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Background and rationale

Right from its historic initiation in 1965, the universal Public Distribution System (PDS) was the most far reaching food safety net operations, and an important vehicle for the distribution of procured grains in the deficit regions. However, it has colonial roots as a strategy to provide food during famine and floods. Still, it continues to be a major instrument for ensuring food security and other daily needs for the poor populations in India (Government of India, 2007). Nevertheless, the PDS has changed both qualitatively and quantitatively since 1970s. At first, the PDS was restricted to urban areas and region with food deficits. The core emphasis was on price stabilization and a countervailing authority to private trade. In the early 1980s, the welfare role of the PDS has gained importance. Moreover, the transition from universal PDS to Targeted Public Distribution System (TPDS) in 1997 brought changes PDS entitlements. In order to target the TPDS more towards the poor, the Antyodaya Anna Yojana (AAY) was launched in December 2000. The new system follows a two-tier subsidized pricing structure, one for BPL families, and another for APL families. This scheme sought to identify the ten million poorest of the BPL families and provide them each with 25 kg of food grains per household per month, which was increased to 35 kg per household per month with effect from 1st April, 2002 at fixed price of Rs 2 per kg for wheat, and Rs 3 per kg for rice (Government of India, 2005a).

Although, the government is undertaking to implement the PDS to the best advantage of the beneficiaries, the working structure of the PDS was widely criticized, for its urban bias and failure to reach those, who are living under below poverty line, for whom the programme was intended. PDS lifting is less than half of their allotment for majority of the states and poor states are the worst defaulters. The planning commission study finds that about 58 % of the subsidized food grains issued from the central pool do not reach target groups because of identification errors, non-transparent operation and corrupt practices in the implementation of TPDS (Government of India, 2005a). Some states, such as Bihar, Jharkhand and Uttar Pradesh have not being released the APL quota on the ground that they did not lift it in the past when the market prices are low. Moreover, some of recent studies accentuated that there are large-scale boo-boos

in the identification of targeted families and distribution of BPL card and PDS lifting (Ram *et al.*, 2009; Kumar, 2010; Bardhan, 2011; Basu, 2011; Banerjee, 2011; Himanshu and Sen, 2011; Khera, 2011).

As per National Family Health Survey, 2005-06, 50 % of rural households under poverty line do not have BPL cards. Moreover, evidences also suggest that about two-fifths of the BPL cards in India are with the non-poor households (Ram *et al.*, 2009). A more recent study conducted by the National Council of Applied Economic Research (NCAER) in six low income states found that 40% of the BPL cards have been issued to people who are above poverty line (APL), ranging from 84% in Assam, 43% in Uttar Pradesh, 50% in Rajasthan, 40% in Bihar and 38% in Chhattisgarh. The Antodaya Anna Yojana (AAY), instigated during 2000, to provide super-subsidised food grains for the poorest among the BPL category also exhibited similar misuse (Kumar, 2010).

In most debates around the PDS, the large-scale diversion (or “leakage”) of grains has been major cause of concern. Diversion from the PDS has been estimated periodically. The situation of the trends in overall diversion of food grains is not comforting; while overall diversion is only 24% in 1999-2000, which doubled (54%) in 2004-05 and slightly dropped 44% at the end of the period (Basu 2011; Khera 2011). This low offtake of food grains by the poor attributed to number of reasons such as irregular supply, accessibility, poor quality and financial etc. However, the more important reason is the issue of gross failure of identification of the right beneficiaries (Kumar 2010).

In effort to address the problem, until recently, the policy debates on this programme have focused on the related issues of coverage, targeting, errors of exclusion and inclusion, storage, transport, distribution, diversion, price and quality of the food grains. A growing number of studies have identified that the success of the PDS in meeting its stated objectives depends on the competency of the state governments to identify the genuinely poor families or all needy population, removing ghost BPL/AAY cards, putting in place an effective and efficient delivery system, procurement of food grains and timely release of food stocks (Drèze, 2003, 2010b, Government of India, 2005a; Dreze and Khera, 2010a; Jha and Ramaswami, 2010; Khera, 2011). Use of Unique Identification (UID) number to minimize the misalliances and duplications has taken the debate of PDS boo-boos to further level.

Conversely, the most efficient way of addressing the problem of bungling in PDS is to produce reliable and nuanced display of evidence and facts about the distribution of ration cards and PDS lifting across the states and socioeconomic groups; which can address the first, how broadly the programme is covered in its stated objectives? Second, how well existing level of assistance has targeted those most in need? Moreover, most of the earlier studies give relevant information only for major states. There are not many studies, which provide reliable information on BPL/AAAY card distribution and PDS offtake by social groups. Therefore, this study is an effort to provide reliable information and facts on PDS lifting for maximum number of states and key socioeconomic groups of India.

Data and methods

This study used India Human Development Survey (IHDS, 2005) data for assessment of ration card distribution and PDS offtake in states and socioeconomic groups of India. IHDS is collaborative project of researchers from the University of Maryland and National Council of Applied Economic Research, New Delhi. It is a household survey whose primary goal is to deepen our understanding of human development in India. The IHDS was administered to a nationally representative sample of 41,554 households located across all states and union territories of India with the exception of Andaman Nicobar and Lakshadweep and contains urban as well as rural sample.

The questions finally fielded in IHDS were organized into two separate questionnaires, household and women. The household questionnaires were administered to the individual who were most knowledgeable about income and expenditure, frequently the male head of the household. In the present study, we have used information from household data on ration card, PDS offtake of rice and wheat, price and reasons for not having and not using ration cards. The bivariate and trivariate statistical analyses are used to estimate PDS offtake by type of ration card across states and socioeconomic groups of India. The Standard Error (SE) of mean is used check the confidence of the mean estimates of PDS offtake.

Results

The results in this study exhibited more of facts about the PDS and stratified them in order of following five key aspects:

- PDS card distribution
- PDS offtake of rice and wheat
- PDS offtake price of rice and wheat
- The contribution of PDS in total household rice and wheat consumption
- The reasons of not having and using ration card

PDS Card Distribution

PDS/Ration cards under the public distribution system entitle the eligible population to obtain foodgrain, kerosene, cooking gas, etc, at highly subsidised rates. These benefits account for a substantial proportion social protection expenditures of the national and state government; subsequently, their proper utilisation is often contested. Previous studies fostering the widespread corruption and manipulation in distribution of Below Poverty Line (BPL) cards at the grass root level. Till now, there has been greater discussion on BPL card distribution; however, there are not much comprehensive facts on distribution of various types of PDS cards and more particularly about those who do not hold ration cards. Therefore, greater vigilance and evaluation is required in this regard. Currently, PDS issues three types of ration cards: 1) Below Poverty Line (BPL) cards issued below poverty line households, 2) Above Poverty Line (APL) cards which are of two types, namely saffron cards and photo cards. They are issued to above poverty line families (APL), 3) Antyodaya Anna Yojana (AAY) cards are issued to the poorest of the poor families living in rural areas and urban slums. As mentioned previously in this paper, the entitlement of ration differs for different PDS cards. The valuation of whether right beneficiary holding an appropriate card allotted to him is a critical indicator of PDS benefits and functioning.

Table 1 displays PDS card distribution by state. Results reveal that at all India level 83% of households have a PDS ration card, out of which 34% have BPL cards, 3 % have Antyodaya cards and remaining are holding standard APL cards. State-wise differences in distribution of PDS cards are large; low take-up is observed more in new states such as Jharkhand (38%), Chhattisgarh (31 %) and poor states like Bihar (33%). The issuing of PDS cards are near to 100% in states of Himachal Pradesh, Kerala, Rajasthan and West Bengal. However, there is huge rural-urban variation in distribution of PDS card at national and state level. At all India level, 85 % households in rural areas are having PDS cards compared with 79% households in urban

areas. Both at rural and urban, again same states: Jharkhand, Chhattisgarh and Bihar have greater proportion of households who are not holding any PDS card, however, in majority of the states, such proportion is greater in urban than rural areas. More than half of the urban households in Jharkhand and near about half in Orissa do not hold any PDS card (Appendix 1).

The assessment of PDS card distribution by socioeconomic groups shows less skewed distribution than state level pattern. By social groups, results reveal that the greater proportion BPL card holders are among STs (50%), followed SCs (43%) and OBCs (35%). Similarly, the proportion of households with Antyodaya card are greater among STs (6%), followed by SCs (3%). Yet, regrettably the greater proportion of households without any PDS cards are belonging to Schedule Tribe (21%), OBC (19%) and Muslims (16%) compare to others. Commensurate to social groups, by economic groups, the results evident that the distribution of BPL cards are in expected pattern, greater proportion of poorest and poorer households are holding BPL cards and such proportion is decreasing with increasing economics status. Again ironically, the greater proportions of households without any type of PDS card are among poorest and poorer economics groups. Similar results are also found in case of Antyodaya card distribution. The more satirical situation is 30 % of richer and 13% of richest is holding the BPL cards (Table 2). The greater proportions of households in poor states are found without any PDS cards but substantial proportion of non-poor households holding BPL cards are found in socioeconomically advanced south Indian states (Appendix 2).

PDS offtake of Rice and Wheat

This paper critically assess, whether how many households in India across the states and socioeconomic groups really getting the offtake level of 25kg per month per family that announced in the Union budget 2000-01 under TDPS. However, the household level estimates of PDS offtake is somewhat crude measure because the household size across the states and social groups varies greatly. If a household entitled to get 25kg per month and if we consider the average household size in India is approximately around 5 then, the average per capita per person is 5 kg. Therefore, it is logical to assess that how many persons in India is getting 5kg of PDS food grains per month. Table 3 and 4 presents the per capita offtake of PDS food grains among the states and social groups by type of PDS card.

The results in table 3 indicate that only for people with BPL cards residing in two states (Jammu & Kashmir and Himachal Pradesh), the combined per capita offtake per person of rice and wheat is more than 5kg. Remarkably, in many of the poor states such as Bihar, Jharkhand, Uttar Pradesh, Rajasthan and Orissa and in non-poor states such as West Bengal, Gujarat and Delhi combined offtake of rice and wheat is less than 2 kg per person among BPL households. Though, the similar situation is also observed in Haryana and Punjab; it is generally believed that these states are not affected by food deficit and the below poverty line population is also insignificant.

Furthermore, the overall PDS offtake in rural areas for all the selected states is greater than the urban areas. Similarly, between states distribution of PDS offtake is more skewed in rural than urban areas (Appendix 3). Among same type of ration card holders, the PDS off take is also varying substantially by household's economic status. In majority of the states, compared to poor, offtake of food cereals is 50% less among non-poor even if they hold BPL/AYY cards. On other hand, as expected, the offtake of cereals by poor people who are holding APL cards is substantially lower compared to BPL/AYY card holders (Appendix 4). This clearly indicates that with present PDS setup, the PDS offtake much depends on holding the type of PDS card than actual economic status of people.

The results in table 4 gives further insights on PDS offtake of cereals by socioeconomic groups. The combined rice and wheat per capita PDS offtake per month is less than 3 kg for all the categories including poorest and poorer BPL card holders. However, within the socioeconomic groups, there are substantial variations in PDS offtake. As expected, the PDS offtake is greater among people in poorest economic group than other economic groups. The PDS offtake of cereals decreases with increasing economic status. Nevertheless, among richer and richest, the PDS offtake under BPL/AYY cards is significant. Moreover, in other religious group PDS offtake is greater than SCs and STs. This could be because other religious groups (e.g. Christians and Jains) mainly belongs to non-agricultural community and within these communities, BPL families are obligatory to depend on PDS for their food grains because neither they have home grown food grains nor they have purchasing power to buy from outside markets.

PDS Price vs Market Price for Rice and Wheat

The Union Budget 2000-01 fixed the prices for issue of food grains for BPL families at 50% of the economics cost that the APL families pay, and all prices are revised by the Food Corporation of India (FCI) from time to time. Under the scheme of AAY, for the poorest BPL families, the prices were fixed at Rs 2 per kg for wheat and Rs 3 per kg for rice. With this disputation, this paper assessed that how far the BPL families are benefiting from the stated entitlements in terms of fair prices for food grains. The result presented in table 5 reveals that though, in majority of the states, the PDS price is half of the market price under both BPL/AAY and APL cards, there is huge state variation in PDS price of rice and wheat. Among, the BPL/AAY card holders, the lowest PDS price for rice is witnessed in Gujarat (Rs 3 per kg) and highest in Punjab (Rs 10 per kg). In case of wheat, the lowest PDS price is again witnessed in Gujarat (Rs 2 per kg) and highest in Orissa and Assam (Rs 8 per kg). Similar, pattern of results are also found among APL card holders.

Commensurate to state-wise results of PDS and market prices, the estimates of PDS and market prices by socioeconomic groups also evident that PDS price of rice and wheat are on an average half of the market prices. Unlike the state-wise estimates, the PDS price estimates of rice and wheat by the socioeconomic groups show less skewed pattern. Among the BPL/AAY card holders, the PDS price of rice ranges from around Rs 4.50 per kg in STs and poorest to Rs 6 per kg in other religious groups. Similarly, for APL card holders, it ranges from Rs 4.50 among poorest to Rs 8 among other religion groups. In case of wheat, the skewedness of PDS prices across socioeconomic groups further reduces (table 6).

The Contribution of PDS in Total Household Rice and Wheat Consumption

The assessment of contribution of PDS to total household rice and wheat consumption gives number of intriguing insights. A point to be notable in these findings is that the contribution of PDS to total household rice and wheat consumption is more among economically developed states than the poorer states. Among BPL/AAY card holders, the contribution of PDS rice consumption to total household rice consumption is substantially less in socioeconomically poorer states such as Bihar (0.3%) Jharkhand (7 %), Orissa (12%) and Uttar Pradesh (14%) compared to socioeconomically advantageous states like Maharashtra, Goa, (45%), Tamil Nadu

(37%) and Andhra Pradesh (33%). Similar pattern of results has also been observed in case of contribution of PDS wheat consumption to total household wheat consumption (table 7). Overall, results in table 7 suggest the huge state level variation in contribution of PDS cereals consumption to total household cereals consumption.

Table 8 display the contribution of PDS to total household cereals consumption by key socioeconomic characteristics. Contrasting to state-wise results, results by socioeconomic groups reveals that the contribution of PDS to total household's rice consumption shows less skewed pattern; which varies only between 19% to 27% for social groups and 16% to 24 % for economic groups. Similarly, the contribution of PDS wheat consumption to total household wheat consumption shows that except, in STs (the contribution is much higher) and richest (the contribution is much lower) the PDS contribution in other socioeconomic groups more or less uniform. As expected, the contribution of PDS to total household's cereals consumption is greater among BPL/AYY card holders than APL/Standard card holders.

The Reasons of not having and using Ration Card

Table 9 and 10 display the reasons for not having a ration card and not using ration cards by states and socioeconomic groups, respectively. Among the reasons for not having ration card, 'bureaucratic reasons' are the dominant reason for majority of the states. However, this problem is more pervasive in poor states: Bihar (87%), Orissa (69%), and newly formed states: Chhattisgarh (66%), Jharkhand (64%), and Uttarakhand (46%) compared to other states (less than 40%). However, other reasons (unspecified reason) also equally dominant reason for states like Andhra Pradesh (75%), Jammu and Kashmir (64%), Tamil Nadu (58%), Rajasthan (45%) and Delhi (44%). Moreover, change in residence ('moved') and 'not needed' also contributes reasonably for not having a ration card.

The assessment of reasons for not having a ration card by socioeconomic groups again reveals 'bureaucratic reasons' are the major reason behind not having a ration card, more particularly in disadvantageous socioeconomic groups. Households belong to ST caste and poorest and poorer economic status are facing more bureaucratic problem for getting a ration card. Substantial proportion of richest households and other religions (Christians, Sikhs, Jains ect.) are indicating that they do not need ration card. Shift in the residence is also a major reason for not having

ration card for other religion, upper caste and households with rich wealth status. Reasonable proportions of households have lost their ration cards.

Among the specified reasons for not using the ration card, 'irregular supply' is the major reason, followed by 'no time', 'poor quality' and 'financial reasons'. However, the state level results evident that reasons for not using ration card varies substantially. Except Punjab, states with larger proportion of tribal population indicate that 'irregular supply' has the major reason for not using ration cards. However, the picture is much clear in table 12 which is showing the reasons for not using the ration card by socioeconomic groups, where, irregular supply is the major reason for all the disadvantageous socioeconomic groups.

Conclusion

This paper assesses some of the key components of PDS scheme and evaluates that how far the PDS is fulfilling its stated objectives. The assessment of PDS card distribution, offtake and PDS contributions to total household consumption of cereals by states and socioeconomic groups provides number of critical insights, though, totally not new but evident from a comprehensive empirical examination and facts. Moreover, the assessment of reasons for not having ration card and not lifting ration are also important for PDS policy. Some of the important findings of this study are follows:

One, our analyses suggest that the time to time change in scope and structure of PDS has not helped much in removing malfunctioning in the system; particularly in terms of distribution in PDS cards. As, our results suggest many of the non-poor households holds BPL cards and interestingly, substantial proportion of poorest do not hold any type of PDS cards. Similarly, largest proportion of households, those who do not hold any type of PDS cards are from socioeconomically backward states. Moreover, within the group of PDS card holders, larger proportion of poorest hold standard/APL cards, instead of appropriate BPL/AAY cards.

Second, inspite of attempts to confiscate the fraudulent practices in PDS offtake, the lifting of PDS rice and wheat by poor families under BPL/AAY cards are far below stated entitlement under Union Budget 2000-01. Except, in Jammu and Kashmir, the per capita PDS offtake of rice and wheat in other states is well below sanctioned entitlements on BPL/AAY cards. Similarly, the contribution of PDS consumption to total food grain consumption varies from 50% in

Uttarakhand and Karnataka to less than 1% in Bihar. Ironically, the contribution is less in socioeconomically backward states compared with their counter group.

Third, the comparison of market price with PDS price among states and social groups suggest that though PDS price is less than market price but well above government fixed PDS price. The enormous state level variations in PDS offtake and prices reflects that there are large discrepancies in the monitoring strategy of PDS fair price shops across states and lack of uniform commitments of state governments towards PDS distribution. The main differences across states could be the differences in responsibilities for storage; transport and distribution within districts are contracted out to “fair price” shops and the associated contractor; which gives substantial scope for fraudulent practice.

Fourth, among the several reasons that assessed for not having cards and not using ration cards, bureaucratic difficulties and irregular supply are respectively emergence as major reasons. Moreover, bureaucratic reasons are more pronounced in disadvantageous socioeconomic groups than advantageous groups. The majority of advantageous socioeconomic groups, who reported that they do not have a ration card, are mainly those who don't need it. Even if they have ration card, they are not using it mainly because of low quality of PDS cereals.

Finally, we conclude that findings of this study are critical for policy to improve the PDS structure and strategy. The crucial opinion emerging from this study is PDS in terms of meeting its stated objectives depended largely on the ability of state governments in identifying the genuine poor families and effective management of PDS offtake. Besides this, our wild hunting is that the transition from universal PDS to Targeted Public Distribution System (TPDS) in 1997 has led to more “exclusion errors” in PDS card distribution. The immediate action of PDS is to provide ration cards to those who do not have any ration cards. However, the special focus on disadvantageous socioeconomic groups (poorest, poorer and SCs/STs) can't be ruled out. Government should re-strengthen the mechanism and structure of public distribution system for its accountability to avoid malfunctioning in PDS card and food grains distribution through fair price shops. Furthermore, the issue of quality of PDS food grains also equally important and some extent, we can overcome this problem by timely release of food stocks and maintaining hygienic conditions in godowns and fair price shops.

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Table 1: Percentage of households by ration card distribution in India and states, 2005

States/India	No Ration card	BPL card	Standard/APL card	Antyodaya Card
Andhra Pradesh	23.20	64.50	11.70	0.70
Assam	14.50	25.00	59.80	0.70
Bihar	32.60	33.50	32.40	1.40
Chhattisgarh	30.60	37.00	23.10	9.30
Delhi	24.80	20.60	54.50	0.10
Gujarat	15.90	39.50	44.40	0.20
Haryana	6.40	16.40	76.40	0.70
Himachal Pradesh	3.40	17.30	72.40	6.90
Jammu & Kashmir	12.30	27.80	58.90	1.00
Jharkhand	37.90	37.00	22.70	2.40
Karnataka	27.60	52.80	16.60	3.10
Kerala	5.30	36.00	58.70	
Madhya Pradesh	24.20	26.60	44.90	4.20
Maharashtra, Goa	10.10	25.60	62.00	2.30
Northeast	29.10	31.70	37.50	1.70
Orissa	22.00	51.60	23.60	2.90
Punjab	10.80	4.50	84.60	0.00
Rajasthan	4.40	22.70	68.90	4.00
Tamil Nadu	6.30	47.40	46.10	0.10
Uttar Pradesh	16.80	18.00	60.20	5.00
Uttarkhand	7.90	27.90	57.00	7.30
West Bengal	5.90	24.90	66.70	2.60
India	16.70	33.70	47.10	2.50
India (NSSO 2004-05)	18.7	26.5	51.8	2.9

Source: Author's calculation using IHDS, 2005 data.

Table 2: Percentage distribution of Ration Card holders by Socioeconomic Characteristics, India, 2005

Socioeconomic Characteristics	No Ration card	BPL card	Standard/APL card	Antyodaya Card
Social Groups				
SC	13.6	43.3	39.8	3.3
ST	21	50	23	6
OBC	18.8	35.4	43.5	2.3
Higher Caste	15.6	19	64.2	1.2
Muslim	16.5	28.4	53.3	1.9
Other	12.8	19.9	67	0.3
Economic Groups¹				
Poorest	18.9	43.2	33.4	4.6
Poorer	17.6	43.7	35.7	3
Middle	16.3	38.8	42.2	2.7
Richer	14.5	29.9	54	1.7
Richest	16	13	70.4	0.6

Source: Author's calculation using IHDS, 2005 data.

Note: An index of economic status (wealth quintile) for each household was constructed using principal components analysis based on data from households. The wealth quintiles is based on 30 assets and housing characteristics, each household assets is assigned a weight (factor score) generated through principle component analysis, and the resulting assets scores are standardized in relation to normal distribution with mean of zero and standard deviation of one.

Table 3: PDS offtake of rice and wheat by states and type of ration card in India, 2005

States	Per capita offtake of PDS cereals by card type											
	BPL/ Antyodaya				APL				Total			
	Rice	S.E of mean	Wheat	S.E of mean	Rice	S.E of mean	Wheat	S.E of mean	Rice	S.E of mean	Wheat	S.E of mean
Andhra Pradesh	3.63	0.00	0.03	0.00	0.37	0.00	0.00	0.00	3.15	0.00	0.02	0.00
Assam	0.40	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.14	0.00	0.00	0.00
Bihar	0.02	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
Chhattisgarh	2.67	0.01	0.23	0.00	0.46	0.01	0.15	0.00	1.86	0.01	0.20	0.00
Delhi	0.39	0.01	0.91	0.01	0.04	0.00	0.07	0.00	0.14	0.00	0.30	0.00
Gujarat	0.49	0.00	0.80	0.00	0.06	0.00	0.08	0.00	0.26	0.00	0.42	0.00
Haryana	0.00	0.00	0.31	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.07	0.00
Himachal Pradesh	3.19	0.02	3.35	0.02	1.47	0.01	1.72	0.02	1.88	0.01	2.11	0.01
Jammu & Kashmir	6.47	0.05	0.35	0.01	3.95	0.04	0.30	0.01	4.75	0.03	0.32	0.01
Jharkhand	0.67	0.00	0.49	0.00	0.07	0.00	0.06	0.00	0.40	0.00	0.30	0.00
Karnataka	3.44	0.00	0.75	0.00	0.53	0.01	0.15	0.00	2.75	0.00	0.61	0.00
Kerala	1.88	0.01	0.27	0.00	0.38	0.00	0.22	0.00	0.99	0.00	0.24	0.00
Madhya Pradesh	0.68	0.00	1.69	0.01	0.07	0.00	0.37	0.00	0.31	0.00	0.89	0.00
Maharashtra, Goa	1.34	0.00	2.31	0.00	0.28	0.00	0.51	0.00	0.60	0.00	1.06	0.00
Northeast	2.13	0.02	0.00	0.00	2.63	0.02	0.01	0.00	2.40	0.02	0.01	0.00
Orissa	1.57	0.01	0.00	0.00	0.11	0.00	0.01	0.00	1.10	0.00	0.00	0.00
Punjab	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Rajasthan	0.00	0.00	1.97	0.01	0.00	0.00	0.07	0.00	0.00	0.00	0.60	0.00
Tamil Nadu	3.53	0.00	0.33	0.00	2.89	0.00	0.31	0.00	3.21	0.00	0.32	0.00
Uttar Pradesh	0.85	0.00	0.88	0.00	0.02	0.00	0.03	0.00	0.24	0.00	0.26	0.00
Uttarkhand	2.76	0.01	2.10	0.01	0.15	0.00	0.05	0.00	1.06	0.01	0.76	0.01
West Bengal	0.34	0.00	0.32	0.00	0.02	0.00	0.01	0.00	0.11	0.00	0.10	0.00
India	1.78	0.00	0.68	0.00	0.36	0.00	0.16	0.00	0.95	0.00	0.38	0.00

Source: Author's calculation using IHDS, 2005 data.

Table 4: PDS offtake of rice and wheat by Socioeconomic Characteristics and type of ration card, India, 2005

Socioeconomic groups	BPL/ Antyodaya			APL/Standard				Total			S. E. of Mean	
	Rice	S. E. of Mean	Wheat	S. E. of Mean	Rice	S. E. of Mean	Wheat	S. E. of Mean	Rice	S. E. of Mean		Wheat
Social Group												
SC	1.86	0.00	0.75	0.00	0.49	0.00	0.15	0.00	1.15	0.00	0.46	0.00
ST	1.67	0.00	0.79	0.00	0.78	0.01	0.37	0.00	1.40	0.00	0.66	0.00
OBC	1.90	0.00	0.62	0.00	0.42	0.00	0.16	0.00	1.07	0.00	0.36	0.00
Higher caste	1.34	0.00	0.73	0.00	0.13	0.00	0.16	0.00	0.40	0.00	0.29	0.00
Muslims	1.70	0.01	0.60	0.00	0.51	0.00	0.12	0.00	0.92	0.00	0.29	0.00
Other	2.07	0.01	0.40	0.00	0.24	0.00	0.12	0.00	0.64	0.00	0.18	0.00
Economic Group¹												
Poorest	2.19	0.00	0.89	0.00	0.48	0.00	0.24	0.00	1.45	0.00	0.61	0.00
Poorer	1.80	0.00	0.68	0.00	0.50	0.00	0.24	0.00	1.23	0.00	0.48	0.00
Middle	1.76	0.00	0.70	0.00	0.38	0.00	0.18	0.00	1.05	0.00	0.43	0.00
Richer	1.65	0.00	0.64	0.00	0.34	0.00	0.14	0.00	0.82	0.00	0.32	0.00
Richest	1.02	0.00	0.31	0.00	0.25	0.00	0.10	0.00	0.38	0.00	0.14	0.00

Source: Author's calculation using IHDS, 2005 data.

Note: An index of economic status (wealth quintile) for each household was constructed using principal components analysis based on data from households. The wealth quintiles is based on 30 assets and housing characteristics, each household assets is assigned a weight (factor score) generated through principle component analysis, and the resulting assets scores are standardized in relation to normal distribution with mean of zero and standard deviation of one.

Table 5: PDS offtake of price per kg of rice and wheat in India and states, 2005

State/ India	BPL/AAY								Standard /APL							
	Rice Per kg Price				Wheat Per kg Price				Rice Per kg Price				Wheat Per kg Price			
	Market price	S.E of mean	PDS price	S.E of mean	Market price	S.E of mean	PDS price	S.E of mean	Market price	S.E of mean	PDS price	S.E of mean	Market price	S.E of mean	PDS price	S.E of mean
Andhra Pradesh	10.91	0.00	5.14	0.00	11.74	0.00	7.01	0.00	12.61	0.00	5.03	0.00	11.91	0.00	7.00	0.00
Assam	10.36	0.00	6.00	0.00	11.66	0.00	8.00	0.00	10.75	0.00	6.01	0.00	11.66	0.00	8.00	0.00
Bihar	10.01	0.00	5.98	0.00	8.00	0.00	3.99	0.00	10.01	0.00	6.00	0.00	8.13	0.00	4.00	0.00
Chhattisgarh	8.74	0.00	5.51	0.00	7.93	0.00	4.99	0.00	10.66	0.00	6.01	0.00	8.50	0.00	5.04	0.00
Delhi	13.72	0.01	6.92	0.00	9.12	0.00	5.89	0.00	14.54	0.00	7.01	0.00	9.28	0.00	6.00	0.00
Gujarat	11.57	0.00	3.15	0.00	8.91	0.00	2.22	0.00	13.60	0.00	3.11	0.00	9.73	0.00	2.05	0.00
Haryana	12.46	0.00	0.00	0.00	7.13	0.00	3.03	0.00	13.58	0.00	0.00	0.00	7.51	0.00	3.01	0.00
Himachal Pradesh	11.90	0.00	6.98	0.00	9.43	0.00	5.55	0.00	12.40	0.00	9.09	0.00	9.28	0.00	7.21	0.00
Jammu & Kashmir	12.58	0.01	8.09	0.00	8.85	0.00	7.86	0.00	14.90	0.01	9.01	0.00	8.88	0.00	7.96	0.00
Jharkhand	9.91	0.00	4.10	0.00	9.44	0.00	3.92	0.00	10.64	0.00	4.07	0.00	9.15	0.00	4.05	0.00
Karnataka	10.99	0.00	3.27	0.00	9.81	0.00	3.86	0.00	13.13	0.00	3.27	0.00	9.96	0.00	4.07	0.00
Kerala	13.34	0.00	7.66	0.00	13.41	0.00	7.83	0.00	13.40	0.00	8.08	0.00	12.82	0.00	7.95	0.00
Madhya Pradesh	10.17	0.00	5.87	0.00	6.89	0.00	4.70	0.00	11.98	0.00	6.04	0.00	7.19	0.00	5.00	0.00
Maharashtra, Goa	10.91	0.00	6.02	0.00	8.48	0.00	4.92	0.00	12.50	0.00	6.26	0.00	9.61	0.00	5.16	0.00
Northeast	12.10	0.00	5.66	0.00	11.03	0.00	3.59	0.01	12.51	0.00	5.95	0.00	11.04	0.00	5.29	0.01
Orissa	8.39	0.00	5.08	0.00	11.05	0.00	8.00	0.00	8.49	0.00	5.01	0.00	11.13	0.00	8.00	0.00
Punjab	14.44	0.01	10.71	0.00	8.80	0.00	2.92	0.00	13.76	0.00	10.49	0.00	8.97	0.00	2.86	0.00
Rajasthan	14.87	0.00	0.00	0.00	7.75	0.00	4.83	0.00	15.66	0.00	0.00	0.00	8.02	0.00	5.00	0.00
Tamil Nadu	13.29	0.00	4.03	0.00	11.93	0.00	7.98	0.00	13.32	0.00	3.73	0.00	11.98	0.00	7.97	0.00
Uttar Pradesh	9.04	0.00	3.34	0.00	6.98	0.00	3.13	0.00	10.12	0.00	3.02	0.00	7.21	0.00	3.01	0.00
Uttarakhand	10.66	0.00	6.50	0.00	7.53	0.00	4.68	0.00	11.65	0.00	7.01	0.00	7.89	0.00	5.00	0.00
West Bengal	10.71	0.00	3.22	0.00	10.02	0.00	3.06	0.00	11.39	0.00	3.02	0.00	10.11	0.00	3.01	0.00
India	10.97	0.00	4.59	0.00	9.75	0.00	5.29	0.00	12.19	0.00	4.57	0.00	9.33	0.00	4.74	0.00

Source: Author's calculation using IHDS, 2005 data

Table 6: PDS offtake of price per kg of rice and wheat by socioeconomic groups, 2005

Socioeconomic groups	BPL/AAV								Standard /APL							
	Rice Per kg Price				Wheat Per kg Price				Rice Per kg Price				Wheat Per kg Price			
	Market price	S.E of mean	PDS price	S.E of mean	Market price	S.E of mean	PDS price	S.E of mean	Market price	S.E of mean	PDS price	S.E of mean	Market price	S.E of mean	PDS price	S.E of mean
Social Group																
SC	10.78	0.00	4.74	0.00	9.68	0.00	5.29	0.00	11.75	0.00	4.95	0.00	9.19	0.00	4.58	0.00
ST	10.01	0.00	4.64	0.00	9.30	0.00	4.73	0.00	11.53	0.00	5.66	0.00	9.05	0.00	5.19	0.00
OBC	11.07	0.00	4.80	0.00	9.88	0.00	5.60	0.00	11.80	0.00	4.93	0.00	9.21	0.00	5.08	0.00
Higher caste	11.74	0.00	4.93	0.00	9.74	0.00	5.11	0.00	13.07	0.00	5.10	0.00	9.37	0.00	4.44	0.00
Muslims	11.18	0.00	4.87	0.00	9.68	0.00	5.12	0.00	11.48	0.00	4.66	0.00	9.36	0.00	4.64	0.00
Other	12.91	0.00	6.42	0.00	11.91	0.00	7.03	0.00	14.26	0.00	7.89	0.00	10.81	0.00	5.48	0.00
Economic Group																
Poorest	10.38	0.00	4.59	0.00	9.56	0.00	5.16	0.00	10.70	0.00	4.64	0.00	9.00	0.00	4.86	0.00
Poorer	10.45	0.00	4.76	0.00	9.57	0.00	5.19	0.00	11.01	0.00	4.67	0.00	9.03	0.00	4.77	0.00
Middle	10.93	0.00	4.83	0.00	9.75	0.00	5.32	0.00	11.54	0.00	5.03	0.00	9.03	0.00	4.60	0.00
Richer	11.73	0.00	5.05	0.00	10.12	0.00	5.63	0.00	12.32	0.00	5.22	0.00	9.39	0.00	4.79	0.00
Richest	13.16	0.00	5.11	0.00	10.06	0.00	5.64	0.00	13.86	0.00	5.50	0.00	9.80	0.00	4.83	0.00

Source: Author's calculation using IHDS, 2005 data.

Note: An index of economic status (wealth quintile) for each household was constructed using principal components analysis based on data from households. The wealth quintiles is based on 30 assets and housing characteristics, each household assets is assigned a weight (factor score) generated through principle component analysis, and the resulting assets scores are standardized in relation to normal distribution with mean of zero and standard deviation of one.

Table 7: Contribution of PDS to total consumption of rice and wheat in India and states, 2005

India/States	Percent contribution of PDS Rice off take to Total household Rice consumption per month			Percent contribution of PDS Wheat off take to Total household Wheat consumption per month		
	BPL/ Antyodaya	APL/ Standard	Total	BPL/ Antyodaya	APL/ Standard	Total
Andhra Pradesh	33.31	3.52	29.03	1.59	0.07	1.36
Assam	3.40	0.17	1.22	0.00	0.11	0.08
Bihar	0.26	0.03	0.15	0.34	0.03	0.18
Chhattisgarh	20.59	4.73	15.81	9.29	4.19	6.22
Delhi	17.39	2.13	6.84	16.74	1.08	4.92
Gujarat	13.66	1.92	7.70	19.40	1.76	9.51
Haryana	0.00	0.00	0.00	3.22	0.22	0.84
Himachal Pradesh	66.53	32.79	41.26	53.91	27.39	33.65
Jammu & Kashmir	46.97	32.19	37.28	7.88	5.96	6.41
Jharkhand	7.48	1.08	5.19	16.84	1.56	8.80
Karnataka	49.44	6.87	38.56	46.28	7.04	35.45
Kerala	25.39	4.63	12.52	17.71	11.45	13.66
Madhya Pradesh	16.97	2.61	9.81	20.28	3.74	9.50
Maharashtra, Goa	44.53	8.75	18.95	54.38	11.92	24.56
Northeast	17.87	21.67	19.88	0.34	0.50	0.43
Orissa	12.67	1.02	9.27	0.12	0.63	0.30
Punjab	0.00	0.64	0.60	0.00	0.02	0.02
Rajasthan	0.00	0.00	0.00	23.52	0.88	7.21
Tamil Nadu	37.56	29.40	33.36	19.73	19.97	19.86
Uttar Pradesh	14.07	0.37	4.57	12.27	0.42	3.55
Uttarkhand	51.89	3.24	21.47	32.49	0.71	11.70
West Bengal	2.90	0.16	0.98	11.67	0.45	3.49
India	22.29	6.03	13.92	13.55	2.58	6.51

Table 8: Contribution of PDS to total consumption of rice and wheat by socioeconomic characteristics, India, 2005

Socioeconomic groups	Percent contribution of PDS Rice off take to Total household Rice consumption per month			Percent contribution of PDS Wheat off take to Total household Wheat consumption per month		
	BPL/ Antyodaya	APL/ Standard	Total	BPL/ Antyodaya	APL/ Standard	Total
	Social Group					
SC	22.79	6.42	15.82	13.09	2.25	7.35
ST	19.33	10.89	17.05	20.78	6.97	15.36
OBC	23.45	6.93	15.33	12.03	2.46	6.00
Higher caste	20.98	2.59	7.74	14.51	2.67	5.01
Muslims	21.04	7.02	12.28	13.33	2.32	5.77
Other	27.36	4.94	11.75	12.97	1.73	2.85
Economic Group¹						
Poorest	24.54	6.46	17.54	15.58	3.50	9.67
Poorer	21.70	7.22	15.97	13.75	3.70	8.60
Middle	22.66	6.23	15.23	14.09	2.79	7.53
Richer	22.08	5.91	12.86	13.24	2.33	5.73
Richest	15.99	4.98	7.21	7.20	1.83	2.54

Source: Author's calculation using IHDS, 2005 data.

Note: An index of economic status (wealth quintile) for each household was constructed using principal components analysis based on data from households. The wealth quintiles is based on 30 assets and housing characteristics, each household assets is assigned a weight (factor score) generated through principle component analysis, and the resulting assets scores are standardized in relation to normal distribution with mean of zero and standard deviation of one.

Table 9: Reasons for not having a ration cards in India and states, 2005

States/India	Not needed	Lost	Bureaucratic	Moved	Other ¹
Andhra Pradesh	4	3.1	12.8	5.2	74.9
Assam	16.1	11.3	36.6	2.3	33.6
Bihar	0.7	8	86.7	1.2	3.4
Chhattisgarh	13.9	8	66.5	3	8.5
Delhi	21.6	4.3	23	6.8	44.4
Gujarat	18.9	7.3	19.1	27.3	27.3
Haryana	10	10.5	13.6	20.2	45.6
Himachal Pradesh	26.7	3.3	15.5	16.8	37.7
Jammu & Kashmir	7.3	2.9	14.9	9.9	64.9
Jharkhand	1.5	7	64.9	4.5	22
Karnataka	11	3.1	36.6	9.8	39.6
Kerala	10.9		10.8	57.8	20.5
Madhya Pradesh	7.9	7	67	5.3	12.8
Maharashtra, Goa	11.4	11.1	25.3	40.8	11.5
Northeast	33.9	7.6	8.4	5.6	44.5
Orissa	7.1	6.6	69.3	2.6	14.4
Punjab	13.5	18.9	24.9	19.9	22.7
Rajasthan	21.8	6.8	16.6	8.9	45.9
Tamil Nadu	4.9	7.8	10	18.6	58.7
Uttar Pradesh	13.9	11.7	34.4	6.7	33.2
Uttarakhand	19.2	3.5	45.7	6.9	24.6
West Bengal	1.5	41.4	32.6	11.7	12.8
India	9.3	8.3	42.7	9.9	29.8

Source: Author's calculation using IHDS, 2005 data.

Note: 1. Unspecified reason

Table 10: Reasons for not having a ration cards in India and states, 2005

Socioeconomic groups	Not needed	Lost	Bureaucratic	Moved	Other ²
Social groups					
SC	6.30	10.10	44.30	8.90	30.40
ST	10.70	7.60	53.40	7.30	21.10
OBC	7.00	8.50	46.20	8.80	29.50
Higher caste	15.90	6.30	33.20	13.00	31.70
Muslims	6.70	8.90	40.10	9.30	35.00
other	24.70	7.60	13.30	26.90	27.40
Economic groups¹					
poorest	3.90	9.30	54.50	7.00	25.30
poorer	4.90	8.20	51.20	8.20	27.40
middle	7.40	9.00	40.00	11.60	32.00
richer	12.20	8.30	34.30	12.00	33.30
richest	21.00	7.10	26.40	12.50	33.00
	9.50	8.40	42.10	10.10	29.90

Source: Author's calculation using IHDS, 2005 data.

Note: 1. An index of economic status (wealth quintile) for each household was constructed using principal components analysis based on data from households. The wealth quintiles is based on 30 assets and housing characteristics, each household assets is assigned a weight (factor score) generated through principle component analysis, and the resulting assets scores are standardized in relation to normal distribution with mean of zero and standard deviation of one.

2. Unspecified reason

Table 11: Reasons for non-use of ration cards in India and states, 2005

India/States	Reasons for non use of Ration cards					
	Too far	No time	Financial	Irregular supply	Poor quality	Other ¹
Andhra Pradesh	2.7	0.7	0.7	18.4	7.3	70.2
Assam	0	2.2	60.8	19	3.6	14.3
Bihar	1.2	7.1	11.5	19.8	16.7	43.8
Chhattisgarh	3.2	19	2.7	48.7	9.5	17
Delhi	3.7	26.2	0.9	17.7	9.5	42
Gujarat	2.4	9.9	7.2	5.5	4.4	70.6
Haryana	2.2	7.4	1.6	22.4	5.8	60.7
Himachal Pradesh	0	50.7	25.1	4	0	20.2
Jammu & Kashmir	4.6	12	2.3	36.8	6.9	37.4
Jharkhand	0.9	1.9	3.4	59.1	1.7	32.9
Karnataka	2.7	2.1	1.1	12.1	14.5	67.6
Kerala	4.7	16.4	1.1	1.3	40.6	35.9
Madhya Pradesh	8.6	6.4	1.6	41.3	10.8	31.2
Maharashtra, Goa	7.7	10.4	2	19.5	22.2	38.1
Northeast	1.9	3.5	14.2	25.9	8.7	45.9
Orissa	0	16.5	28.7	37.1	3.6	14.1
Punjab	6.9	5.4	4.2	54.5	2.2	26.9
Rajasthan	2.6	6	1.4	15	7.5	67.7
Tamil Nadu	14.2	19.5	1.6	0	5.6	59
Uttar Pradesh	7.7	19.1	0.4	31.3	9.2	32.2
Uttarkhand	6	20.9	9.9	18.6	8.7	35.8
West Bengal	14.2	24.4	0	1.2	1.5	58.8
India	4.9	9.8	4.4	26.5	9.4	45

Source: Author's calculation using IHDS, 2005 data.

Note: 1. Unspecified reason

Table 12: Reasons for non-use of ration cards by socioeconomic characteristics in India, 2005

Socioeconomic Characteristics	Reasons for non use of Ration cards					
	Too far	No time	Financial	Irregular supply	Poor quality	Other ²
Social Group						
SC	5.4	7.2	7.3	34.3	7.1	38.7
ST	2.3	6.1	6.1	44.2	5.5	36
OBC	4.2	7.3	3.3	25.7	9.9	49.6
Higher caste	5.3	12.7	2.5	21.5	10.4	47.6
Muslims	4.5	7.9	13.4	22.5	8.6	43.1
Other	5.5	13.9	1.3	33.5	10.1	35.7
Economic Group¹						
Poorest	3.3	3.6	10.4	30.5	8.2	43.9
Poorer	3.8	6.4	9.8	36.1	7.9	36
Middle	3	6.2	10.8	31	4.9	44.2
Richer	5.6	8	2	30	5.9	48.4
Richest	5.4	12.8	2.1	22	12.3	45.3

Source: Author's calculation using IHDS, 2005 data.

Note: 1. An index of economic status (wealth quintile) for each household was constructed using principal components analysis based on data from households. The wealth quintiles is based on 30 assets and housing characteristics, each household assets is assigned a weight (factor score) generated through principle component analysis, and the resulting assets scores are standardized in relation to normal distribution with mean of zero and standard deviation of one.

2. Unspecified reason

A1: Percentage of households by Type of Ration card and Place of Residence in India and states, 2005

States/India	Rural				Urban			
	No Ration card	BPL card	Standard/APL card	Antodaya Card	No Ration card	BPL card	Standard/APL card	Antodaya Card
Andhra Pradesh	18.01	73.07	8.06	0.86	38.22	39.41	22.27	0.11
Assam	10.07	27.53	61.55	0.85	33.84	13.65	52.26	0.25
Bihar	32.20	35.12	31.32	1.36	36.21	20.69	41.59	1.51
Chhattisgarh	30.75	42.12	16.49	10.64	30.00	15.56	50.74	3.70
Delhi	20.00	27.32	52.68	-	24.93	20.40	54.56	0.12
Gujarat	11.06	48.22	40.72	-	23.54	25.49	50.43	0.54
Haryana	4.47	20.89	74.03	0.61	12.31	2.99	83.58	1.12
Himachal Pradesh	1.38	18.62	72.70	7.30	18.73	7.30	70.16	3.81
Jammu & Kashmir	11.31	32.25	55.39	1.05	15.87	11.11	72.06	0.95
Jharkhand	34.62	43.15	19.41	2.82	55.06	5.19	39.75	-
Karnataka	22.29	64.92	9.60	3.19	37.23	30.65	29.28	2.84
Kerala	5.59	34.77	59.64	-	4.65	39.40	55.94	-
Madhya Pradesh	22.82	28.91	43.93	4.34	28.18	20.22	47.61	3.98
Maharashtra, Goa	8.49	37.24	50.48	3.79	12.31	9.89	77.54	0.26
Northeast	27.13	37.86	32.85	2.16	35.99	9.95	54.05	-
Orissa	18.44	55.27	23.20	3.09	42.83	29.83	25.83	1.50
Punjab	8.27	3.91	87.77	0.05	14.89	5.48	79.63	-
Rajasthan	2.23	26.48	66.79	4.51	10.85	11.22	75.47	2.46
Tamil Nadu	4.39	49.48	46.06	0.07	8.84	44.76	46.16	0.24
Uttar Pradesh	14.33	21.39	58.46	5.82	26.09	5.25	66.96	1.69
Uttarakhand	5.10	32.91	52.89	9.10	18.84	8.00	73.16	-
West Bengal	5.83	28.79	61.78	3.60	5.91	15.85	78.15	0.09
India	14.97	38.67	43.24	3.11	21.16	21.29	56.63	0.92

Source: Indian Human Development Survey, 2005

Note: The IHDS estimates (85 percent in rural and 79 percent in urban) of PDS Ration cards are higher than the NSS estimates (81 percent in rural and 67 percent in urban) perhaps in part because of the households' reluctance to report to a government survey that they have an inappropriate card, or even their expectation of acquiring a new one.

A2: Percentage of households by type of Ration card and economic status (poor/non-poor) in India and states, 2005

States/India	Poor ¹				Non-Poor ¹			
	No Ration card	BPL card	Standard/APL card	Antodaya Card	No Ration card	BPL card	Standard/APL card	Antodaya Card
Andhra Pradesh	14.13	80.29	4.77	0.81	23.63	63.67	12.04	0.66
Assam	8.37	46.44	44.31	0.88	15.74	20.42	63.13	0.71
Bihar	27.52	40.91	27.83	3.74	33.41	32.42	33.15	1.03
Chhattisgarh	28.75	46.79	13.99	10.47	33.15	23.55	35.58	7.71
Delhi	25.42	34.32	40.26	-	24.71	18.98	56.18	0.12
Gujarat	12.63	64.62	22.75	-	16.24	36.55	46.98	0.23
Haryana	4.75	25.63	67.55	2.08	6.55	15.66	77.17	0.62
Himachal Pradesh	1.24	33.90	35.58	29.29	3.44	16.72	73.64	6.20
Jammu & Kashmir	18.24	31.77	44.66	5.33	11.92	27.76	59.39	0.93
Jharkhand	27.12	55.39	14.30	3.18	47.26	20.61	30.49	1.63
Karnataka	18.68	65.52	8.68	7.13	29.01	50.72	17.85	2.42
Kerala	0.53	62.96	36.51	-	6.63	28.83	64.54	-
Madhya Pradesh	25.49	36.44	31.99	6.08	23.23	19.87	53.99	2.91
Maharashtra, Goa	9.30	37.03	51.29	2.38	10.32	22.43	65.02	2.23
Northeast	10.43	61.22	15.77	12.58	30.73	29.07	39.51	0.69
Orissa	13.51	63.76	19.15	3.58	26.72	44.74	26.08	2.45
Punjab	13.91	2.46	83.63	-	10.66	4.49	84.82	0.03
Rajasthan	3.51	26.46	67.01	3.02	4.38	21.64	69.68	4.30
Tamil Nadu	6.54	54.26	39.20	-	6.31	46.04	47.48	0.17
Uttar Pradesh	15.22	26.23	50.84	7.71	17.37	14.91	63.82	3.91
Uttarakhand	7.13	44.72	37.23	10.93	8.21	20.24	65.95	5.59
West Bengal	10.81	37.03	48.89	3.27	4.78	22.31	70.51	2.40
India	15.65	43.66	36.07	4.62	17.01	31.05	50.03	1.91

Source: Indian Human Development Survey, 2005

Note: 1. IHDS calculated household poverty based on the monthly consumption per capita and the official planning commission poverty line as of 2005.

In this analysis **poor** indicates households is below this poverty line and **non-poor** indicates above this poverty line.

A3: PDS offtake of rice and wheat by place of residence India and states, 2005

States/India	Per capita offtake of PDS cereals for person											
	Rural				Urban				Total			
	Rice	S.E of mean	Wheat	S.E of mean	Rice	S.E of mean	Wheat	S.E of mean	Rice	S.E of mean	Wheat	S.E of mean
Andhra Pradesh	2.89	0.00	0.02	0.00	1.44	0.00	0.02	0.00	2.52	0.00	0.02	0.00
Assam	0.12	0.00	0.00	0.00	0.13	0.00	0.01	0.00	0.12	0.00	0.00	0.00
Bihar	0.01	0.00	0.01	0.00	0.03	0.00	0.03	0.00	0.01	0.00	0.01	0.00
Chhattisgarh	1.60	0.01	0.17	0.00	0.76	0.01	0.07	0.00	1.43	0.01	0.15	0.00
Delhi	0.08	0.01	0.16	0.01	0.11	0.00	0.24	0.00	0.11	0.00	0.23	0.00
Gujarat	0.24	0.00	0.41	0.00	0.20	0.00	0.28	0.00	0.23	0.00	0.36	0.00
Haryana	0.00	0.00	0.09	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.07	0.00
Himachal Pradesh	1.91	0.01	2.18	0.01	1.16	0.03	1.02	0.03	1.83	0.01	2.05	0.01
Jammu & Kashmir	4.53	0.03	0.28	0.01	4.52	0.06	0.47	0.01	4.52	0.03	0.31	0.01
Jharkhand	0.28	0.00	0.21	0.00	0.13	0.00	0.11	0.00	0.26	0.00	0.20	0.00
Karnataka	2.61	0.00	0.58	0.00	0.93	0.00	0.21	0.00	2.03	0.00	0.45	0.00
Kerala	1.13	0.00	0.28	0.00	0.47	0.01	0.12	0.00	0.95	0.00	0.23	0.00
Madhya Pradesh	0.28	0.00	0.73	0.00	0.17	0.00	0.68	0.01	0.26	0.00	0.71	0.00
Maharashtra, Goa	0.83	0.00	1.45	0.00	0.18	0.00	0.34	0.00	0.56	0.00	0.99	0.00
Northeast	1.76	0.01	0.01	0.00	1.61	0.03	0.00	0.00	1.73	0.01	0.00	0.00
Orissa	0.94	0.00	0.00	0.00	0.56	0.01	0.03	0.00	0.89	0.00	0.00	0.00
Punjab	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Rajasthan	0.00	0.00	0.67	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.58	0.00
Tamil Nadu	3.68	0.00	0.28	0.00	2.32	0.00	0.34	0.00	3.08	0.00	0.31	0.00
Uttar Pradesh	0.24	0.00	0.26	0.00	0.10	0.00	0.10	0.00	0.21	0.00	0.23	0.00
Uttarakhand	1.19	0.01	0.85	0.01	0.13	0.00	0.10	0.00	0.99	0.01	0.71	0.01
West Bengal	0.13	0.00	0.12	0.00	0.03	0.00	0.03	0.00	0.10	0.00	0.10	0.00
India	0.91	0.00	0.37	0.00	0.56	0.00	0.21	0.00	0.82	0.00	0.32	0.00

A4: PDS offtake of rice and wheat by economics status and type of ration card, India and states, 2005

State/India	BPL/ Antyodaya								APL/ Standard							
	Poor				Non Poor				Poor				Non Poor			
	Rice	S.E of mean	Wheat	S.E of mean	Rice	S.E of mean	Wheat	S.E of mean	Rice	S.E of mean	Wheat	S.E of mean	Rice	S.E of mean	Wheat	S.E of mean
Andhra Pradesh	4.03	0.00	0.04	0.00	3.31	0.00	0.02	0.00	0.89	0.01	0.00	0.00	0.27	0.00	0.00	0.00
Assam	0.38	0.01	0.00	0.00	0.42	0.01	0.00	0.00	0.03	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Bihar	0.03	0.00	0.04	0.00	0.02	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chhattisgarh	3.75	0.01	0.25	0.00	1.69	0.01	0.20	0.00	1.35	0.03	0.09	0.00	0.25	0.01	0.17	0.00
Delhi	1.19	0.07	1.55	0.05	0.36	0.01	0.88	0.01	0.00	0.00	0.00	0.00	0.04	0.00	0.07	0.00
Gujarat	0.52	0.00	0.89	0.00	0.46	0.00	0.73	0.00	0.12	0.00	0.22	0.00	0.05	0.00	0.05	0.00
Haryana	0.00	0.00	1.03	0.03	0.00	0.00	0.07	0.01	0.00	0.00	0.06	0.00	0.00	0.00	0.01	0.00
Himachal Pradesh	4.22	0.04	3.81	0.04	2.83	0.03	3.19	0.03	1.76	0.03	2.13	0.03	1.42	0.01	1.66	0.02
Jammu & Kashmir	6.07	0.07	0.50	0.02	6.60	0.06	0.30	0.01	2.64	0.08	0.59	0.03	4.10	0.05	0.27	0.01
Jharkhand	0.84	0.01	0.60	0.00	0.42	0.01	0.35	0.00	0.21	0.01	0.18	0.01	0.03	0.00	0.03	0.00
Karnataka	4.14	0.00	0.89	0.00	2.77	0.01	0.61	0.00	1.13	0.01	0.29	0.00	0.40	0.01	0.11	0.00
Kerala	1.68	0.01	0.25	0.00	1.92	0.01	0.28	0.00	0.37	0.01	0.35	0.00	0.38	0.00	0.20	0.00
Madhya Pradesh	0.82	0.01	2.21	0.01	0.52	0.01	1.09	0.01	0.09	0.00	0.67	0.01	0.05	0.00	0.21	0.01
Maharashtra, Goa	1.49	0.00	2.62	0.01	1.23	0.00	2.09	0.01	0.61	0.00	1.15	0.01	0.22	0.00	0.39	0.00
Northeast	4.29	0.04	0.01	0.00	1.37	0.02	0.00	0.00	1.81	0.05	0.01	0.00	2.72	0.03	0.01	0.00
Orissa	1.60	0.01	0.00	0.00	1.49	0.01	0.01	0.00	0.11	0.00	0.00	0.00	0.11	0.00	0.02	0.00
Punjab	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Rajasthan	0.00	0.00	2.76	0.02	0.00	0.00	1.48	0.02	0.00	0.00	0.14	0.00	0.00	0.00	0.05	0.00
Tamil Nadu	4.51	0.01	0.34	0.00	3.00	0.00	0.33	0.00	3.62	0.01	0.27	0.00	2.46	0.00	0.34	0.00
Uttar Pradesh	0.99	0.00	0.97	0.00	0.69	0.01	0.78	0.01	0.04	0.00	0.06	0.00	0.01	0.00	0.02	0.00
Uttarkhand	3.43	0.02	2.06	0.01	2.12	0.02	2.14	0.02	0.63	0.01	0.13	0.01	0.05	0.00	0.03	0.00
West Bengal	0.38	0.00	0.33	0.00	0.29	0.00	0.32	0.00	0.02	0.00	0.03	0.00	0.01	0.00	0.01	0.00
India	1.98	0.00	0.78	0.00	1.60	0.00	0.60	0.00	0.49	0.00	0.24	0.00	0.31	0.00	0.13	0.00

Source: Author's calculation using IHDS, 2005 data.

Note: 1. IHDS calculated household poverty based on the monthly consumption per capita and the official planning commission poverty line as of 2005. In this analysis **poor** indicates households is below this poverty line and **non-poor** indicates above this poverty line.