

# Assessing the Scope for Cash Transfers in lieu of the TPDS in Rural and Urban Bihar



Pre-Pilot Study Summary Report

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## Executive Summary

The Government of India's Targeted Public Distribution System (TPDS) is designed to promote food security among vulnerable segments of the population through the provision of subsidized commodities. In practice, the TPDS has been afflicted with inefficiencies and leakage to such an extent that prominent academics and policy-makers have suggested migrating to a system of direct cash transfers instead.

Following interest from the Government of Bihar in piloting and evaluating a cash transfer program in lieu of current TPDS subsidies, the Jameel Poverty Action Lab (J-PAL) South Asia conducted a pre-pilot study to assess beneficiary interest in switching from TPDS rations to cash transfers in the state of Bihar. The main objectives of the study were to gather information on the user experience at ration shops and non-ration shops and to gauge interest among beneficiaries for a cash transfer program. A representative sample of 500 TPDS beneficiaries was drawn from urban and rural areas of Patna, and the survey was conducted in April 2011.

The highlights of the pre-pilot study (discussed in detail in this report) are presented below:

- While access (in terms of distance) to fair price shops (FPS's) is fairly high, the vast majority of respondents also reported multiple *kirana* shops in the same geographic radius, suggesting substantial competition in the open market and options for grocery purchases beyond the FPS's.
- However, 'effective access' to FPS's is more limited, with the average FPS being open for 10 days/month in urban areas and only 6 days/month in rural areas. *Kirana* shops are open almost every day and are also open for more hours per day than FPS's. Even when the FPS is open, reported waiting times are much longer in FPS's than *kirana* shops.
- Over 80% of respondents reported adulteration of goods at the FPS, while reports of adulteration were infrequent for *kirana* shops. A majority of respondents also reported that the goods they received from the FPS weighed less than what they paid for, while fewer than 10% of respondents reported under-weighting of goods in *kirana* shops.
- While respondents reported fluctuations in *kirana* shop prices, the degree of volatility was not high and did not exceed 15% over the course of the previous 365 days.
- **An overwhelming majority of respondents expressed an interest in participating in a cash transfer program that paid them the equivalent value of the subsidy provided through the TPDS (>95%).**
- However, respondents did express certain concerns including inflation, fear of not getting complete cash transfer/delayed cash transfer, and potential for cash to be spent on non-essential items.
- The minimum value of cash for which respondents were willing to forgo their TPDS ration was higher, on average, than the value of the entitled FPS subsidy that they currently received.
- The majority of respondents (regardless of gender) stated a preference for the cash transfer to be given to the female head of household and through either a bank or the post office.

The report also includes insights generated through a detailed focus group discussion that was conducted with current TPDS beneficiaries in urban Patna. Data from both the household survey and focus group discussion illustrate the weaknesses of the current TPDS system and the high level of interest among beneficiaries in switching to cash transfers. The findings from this pre-pilot study provide a compelling case for conducting and evaluating a larger-scale cash transfer pilot study in the state of Bihar.

## Background

### The Targeted Public Distribution System (TPDS)

India's targeted public distribution system (TPDS) serves as the government's main instrument for combating food insecurity. Through a network of local retailers or fair price shops (FPS's), households classified as 'below the poverty line' (BPL) are eligible to receive subsidized commodities. While many policy-makers feel that the provision of rations is and must remain an essential government function, it is widely accepted that the current TPDS is in need of significant reform.

The TPDS suffers from both inefficiency and leakage, with a 2005 Planning Commission study estimating that the Government of India (GoI) spends Rs.3.65 for every Rs.1 worth of benefits delivered. The State of Bihar's TPDS is particularly plagued by inefficiencies, with leakage estimated at 75% in 2005.<sup>1</sup> A second weakness is the restrictions placed upon beneficiary choice by the FPS system. The PEO study found that 70% of respondents preferred local food varieties to those offered at the FPS. Finally, populations like migrant workers are disadvantaged by TPDS benefits being tied to a single FPS.

### Pros and Cons of Cash Transfers in Lieu of TPDS

Given the challenges described above, a number of policy-makers and academics<sup>2</sup> have suggested a case for switching to a system of cash transfers. Proponents of cash transfers emphasize the importance of leveraging the biometric architecture of GoI's *Aadhaar* program.<sup>3</sup> This infrastructure can enable secure payments and potentially close key channels of leakage. In addition, by eliminating the onerous supply chain attached to the current system, cash transfers can lower administrative costs. Finally, cash transfers can empower beneficiaries and provide them with a greater measure of choice in terms of their purchasing options.

Opponents of cash transfers in lieu of the TPDS have argued that the current system, though flawed, is designed to protect vulnerable segments of society from fluctuations in prices and ensures that they have access to subsidized food.<sup>4</sup> The provision of cash may afford beneficiaries more choice, but may also expose them to market volatilities, potentially leaving them even more impoverished. Due to less competition and higher transportation costs in remote areas, critics also point to the fact that an equivalent amount of cash may translate to lower benefits in rural, as compared to urban, areas. Finally, a common concern is that in the absence of restrictions, beneficiaries will be tempted to spend cash in wasteful ways (e.g. alcohol consumption).

### How Should we Decide?

Since there are valid arguments both in favor of and against the concept of cash transfers, the question of whether the benefits of switching to cash transfers outweigh the costs is largely an empirical one. This question is best answered by conducting serious pilots of cash transfers and carefully evaluating them to assess whether the promised benefits materialize and whether stated concerns end up being important in practice.

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<sup>1</sup> PEO (2005).

<sup>2</sup> See Basu (2010) and Jha and Ramaswami (2010) for illustrative examples (among several others).

<sup>3</sup> Chaudhuri and Somanathan (2011)

<sup>4</sup> Drèze (2011).

## Pre-Pilot Study - Background and Objectives

The state of Bihar has been among the most pro-active in wanting to try out the idea of cash transfers, with political leaders having expressed a strong interest in considering and evaluating the concept. Specifically, the Chief Minister Nitish Kumar has spoken on multiple occasions about the desirability of cash transfers,<sup>5</sup> and the Deputy Chief Minister has called upon academics to assess the effectiveness of cash transfers.<sup>6</sup> Given levels of interest in Bihar and the current salience of cash transfers in the national discourse on the Right to Food legislation, the authors of this report have been in discussions with the Department of Food and Consumer Protection (FCP), Govt. of Bihar since December 2010 to conduct a pilot project on cash transfers and to rigorously evaluate the impact of the program.

As a precursor to a pilot project, the Principal Secretary, FCP requested a pre-pilot study to gather background information on user experiences with the TPDS and to gauge interest among beneficiaries for cash transfers in lieu of TPDS subsidies.<sup>7</sup>

## Pre-Pilot Study - Sampling and Implementation

The pre-pilot study was overseen by a research team from J-PAL South Asia, with field work conducted by the Indian Market Research Board (IMRB),<sup>8</sup> and financial support provided by the Omidyar Network. Prior to initiation of the study, the J-PAL research team developed a detailed household survey with modules designed to elicit information on the user experience at FPS's and *kirana* shops and to gauge interest in cash transfers. The instrument was piloted in the field for a period of two weeks, after which a group of 15 surveyors was trained for approximately 10 days.

The sampling was designed to be representative of BPL and *Antyodaya* (a sub-category of BPL, considered to be the 'poorest of the poor') beneficiaries and was conducted using lists of BPL and Antyodaya beneficiaries obtained from GoB. For the rural component of the survey, 30 villages in Patna district were sampled using a probability proportional to size (PPS) method. 10 households were randomly selected within each village. In total, 296 rural household surveys were completed. In cases where it was not possible to interview the originally sampled household, surveyors were permitted to interview a household from a randomly pre-sampled replacement list. 14% of originally sampled households ended up being replaced.

Due to the difficulty of obtaining information on addresses, a different sampling method had to be applied for the urban component of the survey. Specifically, 20 FPS were sampled in urban areas of Patna district, again using PPS (based on the number of beneficiaries). IMRB teams assessed the catchment area of each FPS and divided the area into hamlets with populations of roughly 250 households each. 2 hamlets were randomly selected in each FPS, and 5 households were surveyed in each hamlet. A random number between 1 and 50 was used to identify the first household to survey, following which every 50<sup>th</sup> household in the hamlet (using a right hand rule) was interviewed. A total of 195 urban household surveys were completed.

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<sup>5</sup> Interview of Bihar Chief Minister, Nitish Kumar by Vandita Mishra - Indian Express (2011).

<sup>6</sup> IGC Bihar Growth Conference (Dec 2010).

<sup>7</sup> The only other similar exercise we are aware of was conducted by SEWA in Delhi, where 150 households were surveyed. The results are summarized in SEWA (2009) and are similar in many ways to what we find.

<sup>8</sup> We would like to thank IMRB, particularly Saurabh Sardana, Nishant Kumar and the staff at the field office in Patna for their dedicated efforts for high quality and timely completion of the field work and data entry.

## Findings from Pre-Pilot Household Survey

### Household Characteristics

Table 1 presents figures on household characteristics and eligibility categories of surveyed households. The majority of households in both the rural and urban sample possessed BPL cards/coupons. A much smaller percentage possessed either *Antyodaya* or 'above poverty line' (APL) cards/coupons.<sup>9</sup> Households reported an average monthly expenditure of around Rs. 4,200 in urban areas and around Rs. 3,700 in rural areas. In addition, most households in the sample did not have any member who was educated beyond Class 10. The majority of men were employed in wage labor and the majority of women were engaged in housework as their primary activity

**Table 1: Household Characteristics**

Household Characteristic	Urban	Rural
<b>Panel A (Household Size and Category)</b>		
Average household size	6.4	6.3
% of households who reported having an APL card/coupon	0.5	8.3
% of households who reported having a BPL card/coupon	90.3	84.0
% of households who reported having an <i>Antyodaya</i> card/coupon	9.2	18.8
<b>Panel B (Expenditure and Education Levels)</b>		
Average household monthly expenditure (in Rs.)	4,222.0	3,688.0
% of households where the highest education level in the household is class 5 or lower	25.2	37.3
% of households where the highest education level in the household is class 10 or lower	83.1	87.6
<b>Panel C (Occupation)</b>		
Percentage of households where the <b>male</b> head of the household is primarily occupied in (top 3 occupations):		
Wage Labor	51.3	38.2
Self-employed	23.6	19.8
Agriculture	2.1	23.3
Percentage of households where the <b>female</b> head of the household is primarily occupied in (top 3 occupations):		
Housework	77.4	62.5
Agriculture	1.0	14.9
Wage Labor	7.7	7.6

### Access to FPS and Kirana Shops

Table 2 summarizes reported distances to the nearest FPS, as well as the density of surrounding *kirana* shops. Access to an FPS in terms of physical distance is reasonably good: 60% of urban and 57% of rural respondents reported having an FPS within 1 km, and over 96% of respondents reported having one

<sup>9</sup> Around 14.6% of households in the rural sample and 1.5% of the households in the urban sample possessed more than one type of card/coupons.

within 3 km. However, it is very rarely the case that a beneficiary does not have a private *kirana* shop available in the same distance radius as the FPS (1.5% of urban respondents and 6.3% of rural respondents), and the extent of competition among *kirana* shops is quite substantial. Overall, rural households reported an average of 4 *kirana* shops within the same distance as the FPS and urban households an average of 7.

**Table 2: Location of Nearby FPS and *Kirana* Shops**

Distance to Assigned FPS	% of Households in Urban	% of Households in Rural
1km or less	60.0	56.9
1-3km	35.4	39.6
3-5km	3.6	3.5
	Urban	Rural
Average number of <i>kirana</i> shops within same distance as assigned FPS	7	4

Table 3 illustrates the sharp contrast in ease of access to FPS's and *kirana* shops when measured by the number of days the shops are open in a month and the number of hours open in a day (when open). While *kirana* shops are essentially open on all days in a month (in both rural and urban areas), we see that in rural areas over 50% of respondents reported that the FPS is open less than 5 days/month and over 80% reported that it is open less than 10 days/month. In urban areas, the FPS is open a little more often, but close to 50% of respondents reported that the FPS is open less than 10 days/month. On average an FPS was reported as being open for 10 days/month in urban areas and 6 days/month in rural areas, while the *kirana* shops were reported as being open on all days of the month (30 days/month). Finally, on days when the outlets were open, respondents reported that *kirana* shops operated for roughly twice the number of hours as FPS's.

**Table 3: Days per Month and Hours per Day that FPS and *Kirana* Shop are Open**

	Urban		Rural	
	FPS	<i>Kirana</i> Shop	FPS	<i>Kirana</i> Shop
Average days open per month	9.7	30	6.0	29.8
% of respondents reporting shop open for less than 5 days/month	13.8	0.0	54.2	0.0
% of respondents reporting shop open for less than 10 days/month	48.7	0.0	81.6	0.0
Average hours open per day (when shop is open)	5.1	11.0	6.1	10.6

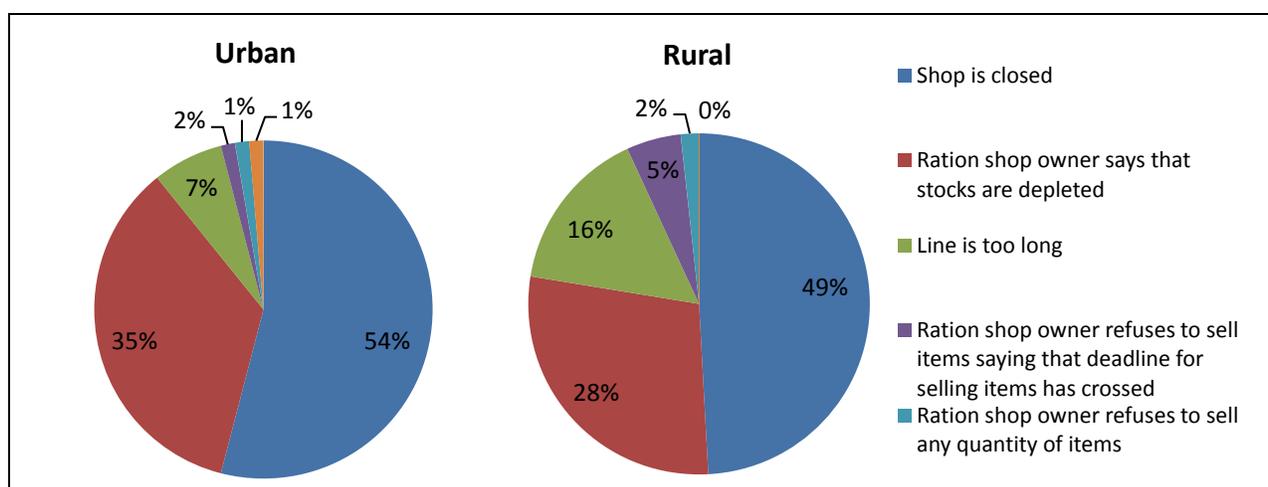
The time-cost of purchasing goods is an important consideration, especially for poor families that must forego wages in order to make a trip to the FPS or *kirana* shop. Table 4 summarizes data on the average time spent waiting in queues during each visit to the FPS or *kirana* shop. While roughly 80% of rural and urban respondents said that their waiting time at the *kirana* shop was less than 15 minutes, only 13% of rural respondents and 24% of urban respondents reported waiting less than 15 minutes to buy goods at their FPS. Wait times seem particularly problematic in rural Patna, where more than 50% of respondents reported waiting in excess of 45 minutes.

**Table 4: Waiting Times at FPS and Kirana Shop**

Waiting Time	% of Households in Urban		% of Households in Rural	
	FPS	Kirana Shop	FPS	Kirana Shop
Less than 15 minutes	24.1	78.5	13.2	81.3
16-30 minutes	40.5	17.9	29.2	14.6
31-45 minutes	2.6	0.0	5.6	0.7
More than 45 minutes	27.2	3.1	52.1	3.1

In summary, these data suggest that *kirana* shops are open on more days of the month, for more hours per day, and require customers to wait a lot less than FPS's. Moreover, there are several *kirana* shops in the same geographic radius as the assigned FPS. This suggests that beneficiaries have multiple options for purchasing their groceries and that private *kirana* shop owners face competitive pressures to be accessible to their customers in a way that FPS owners do not (since they have a local monopoly on distributing subsidized commodities).

Another manifestation of the limited success of the status quo in providing food security is that rural and urban respondents reported an average of **1.47** and **1.85 unsuccessful trips per month to the FPS**, respectively. When we probed households as to why they were unable to purchase desired goods, roughly half cited the shop being closed and roughly 30% reported the shop owner saying stocks were depleted. Among rural respondents, 15.5% reported queues being too long (see Figure 1 below)

**Figure 1: Reasons Households are Unable to Purchase Goods at FPS**

### Purchasing Patterns at FPS and Kirana Shops

Results from the survey also indicate that while respondents are purchasing goods at FPS's, they are typically supplementing these purchases with goods from non-FPS outlets. Table 5 provides information on the average quantities of goods that households reported purchasing in the last month from the FPS and from private *kirana* stores.

**Table 5: Average Quantity of Goods Purchased in the Last 30 days at FPS and Kirana Shop**

Item	Urban		Rural	
	FPS	Kirana Shop	FPS	Kirana Shop
Wheat (kg)	9.4	21.8	10.1	15.4
Rice (kg)	12.9	21.8	12.6	19.5
Kerosene (L)	1.9	0.5	2.9	0.7

Table 6 shows the fraction of respondents who purchased any *kirana* shop good in the last month.

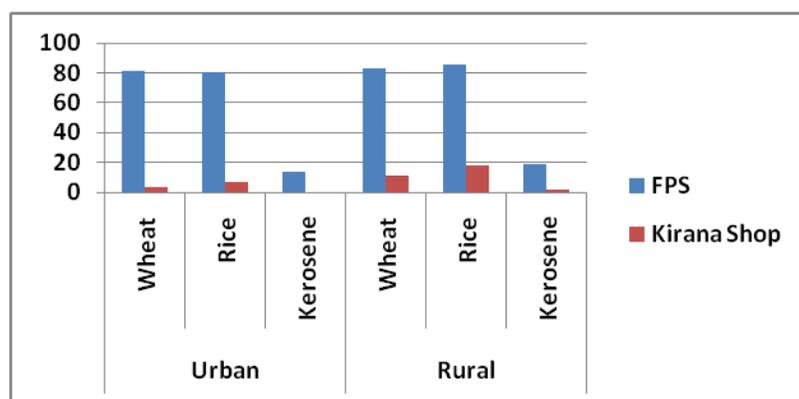
**Table 6: Percentage of Households that Purchased any Good from Kirana Shop in last 30 Days**

Item	% of Urban Households	% of Rural Households
Wheat	87.2	57.3
Rice	88.7	63.2
Kerosene	20.0	30.2

The data in these two tables underscore the fact that receipts through the TPDS are not sufficient to meet household needs. These findings are important because they suggest that a majority of respondents **already use the private market** over and above their FPS entitlements. In a situation where TPDS beneficiaries are spending out of pocket of their own volition, it is less likely that a cash transfer of the same value as the current subsidy will be spent on non-food items (in technical terms – the value of the transfer would be ‘infra-marginal’ to the total desired consumption of food).

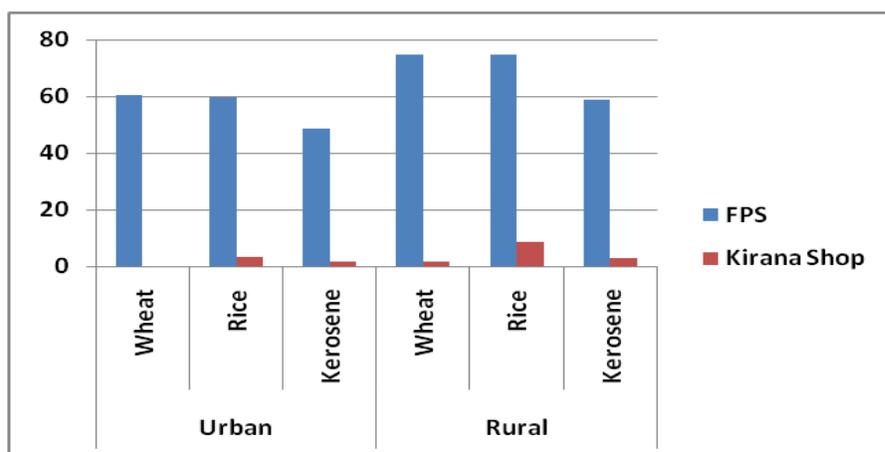
### Challenges with Purchasing Goods: Adulteration and Under-weighting

In addition to leakage of grains en-route to the FPS (which manifests itself to beneficiaries in terms of closed and out of stock shops), two additional forms of leakage include adulteration and under-weighting of goods. Our survey asked respondents a series of questions to understand their exposure to these forms of leakage. As illustrated by Figure 2, over 80% of respondents reported at least some adulteration at the FPS, while reports of adulteration were infrequent for *kirana* shops (less than 10% in urban areas and less than 20% in rural areas).

**Figure 2: Percentage of Respondents that Report Adulteration at FPS and Kirana Shop**

In addition to adulteration, a majority of respondents reported that the goods they receive from the FPS weigh less than what they pay for (around 60% in urban areas and 75% in rural areas). The corresponding fraction of respondents reporting under-weighting of goods in *kirana* shops is a lot lower and never over 10% (Figure 3).

**Figure 3: Percentage of Respondents that Report Under-weighting of Goods at FPS and *Kirana* Shop**



These data confirm leakage along two important dimensions: FPS's are more likely to provide lower quality goods due to adulteration and more likely to under-weight goods or provide beneficiaries less than the amount that they pay for.

### Price Volatility in the Open Market

A key concern expressed by skeptics of cash transfers is that beneficiaries will be exposed to price fluctuations in the open market. In order to gauge price volatility, we asked respondents to report maximum and minimum prices at *kirana* stores over the last 3 months and 1 year (Table 7).

**Table 7: Price Volatility at *Kirana* Shop over the last 90 and 365 Days**

Item	Urban				Rural			
	Last 90 Days		Last 365 Days		Last 90 Days		Last 365 Days	
	Max (Rs.)	Min (Rs.)	Max (Rs.)	Min (Rs.)	Max (Rs.)	Min (Rs.)	Max (Rs.)	Min (Rs.)
Wheat ( <i>per kg</i> )	12	12	12	11	12	12	12	11
Rice ( <i>per kg</i> )	23	21	23	20	21	19	21	18
Kerosene ( <i>per lt</i> )	33	33	33	31	33	32	33	30

The data show that price volatility is present, but that the extent is not very high. In the past year, the average difference between the minimum and maximum price is 10% of the minimum price in rural Patna and 12% in urban Patna.

## Interest in Cash Transfers

A key objective of the study was to gauge levels of interest among TPDS beneficiaries in switching to cash transfers. The first step was to ensure that respondents had a thorough understanding of what a cash transfer would entail. The specific explanation provided by surveyors is presented in Box 1. Beyond this text, surveyors often spent extra time clarifying the concept and addressing respondents' questions.

### Box 1: Explanation Provided to Respondents on Cash Transfer Program

*"The Government of Bihar is considering a program whereby households would receive a direct cash transfer equal to the current subsidy that they are receiving every month instead of their eligibility to purchase food from the ration shop. The amount of transfer will be based on the difference in the price of an item between a kirana store and the ration store, multiplied by their monthly entitlement of that item.*

*For example, if your household is eligible to purchase 10kgs of wheat from the ration store at Rs. 5/kg, and the price of wheat at the kirana store is Rs. 20/kg, then the government is currently providing you a subsidy of Rs. 15/kg [Rs. 20/kg – Rs. 5/kg] and a total of Rs. 150 [Rs. 15/kg × 10kgs]. Under this proposal, the same subsidy of Rs. 150 would be provided to you as cash every month. Moreover, the amount of the cash transfer will be adjusted every year to account for inflation. For example, if the price of wheat at the kirana store increases to Rs. 25/kg, then the cash transfer amount would increase to Rs. 200 [10kgs × (Rs. 25/kg – Rs. 5/kg)]."*

Table 8 presents data on how respondents initially reacted to the proposal; the figures clearly illustrate that support for cash transfers and willingness to participate in the cash transfer program was overwhelmingly high.

**Table 8: Initial Perceptions of the Cash Transfer Program**

	% of Urban households	% of Rural households
Support or strongly support idea of cash transfers	95.9	98.3
Willing to participate in the cash transfer program	94.4	96.9

Respondents were also probed on what they perceived to be the advantages and disadvantages of cash transfers. Tables 9 and 10 summarize these findings. Not surprisingly, respondents cited the poor quality of ration shop goods and the under-provision of their entitlements as benefits of switching to cash. Many also viewed the flexibility afforded by cash as an advantage.

Even though 95% of respondents reported a willingness to take part in a cash transfer program, they did have concerns about cash transfers as well. A large percentage of respondents expressed concern about receiving their transfers on time, as well as receiving the full amount. A substantial proportion of both urban and rural respondents were worried that cash would be spent on non-essential items. Roughly one third of urban households and one fifth of rural households cited inflation as a concern. These findings highlight aspects of the overall program design (e.g. mechanisms for secure and timely payments and controls for inflation) that will be critical for ensuring that cash transfers are implemented effectively and in a way that is easily accessible to users.

**Table 9: Reported Advantages of Cash Transfers over Subsidy**

	<b>% of Urban Respondents that Agree with Statement</b>	<b>% of Rural Respondents that Agree with Statement</b>
I get bad quality commodities from the FPS	83.8	68.3
I do not get my complete entitlement from the FPS	48.7	57.1
I have a much broader range of options with cash transfers	54.5	53.7
The FPS is quite far away/ I have to wait in a very long queue to collect my entitlement	27.2	32.8
I have to pay more than the subsidized price to get my allotment at the FPS	23.6	21.3
The FPS is closed most of the time/the stock is depleted	19.9	18.1
I have no other income/I need cash to meet my most pressing needs	3.1	13.6

**Table 10: Reported Concerns about Cash Transfers**

	<b>% of Urban Respondents that Agree with Statement</b>	<b>% of Rural Respondents that Agree with Statement</b>
There is no guarantee that I will receive cash on time	70.9	70.4
Cash might be spent on non-essential needs	39.2	45.5
I am afraid that I might not receive my fully entitled cash amount	38.1	39.7
I am afraid that I may have to pay a commission or a bribe to receive the cash.	29.6	33.2
I am afraid that I may have to exert a lot of effort to receive the cash amount.	16.9	26.7
Market prices may increase substantially and I may not be able to afford to buy goods in the market	32.8	22.4
The quality of commodities at the FPS and non-FPS shops is the same.	0.0	0.7

## Valuation of Subsidy

An important objective of the 'pre-pilot' study was to identify the minimum threshold at which TPDS beneficiaries would be willing to forgo their current ration in favor of a cash transfer. Starting with the amount of Rs. 250 per month (determined prior to the survey based on a rough sense of the minimum FPS subsidy received by certain households), surveyors asked respondents whether they would prefer to receive their ration next month or a specified amount of cash. The amount was increased in Rs. 50 increments until a maximum offer of Rs. 1,000 was reached. If the respondent did not accept any offer below Rs. 1,000, the surveyor asked directly for the minimum amount he or she would be willing to accept. In Table 11, we present minimum threshold amounts, split by urban/rural and category of

eligibility. As expected *Antyodaya* families had a higher threshold than BPL families given their larger entitlement.

**Table 11: Valuation of Subsidy**

	Urban		Rural	
	BPL	<i>Antyodaya</i>	BPL	<i>Antyodaya</i>
Minimum amount of cash for which respondent would be willing to switch from ration to cash (in Rs.)	577	694	587	633
Value of maximum subsidy from FPS, based on full entitlement (in Rs.)	318	506	278	460
Percentage of households that stated a valuation higher than the maximum subsidy from FPS	64	39	82	48

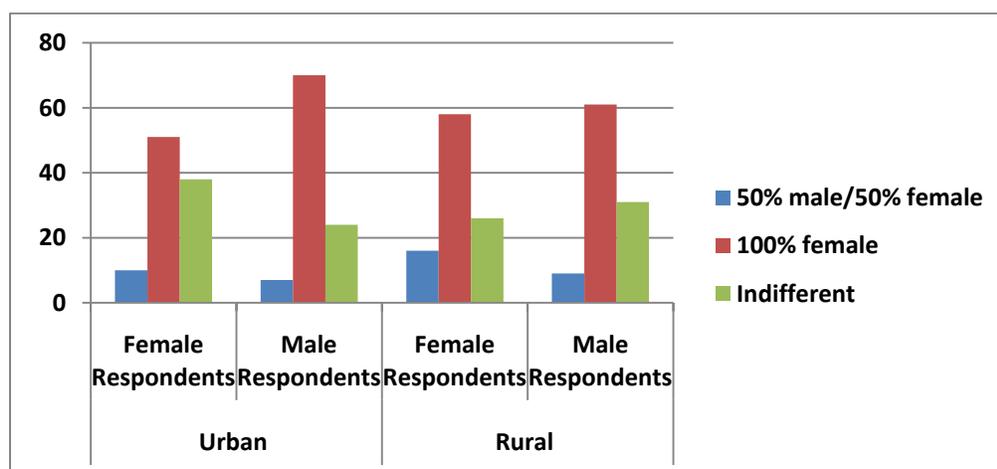
We found that 64-82% of BPL households and 39-48% of *Antyodaya* households produced a valuation of the cash transfer that is higher than the maximum FPS subsidy. Note that there is a disconnect between the responses to this question and the previous one: while over 95% of respondents reported wanting to be part of a cash transfer pilot that provides them with a cash payment **equal to the value** of the current subsidy, in this section, a majority of respondents suggested that the value of transfer that they would require would be **higher** than the current value of the subsidy.

This suggests that there may be considerable uncertainty in respondent's minds as to the actual value of the transfer that they will receive under such a pilot. It would therefore be important for a pilot on cash transfers to try and preserve some choice for the beneficiary, whereby they can choose whether to receive their benefits in cash or in kind - once the exact amount of the cash transfer is known.

## Preference for Receiving the Cash Transfer

We asked respondents to express their preference regarding two aspects of the cash transfer: the gender of the recipient and the mode of receipt. With respect to the former, we asked the male and female head of household separately whether they would prefer the transfer be given exclusively to the female head of household or split between the male and female. Respondents were also allowed to be indifferent between the two options.

The results are presented in Figure 4 below. Around 60% of respondents indicated a preference for the transfer to be given exclusively to the female head of the household - with male respondents even more in favor of this than female respondents! A small fraction (around 15%) preferred that the funds be transferred equally between the male and female heads of household, with the remaining respondents being indifferent between the options.

**Figure 4: Preference for Gender Ownership of Cash Transfer**

Finally, we elicited views on where beneficiaries wished to receive their cash transfers. Table 12 provides a break-down of the preferred location for urban and rural respondents. Households were roughly split between the post office and bank, indicating a certain level of trust in these institutions. This suggests that providing cash transfers in remote areas that are not well served by either a bank or a post office will require an investment in solving the 'last mile' cash delivery problem.

**Table 12: Reported Preference for Location of Cash Collection**

	% of Urban Households	% of Rural Households
Post office	52.8	42.0
Nearby bank	45.6	52.8
Panchayat office	1.0	3.5
At the beneficiary's home	0.0	0.3

## Findings from Focus Group Discussion

In addition to the household questionnaire, the pre-pilot study also included a detailed qualitative focus group discussion. The aim of this discussion was to probe beneficiaries more deeply on their experiences accessing the TPDS, as well as their views and concerns about a direct cash transfer program.

Participants were drawn from the catchment area of one FPS in urban Patna. All participants were female BPL-card holders of a similar socio-economic background to those sampled for the survey. The discussion was conducted by a professional moderator and every effort was made to promote free and open discussion. While the views that emerged over the course of the discussion are not necessarily representative of those held by all FPS beneficiaries, a number of useful insights emerged.

### User Experience at Fair Price Shops

- Participants expressed frustration that a round-trip visit to the FPS usually takes 2-3 hours and that the shop is only open at inconvenient hours (typically between 8am and 2pm) on select

days. Many women discussed their anxiety about leaving children at home and neglecting household duties during trips to the FPS.

- Participants said that the entitled ration amount is not sufficient to meet household needs and that they have to supplement with more expensive purchases from other stores. They expressed their wish to receive a larger entitlement, as well as subsidies for other items like sugar and soap.
- Participants were dissatisfied with the quality of goods at the FPS and cited adulteration and the prevalence of impurities as a common occurrence. Women reported that if they mention adulteration or other quality issues to the FPS owner, the response is that beneficiaries can simply not take the goods if they are not interested.
- Participants reported that they are sometimes given less than their entitled amount and told adjustments will be made the following month.
- Over-payment was not cited as a problem. Participants said they do not typically pay more than the standard amount of Rs.170 (they were generally not aware of the break-down of unit costs).

### Interest in Cash Transfers

- Participants expressed support conditional on reliable payments every month
- They feared scenarios where they would not receive the cash transfer in time, on top of having lost access to FPS goods.
- Some participants expressed concern that the amount of cash provided would not allow them to buy a similar amount of goods at the *kirana* shop.
- Some participants were concerned that their ration card would be taken away, since they required it as a means of identification for accessing other benefits and services.
- Some participants were hesitant for the cash to be transferred via a bank account due to the time and effort required to set up an account. Others said that if they had to access the transferred cash via a card, they would not be able to monitor how much balance remained.

### Conclusion

The findings presented in this report suggest that while heavily utilized, the current TPDS system has weaknesses along several dimensions. Access is highly inconvenient (in terms of hours of operation) and availability of stocks is low, when compared to *kirana* shops. Individuals are inconvenienced by having to make multiple trips to FPS's and waiting in longer lines once they reach the shop. The quality of goods is clearly inferior to those available in the outside market, with adulteration widely prevalent. Beneficiaries are also significantly more exposed to practices of under-weighting at the ration shop.

The overwhelming majority of respondents expressed an interest in participating in a cash transfer program in lieu of their benefits at the ration shop, conditional on the value of the transfer being at least as high as the subsidy they currently receive from the FPS, and the existence of a reliable cash delivery mechanism. However, respondents cited a number of concerns, including the reliability of the payments and the scope for cash to be spent on non-essentials. Moreover, a large portion of respondents produced a valuation of the cash subsidy that was higher than their current TPDS entitlement.

Price inflation and lack of access to grains in the open market are two potential concerns that have been raised with respect to a cash-based system. Our data indicate that price fluctuations at *kirana* stores are relatively low, and that even in rural areas, there is substantial competition and access to non-FPS retailers. Even under the current system, the vast majority of TPDS beneficiaries are supplementing their rations with goods purchased at non-FPS shops.

A cash transfer program will have to be carefully designed to ensure secure, timely payments, with mechanisms in place to adjust the value of the transfers to compensate for price increases. Moreover, it will be essential to invest in a secure payments channel for the cash transfers before commencing a pilot program to replace TPDS entitlements with cash transfers.

The Government of Bihar has expressed an interest in implementing a pilot project to provide direct cash transfers to beneficiaries, and the results of this pre-pilot study suggest that there is substantial interest in this idea among beneficiaries.

Our recommended next step is to identify sites for a cash transfer pilot, ensure the creation of a secure payment channel for the cash transfers in pilot areas, and to then commence a pilot where **beneficiaries are provided a choice** as to whether to receive their entitlements in cash or to retain their status quo entitlements (where the choice can be updated every few months). This will ensure that the benefits of cash transfers can be realized where possible, but the choice of remaining with the status quo will ensure that no beneficiary is worse off and provide insurance against poor implementation of the cash transfer pilot or price fluctuations. We also recommend that the pilot be conducted in a way that enables a careful evaluation of the impact of cash transfers on beneficiary welfare - as outlined in the accompanying proposal.<sup>10</sup>

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<sup>10</sup> This pre-pilot report was prepared by the authors as a background paper to a proposal to evaluate the impact of cash transfers in lieu of the TPDS in Bihar. Author contact information: Karthik Muralidharan - kamurali@ucsd.edu, Paul Niehaus - pniehaus@ucsd.edu, Sandip Sukhtankar - sandip.sukhtankar@dartmouth.edu

## References

1. Basu, Kaushik. *The Economics of Foodgrain Management in India*. New Delhi: Chief Economic Adviser, Government of India, Ministry of Finance, September 2010.
2. Chaudhuri, Arka Roy, and E. Somanathan. *Cash Transfers to Individuals based on Biometric Identification are Feasible and will bring Large Gains to the Economically Insecure*. Discussion Paper 11-04, Indian Statistical Institute, Delhi Planning Unit, May 2011.
3. Drèze, Jean. "The cash mantra." *Indian Express*, May 11, 2011.
4. Jha, Shikha, and Bharat Ramaswami. *How Can Food Subsidies Work Better? Answers from India and the Philippines*. Asian Development Bank Economics Working Paper Series, No. 221, September 2010.
5. Mishra, Vandita. "Bihar will be transformed." *Indian Express*, January 2, 2011.
6. Programme Evaluation Organisation. *Performance Evaluation of Targeted Public Distribution System (TPDS)*. New Delhi: Planning Commission, Government of India., 2005.
7. SEWA. "Do Poor People in Delhi want to change from PDS to Cash Transfers?" A Study conducted by SEWA Delhi, New Delhi, October 2009.