



FUEL AND FERTILIZER SUBSIDIES: INSTITUTING DIRECT CASH TRANSFERS

Shreya Agarwal, May 2011

ViewPoint 11

ABSTRACT

Instead of compensating fuel and fertilizer manufacturers for supplying liquefied petroleum gas (LPG), kerosene and fertilizers at below market rates, in 2011, the government announced a direct transfer of subsidies to below poverty line (BPL) households. This paper recommends design solutions for direct transfers keeping in mind the impact of such a policy on fuel and fertilizer industries and suggests avenues to ensure easy transition.

The potential forms of subsidy transfer—cash, which is fungible, and entitlements, which only allow restricted access to pre-specified goods—are compared. On comparison, we suggest that cash is administratively more feasible than entitlements, allows choice, reduces market distortions, and is not as misused as widely feared. We recommend that cash be transferred through bank accounts, which can be accessed through context-specific last mile delivery options like smart cards and mobile phone technologies. The selection criteria for targeting should be kept broad-based and inclusive to minimise identification challenges.

In light of the shift in subsidy policy, the LPG industry is likely to become more competitive and efficient and result in an equitable access of subsidies. Besides instituting cash transfers, there is need to reduce high start up costs and extend LPG distribution networks in order to shift cooking fuel consumption patterns of the poor in favour of LPG, a cleaner fuel. We suggest that kerosene distribution should be removed from the public distribution system (PDS) entirely to curb leakages and inequitable access. Oil marketing companies should re-appoint dealers through a bidding process for efficient and cost-effective delivery of kerosene to wholesalers and retailers who would sell kerosene at a single market price. The distinction in amount of subsidy transfer should depend on household electrification only if inclusion and exclusion challenges are overcome. In the case of fertilizers, shift in subsidy from manufacturers needs to be gradual because in comparison to other sectors, agriculture is most vulnerable to fluctuating prices. Moreover, cash transfers cannot be instituted until urea pricing is decontrolled and brought under the nutrient-based subsidy (NDS) system. Since identifying BPL households with agricultural landholdings, sharecroppers and tenants is deemed difficult, the transfers may be given to a minimum of all rural BPL households.

TABLE OF CONTENTS

| | |
|--|----|
| Introduction | 3 |
| Form of Subsidy: Cash vs. Entitlement | 4 |
| Cash Delivery Mechanisms | 6 |
| Impact and Recommendations: Fuel and Fertilizer Industry | 7 |
| LPG Subsidies and Cash Transfers | 7 |
| Kerosene Subsidy and Cash Transfers | 9 |
| Fertilizer Subsidy and Cash Transfers | 10 |
| Conclusion | 12 |
| Appendix 1: Acronyms | 14 |
| Bibliography | 15 |

INTRODUCTION

Pranab Mukherjee, Finance Minister, Government of India (GOI) in his 2011 budget speech recommended the provision of LPG, kerosene and fertilizer subsidy through direct subsidy transfers to BPL households. This policy is a drastic departure from the existing system wherein subsidies are routed through manufacturers who are required to sell goods below market rate. As per the current system, fertilizer and LPG subsidies are universal, that is accessible to all, whereas kerosene is targeted to BPL households through the public distribution system (PDS).

The mandate of this paper is to recommend design solutions for direct transfers of these subsidies in India. This is done keeping in mind the possible impact and response to the introduction of direct subsidy transfers on fuel and fertilizer industry. The two main objectives of this paper are:

1. To recommend the most suitable form that the subsidies can take and mechanisms for delivery; and
2. To examine the possible impact of the shift in subsidy policy on the fuel and fertilizer industry and suggest avenues to ensure easy transition.

Besides meeting these two primary objectives, it is also important to question the reason behind the shift in policy in the first place and discuss arguments for and against instituting direct subsidy transfers. The change in subsidy policy follows in response to a wide number of shortcomings in the current system. These shortcomings have been discussed extensively and some are summarised as follows. Critics of the current system suggest that direct compensation to manufacturers results in dual-pricing which is responsible for restricting competition and breeding inefficiency, patronage and corruption. They further suggest that this system perpetuates market distortions and is unresponsive to customer needs. Another critique of the existing system, especially in the case of fertilizer and LPG, is that it is inherently inequitable and in favour of the rich. Kerosene is assessed to suffer from diversion and leakages. Taking these into consideration, the existing subsidy system is found severely wanting, making the case for direct transfers strong.

On the contrary, critics also fear the failure of cash transfers given limited financial inclusion in India, implementation and administrative hurdles, corruption and subversion. Each of these concerns is valid and needs to be resolved. These fears have been further exacerbated with the announcement of a targeted policy wherein subsidies will only be accessible by BPL households. As is well understood, targeting can result in inclusion and exclusion errors, and leakages as also seen in targeted cash transfer schemes like *Indira Awas Yojna* and social pensions to the extent of 17% (Himanshu 2011a). However, since this decision is already taken on account of budgetary limitations, this paper considers targeting as a given. Since accurate and effective targeting is a building block of a successful subsidy program, it is suggested that identification challenges are minimised by keeping selection criteria broad-based and inclusive.

We first begin by discussing the possible forms that the subsidies can take and delivered through followed by a detailed analysis of each industry.

Form of Subsidy: Cash vs Entitlement

Direct transfer of subsidies has the potential to help the poor access basic goods by reducing demand constraints. Deciding on a viable form of subsidy transfer is an important precondition for this potential to be realised. Direct subsidies can either be transferred as cash, which allows unrestricted access to goods and services (henceforth cash) or as an entitlement, which only allows restricted access to pre-specified goods (henceforth entitlement). Entitlements, which often take the form of coupons, vouchers and stamps, can be designed in three ways:

1. *Product specific entitlement:* Allocations for each good can only be used to access that specific good;
2. *Pooled entitlement:* Allocations for different goods are pooled and can be used to access any/all of these goods in any desired proportion; and
3. *Entitlement for a basket of goods:* Allocations for different goods are pooled and can be used to access goods from a pre-specified basket, which may for instance contain food besides fuel and fertilizers.

On comparing cash with entitlements using four parameters—*choice and paternalism, market distortions, administrative feasibility, and political economy arguments*—cash is deemed more apt for subsidy transfer as discussed below.

1. *Choice and paternalism*: Entitlements limit choice and are paternalistic as they operate under the faulty assumption that policy makers have a greater understanding of the needs of the poor than the poor themselves.
2. *Market distortions*: Entitlements distort the consumption patterns of products, as there is a tendency amongst beneficiaries to consume more of the subsidised good than they otherwise would. Some argue that since cash is fungible it presents higher incentives to subvert the system. However, entitlements too can be misused and can give rise to parallel black markets through reselling of subsidised goods. For instance, subsidised food received as aid in Afghanistan is resold at less than a third of the cost of the delivery of the food (Standing 2007).
3. *Administrative feasibility*: Entitlements, which usually take the form of either coupons or vouchers, are harder to monitor and their disbursement is wrought with transparency problems. Moreover, as per Standing (2007), shops do not like dealing with coupons because of extra administrative costs and uncertainty around payments.
4. *Political economy arguments*: Usually subsidy transfers get political support only if used by beneficiaries in a socially acceptable manner for 'productive' gains. As per studies conducted on cash transfer programs by Standing (2007) in Zambia, Somalia and Ethiopia and authors of *Making cash count* (SCUK, HelpAge International & IDS, 2005) in 15 African countries, there exist little empirical evidence that cash transfers are misspent on non-essential items. Instead cash transfers are found to be spent on consumption of basic goods and services, education, healthcare, restoration of land productivity and livelihoods. Cash transfers in Bihar for bicycles for girls have seen a success rate of 92% (Hebbar 2011). The fear of misuse of cash transfers is thereby found to be overestimated.

The option of 'product specific entitlements' is found wanting on count of choice, market distortions and administrative feasibility and thereby should be discarded. Even though options of 'pooled entitlement' and 'entitlement for a basket of goods' provide greater choice and lesser market distortions, they still suffer from administrative infeasibility. Keeping these four arguments in mind, we recommend the transfer of cash for fuel and fertilizer subsidies to BPL households.

Cash Delivery Mechanisms

We recommend that the delivery mechanism for direct cash transfers should only be instituted through bank accounts, which should be opened for at least one member of the household (preferably a woman). All alternative mechanisms such as direct cash in envelopes/coupons/vouchers/stamps face problems of lack of transparency given the limited audit trail and monitoring challenges. Even though the transfer of cash should be made per household, the calculation of the amount of subsidy should be based on the number of individuals per household rather than assuming an average household size of five.

Financial inclusion remains a challenge, as over half the population in India is unbanked. India also suffers from a weak banking infrastructure with as many as four villages being served per post office and eight villages being served per bank branch (Mehrotra 2010). Despite these challenges, opening bank accounts through application of simple Know Your Customer (KYC) norms and attractive commissions to banks is imperative.

Once bank accounts have been opened, the withdrawal of cash subsidies from the bank can be done at bank branches and ATMs through debit cards and through the business correspondent model using smart cards, point of sale (PoS) devices, and mobile phone technologies. Such mechanisms like smart cards and mobile banking are already being implemented under Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGS), security pension payments and *Rashtriya Swastha Bima Yojana*. These delivery mechanisms can be compared and their viability assessed on the basis of existing infrastructure, cost, security, control/risks, human resources, speed, acceptability, resilience, scale and flexibility (Harvey, Haver et al. 2010).

The last mile delivery mechanisms should be decided by the banks and the government together on the basis of contexts. This mechanism should ideally allow flexibility as done by open source multi-application smart cards through which other subsidies can be delivered in the future.

Besides reducing demand constraints, we assert that cash transfers also have the potential to make the industry more responsive to customer needs, remove inherent inequities in the subsidy program and markedly reduce inefficiency and corruption (Kapur, Mukhopadhyay and Subramanian 2008).

Impact and Recommendations: Fuel and Fertilizer Industry

LPG Subsidies and Cash Transfers

State-owned oil companies like Oil and Natural Gas Corporation Ltd (ONGC), Gas Authority of India Ltd. (GAIL), and Indian Oil Corporation Ltd. (IOC) undertake a majority of the exploration, production, refining and marketing of petroleum products in India. Until 2002, state owned petroleum companies operated under the administered price mechanism (APM) wherein fuel like LPG and kerosene were sold at a fixed price. The gap between the fixed price and the import parity price was borne by the government, which also guaranteed national oil companies (NOCs) a 12% return on expenditure. Post 2002, the government disbanded administered price mechanism (APM) and mandated import parity pricing with fixed subsidies. However, this was not implemented. Fuels like kerosene and LPG continue to be sold at a low fixed price. The subsequent costs of maintaining a low sales price is still borne by the government through fiscal budget allocations and oil bonds, and also by NOCs and oil marketing companies (OMCs) in the form of under recoveries. The implementation of import parity pricing is a prerequisite for instituting direct cash transfers for fuels.

We recommend that the LPG subsidy should be distributed to all BPL households monthly irrespective of whether the household has an existing LPG connection or not. Assuming an annual consumption of eight cylinders per year with a per cylinder subsidy of Rs 250, the annual LPG subsidy can be estimated to Rs 2,000 per household. The LPG subsidy has two objectives; first, to increase access to cooking fuel and second, to give impetus to households to switch to LPG given its social benefits as a cleaner fuel.

The benefit of the current subsidy of Rs 11,000 crores distributed through public manufacturers is highly inequitable with 40% of this subsidy merely benefitting 7% of the population. BPL households constitute only about 10% of the total domestic LPG consumers (GOI 2006). LPG subsidy is restricted to domestic consumption only. Subsidised domestic LPG however, sometimes gets diverted for commercial use. Disbanding dual pricing and introducing cash transfers can thereby reduce inequitable distribution and diversion thereby providing the poor greater access to cooking fuel.

Since cash, which is fungible, does not force a switch in cooking fuel in favour of LPG, some such as Morris and Panday (2004) suggest distribution of LPG coupons. Globally, Ecuador has also experimented with perforated subsidy coupons provided with electricity invoices. Instead of forcing LPG consumption through entitlements, we recommend overcoming the inhibiting factors—requirement of lumpy investment and high start up costs—that keep poor households from consuming LPG. The high start up costs of a connection, cylinder and a stove can be lowered by implementing the policy of free LPG connections to BPL rural households already under consideration. An entitlement of Rs 1,400 may be transferred to BPL households without connections for this purpose¹. The costs related with refilling cylinders can be lowered by expanding distribution networks through the *Rajiv Gandhi Gramin LPG Vitaran Yojana* (RGGLVY).

In the current system of dual-pricing with import parity prices as high as 820/12kg cylinder and subsidised prices of approximately 357/14.2kg cylinder, private players, which only distribute two million tonnes of domestic LPG, have been unable to enter the market. Even though public companies have expanded their reach and eliminated waiting lists, with the removal of dual pricing, the entry of private competition can increase efficiency and drive down market prices.

¹A similar scheme—'Deepam'—has been implemented in Andhra Pradesh. Learnings from this scheme suggest that the capital subsidy should only cover a proportion of start up costs to ensure ownership and stake of the poor in getting a LPG connection. This subsidy only when linked with operating cost subsidy can lead to increase in consumption of LPG in poor households.

Kerosene Subsidy and Cash Transfers

Instead of subsidising manufacturers, the kerosene subsidy should be distributed directly to all BPL households monthly. Kirit Parekh (GOI 2006) suggests that the amount of subsidy should depend on whether households have access to electricity. Provision of kerosene subsidy to electrified households results in double subsidisation for the purpose of lighting. On evaluation, if identification of electrified households faces inclusion and exclusion errors, the subsidy should be extended to all BPL households. The current system of linking kerosene subsidy to LPG connections should be disbanded as LPG, mostly used as a cooking fuel, cannot compensate for kerosene, which is used for lighting. Moreover, reduction in kerosene subsidy on account of LPG can act as a disincentive to switch to LPG as a cooking fuel. The subsidy amount is calculated to Rs 1,500 or Rs 600 depending on the allocation of five litres/month for non-electrified or two litres/month for electrified households with a subsidy of Rs 25 per litre.

This subsidy should be allocated in cash. In contradiction, Morris, Panday and Barua (2006) suggest that kerosene subsidy should take the form of an entitlement. They suggest the use of smart cards wherein business correspondents will issue authorisation slips, which can be exchanged for kerosene at local shops. Food and kerosene coupons have also been tested in Andhra Pradesh and Bihar wherein coupons are exchanged for kerosene at PDS shops. These models however, are critiqued not only in light of administrative and monitoring difficulties (Justice Wadhwa Committee on PDS 2009) but also because they limit choice and disincentivise investment in other cleaner products like light emitting diode (LED) lights and lanterns.

The current kerosene subsidy of Rs 15,000 crores is distributed through the PDS system wherein fair price shops (FPSs) sell each household a quota of kerosene at a subsidised price. PDS kerosene not only suffers from diversion of as much as 38.6% (National Council for Applied and Economic Research [NCAER] 2005) but is also highly inequitable with urban per capita consumption 20% higher than rural consumption (Gangopadhyay, Ramaswami and Wadhwa 2004) and allocation of higher subsidy to richer states. Moreover, the current system of distribution of PDS kerosene is highly inefficient wherein state authorised dealers responsible for the transportation of kerosene upto the FPSs make a commission of as much as 200% (Morris, Panday and Barua 2006).

With the removal of dual pricing, we not only expect less diversion of kerosene but also greater participation of private players. In 2010, subsidised kerosene in Delhi was sold for Rs 12.32/liter whereas import parity prices hovered around Rs 27-34/liter depending on the prices of crude oil. The removal of dual pricing is likely to increase competition and efficiency and hence drive down kerosene prices. It is our assertion that diversion of kerosene and inefficient and inequitable distribution can be countered by removing kerosene distribution from the PDS system entirely. It is recommended that the involvement of Food and Civil Supplies Department is kept minimal and the allocation of state wise kerosene should be demand based. PDS kerosene is diverted by the dealers in collusion with FPSs. FPSs which only receive an arbitrage income need to be made more financially viable specially since, as per the Planning Commission (2005), the income on account of kerosene for FPSs amounts to half that of its entire income. Oil management companies should reappoint private dealers through a bidding process to ensure competition and efficiency. These dealers should then supply kerosene to local shops and *kirana* stores as per the demand. In underserved areas, FPSs may continue selling kerosene but at market rates.

Fertilizer Subsidy and Cash Transfers

The fertilizer subsidy of approximately Rs 50,000 crores includes subsidies on imported fertilizers, concessions to manufacturers of decontrolled fertilizers (Phosphorous and Potash) and subsidies to Urea production units. The government recently launched a nutrient-based subsidy (NBS) system wherein subsidies are provided on nutrients like Nitrogen, Phosphorous and Potash (N, P and K) rather than fertilizer products like Di-ammonium Phosphate (DAP) and Muriate of Potash (MOP). This incentivises the consumption of complex fertilizers and ensures balanced nutrient application. Urea is the only fertilizer, which has not been decontrolled and thereby has a fixed maximum retail price (MRP). Urea units get an assured return of 12% post-tax return on expenditure with actual performance depending upon their retention price, energy consumption, capacity utilisation levels and under recoveries.

It is recommended that eventually, the fertilizer subsidy should be distributed annually to all BPL households through cash transfers rather than via manufacturers. The NBS system should be maintained as long as a proportion of subsidy continues to be routed through manufacturers. Some

suggest that fertilizer subsidies should be provided only to poor farmers who either own or lease marginal or small agricultural landholdings or are tenants or sharecroppers as identified under the Kisan Credit Cards Scheme. Given inaccurate land records and large tracts of disputed land, this is argued as unfeasible (Himanshu 2011b). Restriction of subsidy to rural households may also result in inclusion and exclusion errors.

The cash subsidy for fertilizers is calculated to approximately Rs 3,300 per household annually. This calculation is based on the per nutrient subsidies prescribed under NBS applied to one hectare of land, which requires 120kgs of fertilizers in the N:P:K ratio of 4:2:1. This amount may in fact be higher on addition of micro-secondary nutrients, compost and bio-fertilizer costs. Even though there exist a significant difference in the state-wise fertilizer subsidy consumption—Rs 3,924 in Punjab and Rs 824 in Orissa (Thaker and Sharma 2009)—we suggest the application of a uniform per household subsidy amount across states irrespective of soil quality, weather and water conditions to minimise identification challenges.

This payment should be made in cash. Globally, a few countries have experimented with coupons. In Malawi, farmers get 50kgs of urea and the same amount of a nitrogen-phosphorus mix at quarter of the price. Ghana distributes four types of coupons through which farmers may choose four different combinations of nutrients. We, however, caution against adopting this coupon system as it runs counter to integrated nutrient management principles. India is already reeling from soil degradation due to unbalanced nutrient application with excessive usage of urea as against Potash, Phosphorous, Complex fertilizer and other secondary and micronutrients like Zinc and Boron. Moreover, to restore soil health, the application of organic fertilizers is imperative. Currently there exists a gap of six million tonnes (mt) of compost and 10 mt of bio-fertilizers per hectare (Vasudeva 2009). A cash subsidy will allow farmers to choose organic fertilizers.

Instead of immediate shift in subsidy policy, only an incremental phasing out of subsidies to manufacturers is suggested for two reasons. First, the removal of fertilizer subsidies to manufacturers requires all fertilizers including Urea to be decontrolled. This can be done when all nampha based Urea units are converted to gas based units, otherwise they would not survive competition. Closure of Urea units would reduce India's domestic production capacity and increase dependence on imports, which already increased by 20%

in 2009-2010. These units should therefore be allocated gas as a priority. There is also a need for decanalisation of Urea. After conversion to gas, the Urea industry should be brought under NBS with decontrolled prices and a floating MRP. Second, the incremental phasing out of subsidies routed through manufacturers will ensure political acceptability. Under the current system, fertilizer subsidies are enjoyed by all farmers irrespective of their capacity to pay with most being consumed by medium to large farmers. Removing any subsidies from manufacturers would mean increase in retail price of 236% for Urea, 94% for DAP, 504% for MOP, 150% for Complexes and 80% for SSP (Kapur 2010) which is likely to result in farmer unrest. Fertilizer distribution channels should continue through state cooperatives, state agro-industries and marketers, and wholesalers with application of the fertilizer monitoring system and phased disbanding of movement control to underserved areas.

Conclusion

This paper recommends design solutions for direct transfers of kerosene, LPG and fertilizer subsidies in India. It also evaluates the possible impact of shift in subsidy policies on fuel and fertilizer industry and suggests recommendations to ensure easy transition.

A comparative study on the two possible alternatives of the form of direct transfer—cash which allows unrestricted access to goods, and entitlements which only allow restricted access to pre-specified goods—is undertaken. This comparison, based on four parameters of choice and paternalism, market distortions, administrative feasibility and political economy arguments, suggests that cash is a more suitable form of transfer. This cash amount should be transferred through bank accounts that can be accessed through context specific last mile delivery options like smart cards and mobile phone technologies. Financial inclusion is a pre-requisite for ensuring that the poor have access to basic goods and services. Opening of accounts thereby needs to be incentivised through the application of simple KYC norms and instituting attractive commissions to banks.

The shift in subsidy policies towards direct transfer will result in unprecedented changes in the fuel and fertilizer industry. These industries are expected to become more competitive, efficient and responsive to customer needs. Finally, we propose the following three models for the implementation of direct cash transfers for LPG, kerosene and fertilizer subsidies:

| Product | Beneficiaries | Annual Amount/hh (Rs.) ² | Frequency and Implementation | Supply Chain | Pricing |
|-------------------|---|--|---|---|---|
| LPG | All BPL households | Rs 2,000 (eight cylinders @ Rs 250/cylinder subsidy) | Monthly transfer and immediate implementation as soon as last mile delivery infrastructure is in place | Continue the current system as instituted by oil marketing companies | Disband dual pricing (<i>domestic and commercial</i>) LPG to be only sold at import parity prices |
| Kerosene | All BPL households (<i>Subsidy calculated depending on whether households have access to electricity. Distinction between electrified and non-electrified households made only if identification feasible.</i>) | Rs 1,500 for non-electrified hh (5lt/month @ Rs 25/lt subsidy) or Rs 600 for electrified hh (2lt/month @ Rs 25/lt subsidy) | Monthly transfer and immediate implementation as soon as last mile delivery infrastructure is in place | Remove kerosene distribution from the PDS system entirely. Re-appoint private dealers responsible for supplying kerosene from OMCs to retailers through a bidding process | Disband dual pricing (PDS and non-PDS). Kerosene to be sold only at import parity prices |
| Fertilizer | All BPL households (<i>Restriction to BPL households with agricultural landholdings, tenants, share croppers etc./rural households only if identification feasible.</i>) | Rs 3,300 (120 kgs of fertilizer on one hectare of land @ subsidy as per NBS stipulations on a N:P:K ratio of 4:2:1) | Annual transfer and gradual implementation with part subsidy routed through manufacturers at least until Urea is decontrolled and brought under NBS | Continue supplying through state cooperatives, state agro-industries and marketers and wholesalers. | Fertilizer prices to remain below import parity prices and only gradually increased |

Appendix 1: Acronyms

| | |
|---|--------|
| Administered Price Mechanism | APM |
| Below Poverty Line | BPL |
| Di-ammonium Phosphate | DAP |
| Fair Price Shop | FPS |
| Gas Authority of India Ltd. | GAIL |
| Import Parity Price | IPP |
| Indian Oil Corporation Ltd. | IOC |
| Know Your Clients | KYC |
| Light Emitting Diode | LED |
| Liquefied Petroleum Gas | LPG |
| Mahatma Gandhi National Rural Employment Guarantee Scheme | MNREGS |
| Maximum Retail Price | MRP |
| Muriate of Potash | MOP |
| National Oil Companies | NOC |
| Nitrogen | N |
| Nutrient Based Subsidy | NBS |
| Oil and Natural Gas Corporation Ltd | ONGC |
| Oil Management Companies | OMC |
| Phosphorous | P |
| Potash | K |
| Public Distribution System | PDS |
| Single Super Phosphate | SSP |

Bibliography

Gangopadhyay, S., Ramaswami, B. and Wadhwa, W. (2004) "Reducing Subsidies on Household Fuels in India: How will it effect the poor?" *India Development Foundation*. Haryana.

Government of India (2006) "Report of the Committee on Pricing and Taxation of Petroleum Products" Available from: <http://petroleum.nic.in/Report1.pdf> Accessed: April 2011.

Hebbar, N. (2011) "Nitish Moots Direct Cash Subsidies for poor to plug leakages in PDS" *The Financial Express*. February 3. Available from: <http://www.financialexpress.com/news/nitish-moots-direct-cash-subsidies-for-poor-to-plug-leakages-in-pds/745439/> Accessed: April 2011.

Himanshu (2011a) "Food or Cash: The subsidy conundrum" *LiveMint*, Tuesday, March 1. Available from: <http://www.livemint.com/2011/03/01211232/Food-or-cash-the-subsidy-conu.html>. Accessed: April 2011.

Himanshu (2011b) "The Flip Side of Cash Subsidies" *LiveMint*, March 29. Available from: <http://www.livemint.com/2011/03/29210926/The-flip-side-of-cash-subsidie.html>. Accessed: April 2011.

Justice Wadhwa Committee on PDS (2009) "Report on computerization of PDS operations". Available from: <http://pdscvc.nic.in/report%20on%20computersisation%20of%20PDS.htm>. Accessed: April 2011.

Kapur, D., Mukhopadhyay, P. and Subramanian, A. (2008) "More on Direct Cash Transfers", *Economic and Political Weekly*, November 22. Available from: <http://casi.ssc.upenn.edu/system/files/12902.pdf> Accessed: April 2011.

Kapur, R. (2010) "De-regulating Indian Fertilizer Sector". *Indian Farmers Fertilizer Cooperative Limited*. New Delhi.

Mehrotra, S. (2010) "Introducing Conditional Cash Transfers in India: A Proposal for five CCTs". *Planning Commission*. New Delhi. Available from: http://www.socialprotectionasia.org/newsletter_7/1.%20CCTS%20for%20India%20-%20Mehrotra.pdf Accessed: April 2011.

Morris, S. and Panday, A. (2004) "A Study on the LPG Distribution and Related

Subsidy Administration and the Generation and Assessment of Options for Improvement of the System” *Indian Institute of Management, Ahmadabad*. Available from: <http://petrofed.winwinhosting.net/upload/LPG.pdf>. Accessed: April 2011.

Morris, S., Panday, A. and Barua, S. (2006) “A Study on the Kerosene Distribution and Related Subsidy Administration and the Generation and Assessment of Options for Improvement of the System”. *Indian Institute of Management, Ahmadabad*. Available from: <http://petrofed.winwinhosting.net/upload/Kerosene.pdf>. Accessed: April 2011.

NCAER (2005) “Public Distribution of Kerosene in India”, *National Council for Applied and Economic Research*, New Delhi.

Planning Commission (2005) “Performance Evaluation of Targeted Public Distribution System”. New Delhi. Available from: http://planningcommission.nic.in/reports/peoreport/peo/peo_tpds.pdf. Accessed: April 2011.

SCUK, HelpAge International & IDS. (2005) “Making cash count: Lessons from cash transfer schemes in east and southern Africa for supporting the most vulnerable children and households”. UK: Save the Children UK, HelpAge International, IDS. Available from: <http://www.savethechildren.org.uk/scuk/jsp/resources/details.jsp?id=3712&group=resources§ion=publication&subsection=details&pagelang=en>. Accessed: April 2011

Standing, G. (2007) “How Cash Transfers Boost Work and Economic Security” *DESA Working Paper No. 58*. Available from: http://www.un.org/esa/desa/papers/2007/wp58_2007.pdf. Accessed: April 2011.

Thaker and Sharma (2009) “Fertilizer Subsidy in India: Who are the Beneficiaries?” *Indian Institute of Management, Ahmedabad*. Available from: <http://www.iimahd.ernet.in/publications/data/2009-07-01Sharma.pdf>. Accessed: April 2011.

Vasudeva, P.K. (2009) “Farmers and Fertilizers: Direct Subsidy, better yield?” *India News and Feature Alliance*. New Delhi. Available from: http://www.sarkaritel.com/news_and_features/infa/august2009/21farmers&fertilizers.htm. Accessed: April 2011.

ViewPoint Series

1. **Do Corporations Have Social Responsibility?** Edited by Parth J Shah
 2. **Population Causes Prosperity** by Sauvik Chakraverti
 3. **Indian Financial Sector after a Decade of Reforms** by Jayanth R Mehta
 4. **Peter Bauer: A True Friend of the World's Poor** by Sauvik Chakraverti
 5. **New Public Management: Escape from Babudom** by Sauvik Chakraverti
 6. **College Autonomy: Policy Practice & Prospects** by Ninan Abraham
 7. *Aarthik Swatantrata: Ek Vismrit Manavadhikar* by Parth J Shah
 8. **Private Schools Serving the Poor: Working Paper, A Study from Delhi, India** by James Tooley and Pauline Dixon
 9. **Skill Vouchers: Global Experiences and Lesson for India** by Leah Verghese and Parth J Shah
 10. **Reservation in Private Schools under the Right to Education Act: Model for Implementation** by Shekhar Mittal and Parth J Shah
-

ViewPoint 11: Fuel and Fertilizer Subsidies: Instituting Direct Cash Transfers



Author: Shreya Agarwal, Centre for Civil Society
Contact: shreyaaga@gmail.com

Centre for Civil Society

Social Change through Public Policy

Established on 15 August 1997, Centre for Civil Society (CCS) is an independent, non-profit research and educational think tank based in Delhi committed to increasing opportunity, prosperity, and quality of life for every Indian by reinvigorating civil society and readjusting political society. Our mission is to promote social change through public policy by being a resource for innovative community and market based ideas for critical policy issues particularly in the areas of education, livelihoods, and governance. Our unique focus on public policy and longer-term solutions makes our research outputs crucial feeders into policy making and opinion formulation. We champion limited government, rule of law, free trade and individual rights. By bringing these ideas to current and future leaders, CCS is advancing opportunity and prosperity for all Indians.



A-69 Hauz Khas, New Delhi 110016
Tel: +91 11 2653 7456, 2652 1882 Fax: +91 11 2651 2347
Email: ccs@ccs.in
www.ccs.in | www.schoolchoice.in | www.righttoeducation.in
www.azadi.me | www.jeevika.org