

Food Security

Bihar on the Move

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Bihar's public distribution system used to be one of the worst in India, but the system has improved significantly from 2011 onwards. The National Food Security Act, backed early on by the political leadership, enabled the state to include the bulk of the rural population in this improved system. However, there is still a long way to go in ensuring that the system is reliable, transparent and corruption-free.

In her moving "Farewell to India," written in 2013 as she left India after reporting there for several years, journalist Stephanie Nolen gives a harrowing account of the plight of marginalised groups in rural Bihar:

In village after village, I met people living in conditions more grim, more horrifying than almost any I had seen in 20 years of reporting that had taken me from the AIDS-ravaged highlands of Lesotho to dust-baked southern Afghanistan. After a couple of days, I was nearly speechless with despair.

Anyone who has visited, say, a Musahar hamlet in Gaya District or the homes of bonded labourers in Muzaffarpur, would be able to relate to this testimony, even if he or she has never been to Lesotho or Afghanistan. Any discussion of social security initiatives in Bihar must begin with this recognition of the abominable nature of extreme poverty in that area.

The National Food Security Act (NFSA), with all its flaws, can be seen as a step towards ensuring that the basic requirements of dignified living are guaranteed to all as a matter of right. However, the implementation of NFSA in Bihar is an enormous challenge, given its notorious record of corruption and misgovernance. This article examines recent developments in this regard, based on a survey of 1,000 rural households in four districts of Bihar.¹

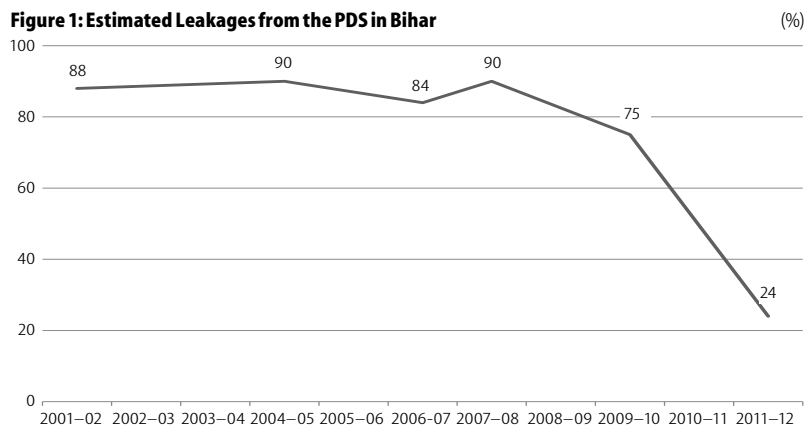
NFSA: Entitlements and Eligibility

The NFSA became law in 2013, but only a few states have implemented it so far. In Bihar, the implementation of the act officially began on 1 February 2014.

The NFSA guarantees three sets of entitlements: subsidised food from the public distribution system (PDS); nutritious meals for children; and maternity entitlements. Our concern in this paper is with PDS entitlements: 5 kg of foodgrains per person per month at nominal prices (Rs 3, 2 and 1 per kg for rice, wheat and millets, respectively) for all households in the "Priority" category, along with the continuation of the Antyodaya programme. Under the Antyodaya programme, the poorest households are entitled to 35 kg of foodgrains per month at the same prices. Priority and Antyodaya households are referred to as "eligible households" in the act. The act does not specify eligibility criteria, but it does specify the mandatory coverage of the PDS: 75% in rural areas and 50% in urban areas at the national level, to be adjusted state-wise (by the central government) so that poorer states have higher coverage. In Bihar, one of India's poorest states, the mandatory coverage is 86% in rural areas and 75% in urban areas.

We are grateful to Anindita Adhikari, Ankita Aggarwal, Aashish Gupta, Chinmay Kumar, Kanika Sharma, Alokika Singh and Nikhil Srivastav for helping to plan and coordinate the field survey; to Azhar Hussain for valuable insights on the Socio Economic and Caste Census; and to Shrayana Bhattacharya, Hemanshu Kumar, Rohini Somanathan, Raghav Puri and Sohini Paul for sharing findings of their own recent surveys in rural Bihar. We are also grateful to the Department of Food and Public Distribution and the Department of Rural Development (Government of Bihar), particularly food minister Shyam Rajak, for numerous clarifications. The survey was funded by the Indian Institute of Technology (Delhi) and the Planning and Development Unit at the Department of Economics, Allahabad University.

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Figure 1: Estimated Leakages from the PDS in Bihar

Source: Khera (2011a) and Drèze and Khera (2011, 2015), based on matching NSS data on PDS purchases with FCI data on PDS offtake.

Identification of eligible households is one of the main challenges in implementing the NFSA. The main issue is the identification of priority households, since a list of Antyodaya households already exists, though the act does not preclude revising it. In the initial scheme of things, priority households were to be identified by applying simple inclusion and exclusion criteria to the Socio Economic and Caste Census (SECC).² Due to delays in the release of SECC data, this prescription was withdrawn from the final version of the act, which simply leaves the identification problem to the state governments. The use of SECC data for this purpose is still an option, but it is not mandatory.

The identification of eligible households actually has two aspects. First, eligibility criteria need to be specified. Second, a method has to be devised to identify households that meet the eligibility criteria. The act leaves both steps to state governments. In fact, it does not even prescribe that state governments should notify binding eligibility criteria. The act merely says that each state has to achieve a particular minimum PDS coverage (separately for rural and urban areas), and leaves the rest to the states. On this, there is a major flaw in the act: if anyone is to be able to claim food entitlements as a matter of right, then there must be well-defined and legally binding eligibility criteria.

In practice, some states have followed the approach envisaged in the initial scheme of things: they have notified inclusion or exclusion criteria and attempted to implement them

using SECC data. Many other states, however, were unable to do so due to delays in the release of SECC data, and fell back on various shortcuts, such as expanding the old “below poverty line” (BPL) list or using a self-declaration process. Bihar is one of the few states that were able to secure SECC data early on, and follow the intended identification process.

The fact that SECC data were released much earlier in Bihar than in other states is not an accident. In contrast with many other states, the political leadership in Bihar has taken strong interest in the speedy implementation of NFSA, probably because of the approaching assembly elections. Opposition parties, for

their part, keep flaying the Government of Bihar for tardy or flawed implementation of the act. This political momentum, quite likely, has played an important role in recent improvements of the PDS in Bihar.

Bihar’s Public Distribution System

Bihar’s PDS has been one of the worst in India for a long time. National Sample Survey (NSS) data from 1999–2000 to 2009–10 consistently show that very few households in Bihar were getting any rice or wheat from the PDS in that period. It is possible to estimate PDS leakages in Bihar by matching NSS data on household purchases from the PDS with Food Corporation of India (FCI) data on PDS offtake from the central government. This exercise suggests leakages in the range of 75%–90% throughout the 2000s (Figure 1).³ As recently as 2009–10, Bihar’s PDS was so bad that it had virtually no impact on rural poverty (Drèze and Khera 2013).

In a survey of the PDS in nine states, conducted in 2011, we found signs of improvement. On average, sample households in Bihar (all of them BPL households) had purchased 45% of their PDS entitlements in the three months preceding the survey. By this and other criteria, Bihar still had the worst PDS among the sample states, by a long margin. The proportion of BPL households who reported having slept hungry sometime during the preceding three months was as high as 70%. Yet it was clear that PDS reforms were finally on the agenda. For instance, the Government of Bihar had initiated a system of

Table 1: Purchase–Entitlement Ratio in Recent Surveys of the PDS in Rural Bihar

Source	Location and Date	Sample ^a	Purchase–Entitlement Ratio (%)
Somanathan and Kjelsrud (2013, 2015)	Paschim Champaran, Siwan, Vaishali, Begusarai, Jehanabad, Aurangabad, Nawada, Jamui, Lakhisarai and Katihar Districts, September–December 2012	2,000 households in 40 villages	80
Hemanshu Kumar (Delhi School of Economics), personal communication	Gaya, Gopalganj, Katihar and Nalanda Districts, March–June 2013	1,429 BPL and Antyodaya households, mainly from Dalit communities	75 ^b
Drèze and Khera (2015)	Katihar and Muzaffarpur Districts, May–June 2013	182 households with NREGA Job Card	68
Shrayana Bhattacharya (World Bank), personal communication	50 randomly-selected gram panchayats across Bihar, June 2014 to June 2015	250 households (five PDS users per GP)	(68–100) ^c

The surveys (all conducted in rural areas) are listed in chronological order. “Purchase–entitlement ratio” refers to the amount of PDS grain purchased by sample households at the time of the survey, as a ratio of their entitlements: 25 kg per household per month prior to the launch of NFSA, and 5 kg per person per month thereafter (Antyodaya households were entitled to 35 kg per month throughout).

^a Randomly-selected households in each case.

^b Subject to having PDS coupons.

^c Not less than 68% in any of the sample GPs (further details are not available at the time of writing). This refers to the ratio of average PDS purchases (based on recording monthly purchases throughout the 2014–05 financial year) to official PDS allocations (as per Bihar’s PDS portal) for the sample villages.

tracking coupons that made it harder, in principle, for dealers to sell PDS grain in the open market.⁴

The coupons were supposed to be distributed to ration card holders and presented by them at the ration shop when they bought wheat or rice from the PDS. The dealer would then hand over the coupons at the local godown each month, to account for the PDS grain he or she had lifted the previous month. A dealer who sold PDS grain in the open market would be unable to file the corresponding coupons, and could, in principle, be caught. One problem with this arrangement, otherwise reasonably sound, is to ensure timely and reliable distribution of coupons to the concerned households (in Bihar, this was done through gram panchayats). Also, at the time of the 2011 survey, it was not clear to what extent the coupons were being systematically tallied.⁵ Choithani and Pritchard (2015) report major irregularities in the functioning of the coupon system, such as dealers demanding several months' coupons for one month's ration. Nevertheless, it is quite possible that the coupon system made an important early contribution to PDS reform in Bihar.

These early improvements are also reflected in NSS data. In fact, the standard matching of FCI offtake data with NSS data on household purchases from the PDS suggests leakages of around 24% in Bihar in 2011–12—dramatically lower than in the 2000s (Figure 1).⁶ Five independent surveys provide further evidence of very substantial improvement in the performance of the PDS in Bihar during the last few years (four are summarised in Table 1, p 45). A survey of 2,000 households in 40 villages spread over 10 districts of Bihar in September–December 2012, directed by Rohini Somanathan and Anders Kjelsrud, found that they were able to purchase about 80% of their entitlements (25 kg per household at that time)—a figure consistent with the NSS-based leakage estimates for 2011–12.⁷ A similar finding emerges from another recent survey, conducted in March–June 2013 in four Bihar districts by Hemanshu Kumar (Delhi School of Economics). Also in 2013, in a follow-up of the 2011 survey mentioned earlier, we found an average purchase–entitlement ratio of 68% in 12 randomly-selected villages of Katihar and Muzaffarpur Districts—much higher than the baseline 45%. Two forthcoming studies, by the National Council of Applied Economic Research and the World Bank, respectively, consolidate this picture of positive change in recent years—alas they are not in the public domain at the time of writing.

The Survey

The findings presented below are based on a field survey (hereafter Bihar NFSA Survey 2014) conducted in December 2014 with the help of student volunteers. The survey covered three randomly-selected blocks in each of four Districts (Banka, Gaya, Purnea and Sitamarhi) situated in different regions of Bihar. In each of the 12 sample blocks, four SECC “enumeration blocks” (EB) were selected at random, and in each of the 48 sample EBs (all located in different villages), 25 households were randomly selected for interview.⁸ Due to time constraints, the target number of sample households per EB had to be

reduced after the survey began, ultimately leading to a sample size of close to 1,000 rural households—997 to be precise.

The socio-economic characteristics of sample households, as per SECC data, are presented in Table 2. The figures speak for themselves: 60% of sample households were landless, only

Table 2: Socio-economic Characteristics of Sample Households (as per SECC Data)

Percentage distribution by social category ^a	
SC	16
ST	9
Other	75
Percentage distribution by education level of the most educated person in the household ^a	
Illiterate	23
Literate, below primary	18
Primary	22
Upper primary	13
Secondary	11
Higher secondary	8
Graduate or higher	5
Percentage distribution by income of the highest earning household member ^a (Rs/month)	
Less than 5,000	75
Between 5,000 and 10,000	20
More than 10,000	5
Proportion of households owning any land other than homestead plot (%)	
	40

^a Figures add to 100.

Source: Socio Economic and Caste Census (www.secc.gov.in).

5% had at least one member earning more than Rs 10,000 per month, and barely one quarter of the sample households had at least one member educated beyond the upper-primary level.

The survey questionnaire consisted of simple questions such as whether the respondent (normally, an adult woman) had a new ration card, how much rice or wheat had been purchased from the PDS each month during the preceding three months, and how the respondent felt about the quality of PDS grain. The investigators were also trained to determine in advance, from SECC data, whether each sample household was officially eligible for PDS entitlements under NFSA (more on this later). Aside from the household interviews, the survey included occasional group discussions as well as unannounced visits to local ration shops.

Quality of SECC Data

Before coming to the survey findings, a brief discussion of the reliability of SECC data is in order. The survey itself does not shed much light on this issue—no attempt was made to verify the SECC data as this time-consuming process was beyond our limited capacity. However, prior to the survey, SECC verification exercises were conducted in selected villages of Bihar, Jharkhand and Madhya Pradesh by some of the field investigators as well as by Azhar Hussain from the Indian Institute of Technology at Banaras Hindu University (Hussain 2014). These enquiries were too patchy for a detailed assessment of the quality of SECC data, but some general observations are possible.

First, the coverage of the SECC seems to be good—close to universal. The reason is that the SECC household listing is essentially the same as the 2011 Census listing, which is prepared in a reasonably professional manner under close supervision from the Office of the Registrar General. Near-universal coverage extends not just to households but to individuals as well. Having said this, the SECC data set is already four years old. This means that children born after 2011 are not included, while persons who died after 2011 are on the list.

Second, demographic details such as age, sex, educational level and so on also seem to be reasonably accurate, for the same reason—this information is simply copied from the census household listing.

Third, SECC data on household occupation, income, assets and related economic variables are less reliable. For instance, landownership data are often inaccurate, as one might expect. Observable characteristics, such as the number of rooms in the house, tend to be more reliably recorded than non-observable ones, for example, income.

The fact remains that in many states, including Bihar, there is no other source of comprehensive data on household characteristics that might be used for the purpose of identifying households eligible for food subsidies under NFSA. Hopefully, most of the inaccuracies in the SECC data set are of little consequence as far as NFSA eligibility is concerned, at least in rural Bihar where the target coverage is as high as 86%. For instance, errors in the recording of landownership would be of no consequence unless they take a household across the eligibility cut-off (for example, 7.5 acres in the case of unirrigated land). Nevertheless, some errors do matter and there is every reason to correct them as far as possible.

The release of SECC data proceeds in two steps: “draft list” and “final list.” When the NFSA was launched in Bihar, in February 2014, only the draft list was available. The draft list is supposed to be revised and turned into a “final list” after all concerned households have been given an opportunity to scrutinise their SECC data and apply for corrections if necessary. In Bihar, an effort was made to give a printed copy of their SECC data (from the draft list) to all rural households. The effort was partially successful—in our sample of 1,000-odd households, about 65% had their SECC printout. This is a significant achievement by Bihar’s standards, but it does leave 35% of households in the dark.

After SECC data were distributed, a large number of applications for correction were received (we found no record of the exact number but it is in lakhs). At the time of the survey, these applications were still being processed and the final list was awaited.⁹ Quite likely, many of the corrections being sought are irrelevant for the purpose of the NFSA (in particular, for the purpose of identifying eligible households). However, some corrections are important. For instance, many households are asking for the inclusion of small children, born after 2011, in the SECC list—this matters, since the PDS entitlements of priority households under the NFSA are defined in per-capita terms. Similarly, there are cases where separate nuclear families were treated as a joint family by the SECC investigators, and as a result, were deemed to meet exclusion criteria (for example, having a house with more than three pacca rooms) that actually do not apply to any of the separate nuclear families. While we found evidence that some of the requested corrections had been made, the reliability of the correction process was far from clear. A detailed study of the nature of the corrections that have been sought, and how they are being processed, would be most useful but it is beyond the scope of this paper.

Status of Sample Households

In Bihar, priority households are identified from SECC data, using exclusion criteria only.¹⁰ That is, any household that does not meet pre-specified exclusion criteria is deemed eligible for the priority category. Antyodaya households, however, are entitled to retain their Antyodaya cards whether or not they meet the exclusion criteria. In line with the terminology of the act, we shall refer to priority and Antyodaya households together as “eligible” households. Since Antyodaya households are few, priority households account for the bulk of eligible households.¹¹

Table 3: Status of Sample Households

Proportion (%) of sample households that:	
Have a copy of their SECC data	65
Are eligible for priority category as per SECC data	
Have a new priority card	74
Have an Antyodaya card	7
Have a priority card or an Antyodaya card ^a	78
Percentage distribution of sample households by status: ^b	
Correct inclusion	79
Correct exclusion	7
Incorrect inclusion	3
Incorrect exclusion	3
Unclear or missing status	9

^aA small proportion (3%) of households had both an Antyodaya card and a new (priority household) ration card under NFSA.

^bSee text. Figures add up to 101 (instead of 100) due to rounding.

Source: Bihar NFSA Survey 2014 (base: all sample households).

Table 4: Ration Cards before and after NFSA

Type of Ration Card	Percentage Distribution	Proportion (%) Eligible under NFSA	Proportion (%) with a Valid Ration Card Post NFSA ^a
One Year before the Survey			
APL	22	77	66
BPL ^b	48	93	82
Antyodaya	7	100	95
No ration card	23	87	73
All households	100	89	78

^aPriority card or Antyodaya card.

^bIncluding “state BPL” cards issued by the Bihar government.

Source: Bihar NFSA Survey 2014 (base: all sample households).

Based on official exclusion criteria, applied to the SECC draft list, 89% of the households in our sample were eligible for the priority category (Tables 3 and 4). This suggests that the exclusion criteria, aimed at excluding 14% of households, are reasonably effective. The survey teams did their best to verify for themselves, independently of SECC data, whether sample households met any of the exclusion criteria.¹² Based on this assessment, we classified households in the following categories: (1) “correct inclusion” (eligibility of the household is confirmed by the survey team); (2) “correct exclusion” (non-eligibility is confirmed by the survey team); (3) “incorrect inclusion” (eligibility is disputed by the survey team); (4) “incorrect exclusion” (non-eligibility is disputed by the survey team); and (5) a residual “unclear” category. Table 3 presents the percentage distribution of households in terms of these categories. Only 3% of households were deemed to be cases of “incorrect exclusion.” This suggests low exclusion errors, in sharp contrast with the earlier BPL list, notorious for its arbitrariness (Drèze and Khera 2010). Of course, exclusion errors are easier to avoid when a large majority of households are eligible, as is the case today in rural Bihar. Nevertheless, the low proportion of exclusion errors is a relatively encouraging finding.

As Tables 3 and 4 indicate, 78% of all households had a valid ration card at the time of the survey: either a new priority card issued under the NFSA (74% of all households), or an Antyodaya

card.¹³ This corresponds to 87% of eligible households. The remaining 13% were still waiting for their new ration card, or at least hoping to get one, without being able to ascertain that they were indeed on the official list of priority cardholders.¹⁴ More than half of these “waiting households” were getting some rice or wheat from the ration shop, presumably because their names were on the dealer’s list, but they had no reliable means of verifying their status. This is one of the major shortcomings of the NFSA process in Bihar: the list of new ration cards is not in the public domain as things stand. Making this list conveniently accessible to the public (for example, on the net and at the local ration shop) would greatly help to enable people to know where they stand as well as to prevent corrupt elements from appropriating anyone’s ration card. It is, in any case, an obligation of the government under Section 4 of the Right to Information Act.

Entitlements of Priority Households

As mentioned earlier, 74% of all households had a priority card at the time of the survey. The first point to note about the priority cards is that in most cases the list of household members closely matched the household’s SECC data. It was clear that these details had been extracted electronically from the SECC, with minimum changes if any.¹⁵

The average household size of priority cardholders was 5.5 persons according to SECC data and 5.4 persons according to their ration cards—almost exactly the same. The average self-reported household size, however, was 6.1. The bulk of the difference is accounted for by the omission of children born after 2011 in the SECC draft list: about half of the children 0-4 years in the sample households were missing in the ration cards (the fact that the other half was included suggests that some progress had been made with updating the SECC draft list). However, some respondents complained of other household members being left out as well: about 5% of all persons aged above four years in the sample households.

As we saw, priority cardholders are entitled to 5 kg of foodgrains per person per month from the PDS at nominal prices. In Bihar, this means wheat or rice—typically 3 kg of

rice and 2 kg of wheat in the sample villages (with some variation, sometimes in response to people’s demands). We asked priority cardholders how much rice and wheat they had actually purchased from the PDS during the two months preceding the survey (October and November 2014).¹⁶ On average, they had purchased 18.8 kg in October and 21.5 kg in November, as against average household entitlements of 27.5 kg. In other words, they had been able to secure 69% of their entitlements in October and 79% in November (Table 5).¹⁷ These “purchase entitlement ratios” are not very different from those reported in other recent surveys of the PDS in Bihar (Table 1).

The balance (31% of entitlements in October and 21% in November) must have been part embezzlement and part bottlenecks. In this connection, it is important to note that tremendous logistic bottlenecks developed in Bihar soon after the NFSA came into force on 1 February 2014. The main reason is that, under NFSA, Bihar’s foodgrain allocation from the central government shot up by about 50%, at a time when the administrative machinery was already stressed with preparations for the Lok Sabha elections. For several months, the system was unable to keep up. Quite likely, the supply chain was yet to be streamlined in October–November 2014. Indeed, one continuing pathology of the PDS in Bihar is that foodgrains are often distributed one or two months behind schedule. This makes it very difficult for people to track their entitlements. At the time of the survey, there were many indications that PDS distribution remained far from reliable and regular (for instance, 16% of NFSA cardholders had not received any PDS rice or wheat in November). All this, of course, also facilitates embezzlement.

Another form of continuing corruption was over-pricing by PDS dealers. Very often, they charged an extra rupee, that is, Rs 4 per kg for rice and Rs 3 for wheat instead of Rs 3 and 2, respectively. The standard excuse invoked by PDS dealers is that the official commissions (40 paise per kg at that time, more than in many other states) are too low to cover their costs—not just the operational costs but also the bribes they have to pay here and there. On average, priority cardholders in the sample paid Rs 3.6 per kg for rice and Rs 2.8 per kg for wheat.

Coming back to the good news register, people’s perceptions of the quality of PDS grain was generally positive (Table 5). The proportion of priority cardholders who felt that the quality of PDS grain was “poor” (as opposed to “average” or “good”) was only 19% for rice and 10% for wheat. This reflects significant progress from the days when PDS grain in Bihar was routinely adulterated.

Antyodaya Households

The NFSA calls for a continuation of the Antyodaya programme, with unchanged entitlements (35 kg of foodgrains per month at Rs 3 and 2 per kg for rice and wheat, respectively). In practice, the integration of Antyodaya in the new scheme of things poses some difficulties. For instance, Antyodaya households cannot be identified in the SECC database. To the best of our knowledge, Antyodaya households in Bihar who were also eligible for the priority category were allowed to choose between retaining their Antyodaya card and exchanging it for a new priority card. Or at least that was the intention

Table 5: PDS Purchases of Priority Cardholders

Proportion (%) of priority cardholders who did not receive any grain from the PDS in the months of:		
October 2014		25
November 2014		16
Average purchase of PDS grain (kg/month): ^a		
October 2014	18.8 (69%)	
November 2014	21.5 (79%)	
Average price paid to PDS dealer for:		
Rice (Rs/kg)		3.6
Wheat (Rs/kg)		2.8
Proportion (%) of priority cardholders who felt that the quality of PDS grain was:		
	Rice	Wheat
Good	55	54
Average	26	36
Poor	19	10

^aIn brackets, average purchase–entitlement ratio for priority cardholders.

Source: Bihar NFSA Survey 2014 (base: all households with a new, priority household ration card issued under NFSA). The table excludes a few households that had both a priority card and an Antyodaya card at the time of the survey.

(Antyodaya households with more than seven members stand to gain from swapping their Antyodaya card for a priority card). In practice, it seems that PDS dealers often told Antyodaya households that they had to surrender their Antyodaya card for a new ration card if they were eligible for the priority category, or that Antyodaya cards were no longer valid. As a result, there was probably more “migration” from the Antyodaya to the priority category than would have happened had people been given a genuine and informed choice between the two.

In our sample, 66 households had an Antyodaya card before the implementation of NFSA. Of these, 29 also had a priority card at the time of the survey (the rest continued to use their Antyodaya card). Further, most of these 29 households were using their priority card and not their Antyodaya card, in spite of the fact that only six stood to gain from migrating to the priority category as they had more than seven members. This is consistent with the survey teams’ impression that many Antyodaya households were told by the dealers that their Antyodaya card was no longer valid.

In fact, there is a danger of Antyodaya households getting slowly absorbed into the priority and the Antyodaya programme being phased out altogether. From the point of view of an administrator, that might seem like a step forward, since it would mean that all PDS cardholders belong to a single category, transparently linked to the SECC. This convenience view, however, would overlook the critical complementarity between the priority and Antyodaya categories, and risk doing a great injustice to Antyodaya households.

This point needs to be understood in the context of the transition, under the NFSA, from “household entitlements” to “per-capita entitlements.” Prior to NFSA, most Indian states had a system of household entitlements for the PDS, for example, 35 kg per month or (in Bihar) 25 kg per month. Under the NFSA, entitlements are defined in per capita terms: 5 kg per person per month for Priority households. This is a more logical and equitable approach, but the transition from household to per-capita entitlements is a major loss for small households, including for instance widows and elderly persons who live alone or with their spouse. It is partly to provide a means of protecting the poorest among these small households that the Antyodaya category was retained under the NFSA. Now that many Antyodaya cardholders have migrated to the priority category, a corresponding number of new Antyodaya cards should be distributed to widows, elderly couples and other poor households affected by the transition to per capita entitlements. In fact, since the coverage of the Antyodaya programme in Bihar is quite small in the first place, there is a case for expanding it along with renewing the list of Antyodaya households.

Observations of the Survey Teams

Three of the field investigators had participated in earlier surveys of the PDS in Bihar (in 2011 and 2013). All of them were impressed with the positive changes (even “massive changes,” as one of them put it) that had taken place in the intervening period. In earlier surveys, many poor households complained

that they had been excluded from the BPL list; with the expanded PDS coverage under NFSA, that problem had been largely resolved. Another improvement was better awareness of entitlements: in the new system, people are much clearer about what they are supposed to get and (especially) what they are supposed to pay. Finally, despite continuing problems of irregular supply, the gaps in delivery now seemed to be shorter and fewer. Earlier, it was not uncommon for PDS delivery to be interrupted in a particular area for six months at a time. Now, as one of the investigators put it, “some sense of accountability for monthly delivery had taken root in the system.”

Among other impressive examples of positive change was that of Arpathal, a tribal village in Chandan Block, Banka District. Most of the families in this village were landless or nearly landless, with incomes below Rs 5,000 per month as per SECC data. Prior to the introduction of the NFSA, many of them had above the poverty line (APL) cards and were deprived of subsidised grain from the PDS. Now most of them have priority cards and are entitled to 5 kg of grain per person per month. The sample households in Arpathal had bought 96% of their entitlements during the two months preceding the survey.

Having said this, there were major variations between the sample districts and villages, and in some of them the situation remained dismal. Among the four sample districts, Gaya was the worst by a long margin as far as the functioning of the PDS is concerned. In some villages, the NFSA did not seem to have had any impact at all. In fact, even SECC data were often missing for entire hamlets in the sample villages of Gaya District. And the PDS seemed untouched by recent reforms. To illustrate, in Kohluara village of Atri Block, about three quarters of the sample households were eligible under NFSA but none of them had received any PDS grain during the two months preceding the survey. In fact, the PDS seemed to be more or less non-functional in this village. The dealer just distributed some kerosene every month and took that opportunity to make fake entries in everyone’s ration cards, indicating that rice and wheat had also been distributed as per NFSA norms. Bajanti Devi, one of the respondents, complained that the act had made no difference at all: before and after the act, her family of five was entitled to 25 kg per month but actually received nothing.

PDS Reforms

The survey included unannounced visits to ration shops whenever possible. Due to the tight schedule of household interviews, only 23 ration shops were inspected. Even this limited exposure, however, was quite revealing.

Briefly, it was evident that Bihar still had a long way to go in ensuring minimum standards of transparency and accountability at the ration shops. For instance, many of the ration shops had little to show by way of an information board. The system of “doorstep delivery,” officially operational at that time, was equally notional in many places.¹⁸ Fixed distribution schedules, another helpful safeguard, were either lacking or ignored. Making fake entries in ration cards was an accepted practice. The dealer’s attitude was often casual in the extreme, with some dealers even admitting openly that they cheated

and seeking to justify it on the grounds that everyone else was cheating too. Evidently, they were not under tight supervision.¹⁹

It seemed that Bihar had over-relied on the coupon system to prevent embezzlement, and neglected other safeguards, in contrast with neighbouring states like Chhattisgarh and Odisha where wide-ranging PDS reforms have drastically reduced PDS leakages (Khera 2011b). Further, for some reason the coupon system was discontinued when the NFSA came into force in Bihar. It is just possible that the positive effects of the transition to NFSA (in particular, much greater public pressure for a functional PDS) were partly undone by the discontinuation of the coupon system. Whether or not the coupon system is eventually reinstated, there is an urgent need to reinforce all possible safeguards against corruption and arbitrariness.²⁰

Outlook

Before concluding, we briefly discuss a few ways of consolidating the gains that have already been achieved in Bihar.

First and foremost, the new list of ration cards urgently needs to be put in the public domain, so that people (especially those without a ration card) have an opportunity to verify their status. Failing that, there is a danger of exclusion errors as well of appropriation of priority cards by corrupt elements.

Second, more can be done to ensure that people are clear about their entitlements—the best guarantee of sustained public pressure on the system to perform. In some areas (particularly Dalit hamlets, as well as Santhal hamlets in Purnea District), we found that awareness of the correct PDS prices and quantities was still quite low. Similarly, there was widespread confusion about the status of Antyodaya cards. Awareness campaigns would help. Another helpful step in this regard would be to reduce the issue price of rice to Rs 2 per kg, so that everyone is entitled to “five kilos for ten rupees” irrespective of the wheat-rice mix. This would greatly help to ensure clarity of entitlements and prevent over-pricing by PDS dealers.

Third, an enormous amount of work remains to be done on PDS reforms. There have already been valuable efforts, such as the coupon system (now discontinued, perhaps temporarily), and more recently, extensive computerisation (a strong safeguard against leakages in the supply chain upwards of the ration shop). Other initiatives, such as doorstep delivery and regular distribution schedules, have been half-heartedly enforced so far, as have elementary safeguards such as full-fledged information boards and transparent records at the ration shops. Further steps can be taken, drawing on the experiences of other states such as Tamil Nadu and Chhattisgarh. For instance, it is essential to ensure (through SMS alerts or otherwise) that people know when and how much grain reaches the local ration shop. Similarly, there are possibilities of good use of modern technology to facilitate tamper-proof recording of “last mile” transactions. Deprioritisation of ration shops, in favour of something as close as possible to self-management (for example, through cooperatives, self-help groups or gram panchayats), is another strong safeguard against embezzlement that needs further exploration in Bihar.²¹

Last but not least, the supply chain needs to be streamlined so that the current pattern of haphazard distribution (often

weeks or even months behind schedule) comes to an end and gives way to regular monthly distribution on fixed days. The weaknesses of the supply chain were beyond the ambit of this study, but the household survey strongly suggests that there was something wrong with it. As mentioned earlier, this is partly due to the enormous increase in the volume of PDS distribution post-NFSA, and hopefully it will turn out to be a temporary problem. Here again, the recent computerisation drive is likely to help, but only if it supplemented with direct efforts to ease the bottlenecks.

Concluding Remarks

The survey findings have to be seen in the light of the dismal functioning of the PDS in Bihar until 2011 or so, and also of Bihar's general record of corruption and misgovernance. Against this background, recent progress with PDS reforms as well as with the implementation of the NFSA can be regarded as reasonably encouraging. The faulty BPL list, with its high exclusion errors, has been replaced with a more logical, transparent and reliable list of eligible households clearly linked to the SECC. People's awareness of their entitlements remains inadequate but is much higher than it used to be, and still—hopefully—growing. Leakages in the PDS have declined, dramatically so in comparison with the unrestrained loot of the 2000s. The distribution of PDS rations is also more regular, and the quality of rice and wheat has improved. In a state where hunger and food insecurity are rampant, these are significant achievements.

Bihar's experience, including SECC-based implementation of the act, is of much interest to other states, especially other poor and poorly governed states (for example, Jharkhand, Madhya Pradesh and Uttar Pradesh) in the same region. This experience shows that effective PDS reforms are possible not

EPWRF India Time Series

Module on Insurance

The Economic and Political Weekly Research Foundation has added a module on Insurance to its online database EPWRF India Time Series (EPWRFITS).

The Insurance module provides time series and company-wise data under Life and Non-Life Insurance, separately for both public and private sectors, starting from 2001. The module covers a large number of variables such as the number of offices, policies issued, premium, claims settled, and solvency ratios.

Under the category of Life Insurance, company-wise data at the state-level on the number of offices and individual new businesses underwritten is included. Cross-country indicators like insurance density and penetration are given to enable international comparison.

The periodicity of data for all variables is annual and has been sourced from publications such as the Insurance Regulatory Authority of India's *Handbook on Indian Insurance Statistics* and annual reports.

With this, the EPWRFITS now has 14 modules covering a range of macroeconomic and financial data.

only in forward states such as Tamil Nadu and Himachal Pradesh, but also in otherwise poorly governed states, and indeed everywhere.

As in Chhattisgarh, recent PDS reforms in Bihar, and particularly the early and vigorous implementation of NFSA, were rooted in political commitment, not unrelated to the approaching assembly elections (due later this year in Bihar). Much like Raman Singh in Chhattisgarh, political leaders in Bihar made up their mind that there were electoral gains to be made from making the PDS work. There is no reason why political interest in the PDS cannot be created in other states as well.

Having said this, Bihar still has a long way to go before it has a well-functioning PDS in tune with the NFSA. The list of eligible households must be put in the public domain (not only on the internet but also at the ration shops) as soon as possible. Households that have been wrongly or unfairly excluded should be included along with expanding the coverage of the PDS to the mandatory 86%. Last but not least, PDS dealers must be held on a much tighter leash, if not replaced (or supplemented) with collective institutions such as a cooperatives, self-help groups and gram panchayats.

We end by noting that there is some uncertainty about the exact timing of Bihar's recent progress with PDS reform. There was certainly a major effort around the time of the implementation of NFSA, but much progress had already been made before that. In fact, given the initial disruptions that accompanied the launch of NFSA in early 2014, it is even possible that the implementation of the act was associated with a temporary setback in the performance of the PDS in Bihar. Hopefully, continued public pressure (before and after the forthcoming assembly elections) will ensure that this damage—if any—is undone and that Bihar successfully implements the NFSA.

Postscript: Implementation of NFSA in Madhya Pradesh

Soon after the completion of the Bihar NFSA survey, in July 2015, we undertook a similar exercise in Madhya Pradesh for comparative purposes.

In Madhya Pradesh, we went to Mandla and Shivpuri Districts, where we had interviewed about 200 randomly-selected households in 2013 as part of the Public Evaluation of Entitlement Programmes (PEEP) survey.²² We revisited the same households in July 2015, one year after the implementation of NFSA began in Madhya Pradesh.

The situation we had found in 2013 was absolutely dismal. At that time, access to the PDS was still based on an outdated BPL list, with large inclusion and exclusion errors. BPL households in our sample had received only 37% of their entitlements during the three months preceding the survey. The APL quota was almost entirely siphoned off by corrupt dealers.

Two years later, in July 2015, we found a sea change in the sample villages. First, the coverage of the PDS had expanded from about half in 2013 to 80% or so. Consequently, exclusion errors have been more or less eliminated.²³

Second, the purchase-entitlement ratio (PER) among sample households had jumped from 37% in 2013 to 96% in 2015. Somehow, full distribution had become the norm.

Third, we found a general improvement in the regularity of distribution of all PDS commodities (foodgrains, salt, sugar, kerosene). In 2015, by and large, ration shops were abiding by the prescribed monthly distribution schedules.

There are also enlightening contrasts between Bihar and Madhya Pradesh. First, in Madhya Pradesh the new ration "slips" that were distributed in lieu of ration cards (a provisional arrangement) clearly mention the number of household members and the corresponding monthly foodgrain entitlements. This has greatly helped to ensure that people know and claim their due.

Second, in the absence of SECC data at that time, the Madhya Pradesh government decided to use its own Samagra Samajik Suraksha (sss) database to identify eligible households. This is an integrated database, built over the last few years for joint use by several departments (labour, civil registration, rural development, etc). Judging from the sample households, the Samagra database seems to be more or less complete, both in terms of enumeration of households and in terms of listing individuals within households. Further, its design allows for continuous and decentralised updating, for example, using birth and death registration.²⁴ In this respect it seems to be ahead of the SECC approach.

Third, the identification of eligible households in Madhya Pradesh is not based on "exclusion criteria" (as in Bihar) but on broad inclusion criteria. These include erstwhile BPL households, all Scheduled Castes and Scheduled Tribes, social security pensioners, registered labourers and so on. One unfortunate consequence of automatic inclusion of all earlier BPL cardholders is that inclusion errors from the earlier system continue. Quite likely, the Madhya Pradesh approach is also more vulnerable to exclusion errors than the Bihar approach. For instance, a poor Other Backward Classes (OBC) farmer who does not have a BPL card may not meet any of the inclusion criteria.

Fourth, in Madhya Pradesh the list of ration cards is in the public domain: it is clearly posted on the sss website and is also supposed to be available at the gram panchayat. As discussed earlier, this is not the case in Bihar.

Fifth, Madhya Pradesh provides maize, rice and wheat to eligible households. To keep things simple, the issue price is the same in each case—Re 1 per kg. This greatly helps people to understand how much they are supposed to pay, and may explain why we found relatively few instances of "overcharging" in Madhya Pradesh compared with Bihar.

The dramatic reduction of PDS leakages in Madhya Pradesh can be attributed to a range of reforms. As in many other states, broad coverage, clear entitlements and low issue prices have helped to create strong public pressure for a well-functioning PDS. The fixed distribution schedule also helps in that respect, and makes it easier to monitor foodgrain movements. The viability of PDS outlets has improved, with higher official commissions (Rs 70 per quintal since April 2015) and larger volumes. Finally, better management practices have been fostered: doorstep delivery, computerisation and handing over the management of PDS outlets to cooperatives of various types. In

these and other ways (including occasional action against corrupt dealers), “pressure from the top” has complemented greater pressure from the public.²⁵

These observations remain somewhat tentative, based as they are on a small sample. Hopefully, further investigations

will validate them. Meanwhile, there is an important hint here that even the worst-governed states are capable of fixing their PDS and implementing the NFSA. In that respect, Madhya Pradesh’s story seems to corroborate the main lessons from Bihar’s recent experience.

NOTES

- 1 This paper does not deal with urban areas at all. A brief visit to two Musahar neighbourhoods of Patna in April 2015 was very sobering—many poor families had no ration card and even those with a ration card were being fleeced with abandon by the local dealers. There is an urgent need for an investigative study of the NFSA in urban Bihar.
- 2 On the logic of this approach, see Drèze and Khera (2010).
- 3 For further details, see Khera (2011a); also Drèze and Khera (2011, 2015), Himanshu and Sen (2013), Rahman (2014). On the dismal state of the PDS in Bihar in the 2000s, see also Mooij (2001), who observes that “there is large-scale misappropriation of foodgrains at all levels” (p 3295).
- 4 For further discussion of the 2011 survey, see Khera (2011b); see also Drèze and Khera (2013), where Bihar’s PDS is contrasted with that of Chhattisgarh.
- 5 From late 2011 onwards, the coupons were bar-coded to facilitate tallying. The coupons were also supposed to be transferable across ration shops, helping to create some competition between dealers. For further discussion of the coupon system in Bihar, see Dhorajiwala and Gupta (2011) and Choithani and Pritchard (2015).
- 6 For further details, see Drèze and Khera (2015). On NSS-based evidence of declining PDS leakages in Bihar, see also Himanshu (2013) and Himanshu and Sen (2013). It is possible that a growing gap between market prices and PDS issue prices has contributed to the decline of leakages. The gap increased when market prices shot up around 2009, and again in 2014 when issue prices were reduced under the NFSA. The bigger profit margin per unit of PDS grain diverted to the open market may have been a factor in dealers reconciling themselves to lower rates of embezzlement in percentage terms.
- 7 Note that the difference between purchase and entitlement is not necessarily a “leakage.” Part of it could also reflect supply bottlenecks. In the leakage estimates reported earlier, NSS purchases data are matched with actual PDS *offtake*, not allocation.
- 8 An enumeration block is a relatively small cluster of contiguous households, usually a hamlet or ward of 100–150 households or so.
- 9 At the time of writing (May 2015), the SECC final list is available for 25 out of 38 districts in Bihar.
- 10 Apparently, a principle of “automatic inclusion” for Scheduled Caste and Schedule Tribe households was announced by Chief Minister Jitan Ram Manjhi sometime after the initial round of identification. To the best of our knowledge, however, no orders to this effect have been issued.
- 11 For practical purposes, Antyodaya could be thought of as a subset of the Priority category: only three Antyodaya households in our sample met some of the exclusion criteria. But since Priority and Antyodaya are separate categories under the act, the same convention is being followed here.
- 12 The exclusion criteria notified by the Government of Bihar are as follows: (1) household

owns motorised three- or four-wheeler; (2) household owns mechanised agricultural equipment (three- or four-wheeler); (3) any household member is a government employee; (4) any household member earns more than Rs 10,000 per month; (5) household runs a non-agricultural enterprise registered with the government; (6) household pays income tax; (7) household pays professional tax; (8) house has three or more pacca rooms (with pacca walls and pacca roof); (9) household owns 2.5 acres (or more) of irrigated land, with at least one irrigation equipment; (10) household owns 5 acres of multi-cropped irrigated and (11) household owns 7.5 acres of land with at least one irrigation equipment.

- 13 A small proportion of sample households (about 3%) had a Priority card as well as an Antyodaya card. This reflected the imperfect integration of the Antyodaya programme with the National Food Security Act, discussed further on.
- 14 According to Food Minister Shyam Rajak, 49 lakh ration cards were yet to be distributed in Bihar at the time of the survey. The households had already been identified but the distribution of cards was held up as the Government of Bihar was waiting for the central government to sanction the corresponding foodgrain allocations.
- 15 One reason why the ration card details did not always correspond exactly to the SECC draft list is that, in some cases, requests for corrections submitted by sample households had already been accommodated, or so it seemed.
- 16 In fact, we also enquired about December, but the responses are difficult to match with entitlements since the survey took place before the end of December (so that PDS distribution was still incomplete for that month).
- 17 Note that what people purchased in November is not necessarily their November quota. This is because PDS distribution in Bihar often lags behind the prescribed schedule, so that the allocations for a particular month are often distributed the next month, or even two months down the line.
- 18 Doorstep delivery refers to the separation of transport agencies from distribution agencies. For further details, see Khera (2011b).
- 19 As Choithani and Pritchard (2015: 67) point out, this lack of accountability is closely related to “class and caste allegiances” of PDS dealers (“fair price shop owners” as the authors call them) in Bihar: “In Chhattisgarh and some other states, a key plank of PDS reform has involved combating FPS profiteering by allocating FPS licences to local, female-operated self-help groups. The absence of this type of reform in our case-study villages in rural Bihar highlights the local political and economic consequences of FPS ownership.”
- 20 According to recent media reports, the coupon system is supposed to be reinstated from July 2015.
- 21 Limited moves have already been made in that direction, for example, by transferring some ration shops to Primary Agricultural Credit Societies (PACS). From our brief visits to ration shops, there were some indications that PACS-managed ration shops were subject to more extensive checks and balances than those managed by private dealers. However the sample was too small to come to any conclusion on this.

- 22 Summary findings of the PEEP Survey are reported in Drèze and Khera (2014).
- 23 Both states have benefited massively from expanded PDS coverage under the NFSA: 86% in rural Bihar and 82% in rural Madhya Pradesh.
- 24 This potentially resolves one major source of harassment for people—keeping the number of household members updated. However, as people tend to rely on the panchayat secretary to get updated printouts, it has kept the door open for petty bribes. Many sample households complained that they had to pay between Rs 100 and Rs 500 for their new ration coupons.
- 25 The phasing out of the APL quota has also eliminated one of the biggest sources of corruption in the PDS in Madhya Pradesh.

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