PDS as a result of the state's decision to expand the PDS were much the same as previously identified "BPL" households (see Puri forthcoming).
- 17 The expansion of PDS coverage in Jharkhand has come in phases, with one expansion during the drought of 2008-09 and another in 2010. It was not easy to trace when these expansions were ordered, what the entitlements of the new cardholders are or the criteria that were used for the selection of new cardholders.
- 18 An order dated 3 August 2004 was issued by the Ministry of Food and Consumer Affairs to implement the second expansion of the Antyodaya list. According to an interim order dated 2 May 2003 in the right to food case, widows are supposed to receive Antyodaya cards.
- 19 For instance, in a 2002 survey of 400 households in Rajasthan, I found that BPL households were buying only 12.6 kg/month, 36% of their 35 kg quota. In the PDS survey 2011, the corresponding figure for the Rajasthan sample is 85-91%.
- 20 As some states provide an additional 5 kg/household per month after a Supreme Court order, the entitlements are expressed as a range (27.3 to 28.7 kg/household per month).
- 21 Another way of calculating a lower bound is to look at the lowest purchase from the PDS in the three months preceding the survey (i e, March-May), as a proportion of the full entitlement. Doing so for BPL households, over all states, households get 82% of their full quota.
- 22 Whether we use the "Normal" purchase criterion, or the "Last Purchase" criterion, the same conclusion applies.
- 23 In 2004-05, 90% of PDS grain in Bihar did not reach ration cardholders (Khera 2011c) according to NSS data; in our PDS survey, the average PER for Bihar is 45-47% (Table 3).
- 24 More recent data pertaining to 2009-10 from the 66th round of the NSS also confirm that revival among most sample states has been consolidated between 2004-05 and 2009-10 (Drèze and Khera 2011).

- 25 The "Rice States" are Andhra Pradesh, Chhattis-garh, Orissa and Tamil Nadu, where wheat is either not distributed at all or forms a very small share of total PDS grain entitlements.
- 26 In the case of Rajasthan, data on awareness was recorded only for about half of the households. Among these, awareness levels are high. The remaining households include missing observations and those who were unaware of their entitlements.
- 27 Some households (nearly 14% of the sample) were unable to answer this question as they had been included in the PDS in the past one or two years only.
- 28 The figures on hunger reported here are not comparable to those reported by the NSS. The latter reports whether everyone in the household gets two square meals throughout the year whereas in this survey, we asked if any person in the household had ever had to sleep hungry/skip a meal in the past three months. During the debriefing workshop, investigators felt that there were variations in people's willingness to talk about hunger in the household, and the data presented here should be read in that light.
- 29 If one excludes outliers, it comes down to 14.5 kg/capita/month.
- 30 In the case of Rajasthan, it is possible that the questionnaire did not capture some food items that might be ordinarily consumed by households (e g, buttermilk).
- 31 This pattern can be explained partly by vegetarian diets for significant sections of the population.
- 32 Statements to this effect were often made in the consultations on the National Food Security Act.
- 33 Note that this amount exceeds the cash equivalent of PDS entitlements. The latter is equal to the market value of PDS commodities, minus what people pay for them at the FPS. This is still quite substantial (e g, Rs 4.65 per kg for wheat) in states that charge the "Central Issue Price".
- 34 Excluding the Bihar sample, the corresponding proportions are 73% (food) and 13% (cash) respectively.
- 35 See Jose (2011), Nag (2011) and Puri (forthcoming).
- 36 In the past, PDS dealers have given us detailed accounts of the corrupt practices they indulge in to break even when official commissions are coupled with low volumes and pressures to pay bribes (see, e.g., Khera 2011b).
- 37 The official NREGA website (www.nrega.nic.in) has a publicly accessible database which contains employment information for all job cardholders (including days of employment, wages earned, worksite employed on and so on). This makes it possible for people to verify their own records and that of others, apart from facilitating social audits.
- 38 This is not the same as the "Food Stamps" advocated by others which can be redeemed at any shop, in the private market or an FPS (e g, Basu 2011).
- 39 See Meenakshi (2011) and Alamu (2011).
- 40 In Table 1, one finds that Bihar 62% of sample households reported getting no work on NREGA in the past 12 months and the average days of NREGA employment in the same period was just 12 days. Not a single household had got 100 days of work. Secondary data also suggest that Bihar is among the worst states in terms of the scale of NREGA employment (see www.nrega.nic.in and Khera 2011d).

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