



# Subsidies to Liquefied Petroleum Gas in India: An assessment of the direct benefit transfer in Mysore

Shruti Sharma



# Table of Contents

---

1. Context.....	3
1.1 LPG Subsidies in India .....	3
1.2 DBT for LPG .....	3
1.3 Mysore DBT-for-LPG Pilot.....	4
2. Survey Methodology .....	4
3. Survey Findings.....	4
3.1 Subsidy Qualification and Receipt .....	4
3.2 Access to Subsidy.....	6
3.3 Impacts on Household Behaviour.....	7
3.4 Other Findings .....	7
4. Summary .....	7
References .....	9

## Executive Summary

- Direct Benefit Transfer (DBT) is an initiative of the Indian central government to develop an electronic payment system for centrally-funded social protection schemes. Under the DBT-for-liquefied petroleum gas (LPG) scheme (known as 'DBTL'), households would order an LPG cylinder from their LPG distributor, receive a payment equivalent to the current subsidy amount via electronic transfer to their bank account, then pay the full (unsubsidized) market price for the cylinder in cash on delivery.
- Mysore, a district in Karnataka state, was selected as one of 20 pilot districts for the introduction of DBTL. DBTL was launched in Mysore on July 1, 2013; however, on January 30, 2014, following extensive reporting of the problems in the design and administration of the DBTL scheme, the Ministry of Petroleum and Natural Gas (MoPNG) announced the immediate suspension of the DBTL program pending formation of a committee to consider the issues raised.
- In early October 2013 the International Institute for Sustainable Development (IISD) conducted structured interviews with 120 beneficiaries in five taluks<sup>1</sup> of Mysore district to assess the DBTL scheme. Focus group discussions involving 10–12 female respondents were also undertaken in four settlements. Key findings include:
  - Subsidy qualification and receipt: Most respondents had a bank account and the unique identification that was required for receipt of the subsidy. However, the vast majority of households surveyed (96 per cent) agreed or strongly agreed with the statement that the DBT required too much paperwork, with focus group respondents also reporting requests from multiple authorities for a range of documents including electricity bills, ration cards, bank passbooks and identification cards.
  - Subsidy amount: There was a consistent lack of understanding regarding the subsidy amount and the methodology for calculating it. In addition, significant problems were reported with the process of subsidy transfer itself, with 47 individual survey respondents (40 per cent) reporting non-receipt of subsidy, and a further 72 respondents reporting receipt of several different subsidy amounts.
  - Household behaviour: Households reported a shift in household expenditure related to the disruption of household budgets, and an increase in short-term household borrowing—especially by poorer households—in order to facilitate purchase of LPG cylinders at the new decontrolled price. There were also reported attempts to limit the consumption of LPG, including substituting it with firewood or other biomass for some heating and cooking tasks.

<sup>1</sup>Taluks are the administrative sub-divisions of the district (also known as “blocks”). There are a total of seven taluks in Mysore district.



## 1. Context

### 1.1 LPG Subsidies in India

In FY 2012/13 the Indian government recorded total spending of INR 41,547 crore<sup>2</sup> (~US\$6.93 billion<sup>3</sup>) subsidizing household LPG consumption. Largely used as a cooking fuel, household (“domestic”) liquefied petroleum gas (LPG) is marketed by the three main public sector oil marketing companies (OMCs)—Indian Oil Corporation Limited (IOCL), Bharat Petroleum Corporation Limited (BPCL) and Hindustan Petroleum Corporation Limited (HPCL)—through a dealership system. In order to purchase domestic LPG cylinders, households are required to possess a registered connection at an LPG dealership. Subsidized LPG consumption currently constitutes around 80 per cent of total LPG use by volume, with the subsidy constituting approximately 50 per cent of the total cost per 14.2 kilogram (kg) household cylinder.<sup>4</sup>

Retail prices of domestic LPG cylinders are currently subsidized through two mechanisms: a direct subsidy and under-recoveries. The direct subsidy is administered at a flat rate (currently INR 22.58) per domestic 14.2 kg cylinder, and financed directly from the government budget. In addition, the government regulates the price at which oil marketing companies can sell domestic LPG, leading to under-recoveries (defined as the difference between the cost price incurred by the companies and the price realized upon sale to the final consumer),<sup>5</sup> which fluctuate on a monthly basis. In FY 2012/13, under-recoveries for domestic LPG amounted to INR 39,558 crore (US\$6.59 billion) (Petroleum Planning and Analysis Cell [PPAC], 2014a), with direct subsidies accounting for the remaining INR 1,989 crore (US\$331 million) (PPAC, 2013).

### 1.2 DBT for LPG

Direct Benefit Transfer (DBT) is an initiative of the central government to develop an electronic payment system for centrally funded social protection schemes, and is intended to function under the framework of a (nominally voluntary) national identify program (Unique Identification [UID], or *Aadhaar*).<sup>6</sup> Under the system proposed for LPG subsidies, households would order an LPG cylinder from their LPG distributor, receive a payment equivalent to the current subsidy amount via electronic transfer to their bank account, then pay the full (unsubsidized) market price for the cylinder in cash on delivery. Following a three-month transition period, electronic transfer of the subsidy would be mandatory, and in order to be eligible for continued receipt of subsidy the head of household would have to enrol in the *Aadhaar* program, obtain a UID number, submit their bank account and UID details to the relevant oil marketing company (opening an account where they did not previously possess one), and link their bank account to their UID number (a process referred to as “seeding”). Receipt of subsidy would continue to be contingent on fuel consumption and, as with the current system of subsidized LPG supply, no forms of targeting would be applied.

On September 23, 2013, the Supreme Court of India, responding to a Public Interest Litigation (PIL) petition, ruled that the imposition of mandatory *Aadhaar* enrolment for receipt of subsidies had no legislative basis and should be discontinued. Following the order, the MoPNG filed an application for modification of the previous order to permit continued mandatory enrolment in order to qualify for subsidy payments under the DBT scheme. On November 26, the Supreme Court ruled that its interim order of September 23 would remain unmodified, and *Aadhaar* could not be made mandatory for receipt of subsidies.

<sup>2</sup> Total expenditure is calculated as a sum of under-recoveries (INR 39,558 crore (US\$6.593 billion)) (PPAC, 2014a) and direct subsidies (INR 1,989 crore [US\$331 million]) (PPAC, 2013).

<sup>3</sup> At an exchange rate of roughly INR 60 = US\$1.

<sup>4</sup> The retail price of unsubsidized LPG in Mysore on October 1, 2013 was INR 941 per 14.2kg cylinder (Milton, 2013), while the subsidized retail price was INR 410.5 (PPAC, 2014c).

<sup>5</sup> These are then partly compensated through budgetary transfers, and partly absorbed into the balance sheets of public sector undertakings (PSUs) in the oil and gas sector.

<sup>6</sup> The “*Aadhaar*” program, launched in 2009, is designed to record the biometric details of all residents and allocate a unique identification number to each individual for use in a range of transactions with public and private entities.

---

On January 30, 2014, following extensive reporting of the problems in the design and administration of the DBTL scheme, and related lobbying to scale back or cancel the program within the ruling Congress Party, MoPNG announced the immediate suspension of the initiative pending formation of a committee to consider the issues raised.

### 1.3 Mysore DBT-for-LPG Pilot

Mysore, a district in Karnataka state encompassing Mysore city and surrounding areas, was selected as one of 20 pilot districts for the introduction of DBTL. The district, which was the site of a previous pilot initiative begun in October 2011 by the central government to integrate Aadhaar-based verification and electronic payment into LPG supply (Raghunandan, 2012; Ramakumar, 2012; Kurup, 2012),<sup>7</sup> was initially scheduled to adopt DBT-for-LPG on a district-wide basis on May 15, 2013. Rollout in Phase 1 districts was then postponed to June 1, with the launch in Mysore being further delayed until July 1 due to a state assembly by-election. Following the scheme's introduction, beneficiaries were given a three-month period to register an Aadhaar-linked bank account with their LPG distributor, failing which they would only be eligible to purchase LPG cylinders at unsubsidized prices. Implementation of DBT-for-LPG was then suspended in all districts on January 30, 2014 pending formation of a committee to examine the extensive problems reported with the program, with LPG supply reverting to the previous system.

## 2. Survey Methodology

In early October 2013, structured interviews were undertaken with 120 beneficiaries in five taluks of Mysore district. Respondents were equally divided between Below Poverty Line (BPL) and Above Poverty Line (APL) households (as recorded by the district administration). In addition, focus group discussions involving 10–12 female respondents were undertaken in four settlements (one urban, one peri-urban and two rural) across different taluks within the district, with a mixed distribution of BPL and APL households. The survey ensured geographic spread of the sample across the district. The four villages were selected on the basis of access to the Gram Panchayat (village-level government body), which facilitated the focus group discussions. Surveys and focus group discussions were undertaken in Kannada and Hindi (depending on respondent preferences).

## 3. Survey Findings

Findings from both the individual and focus group surveys were divided into three principal categories: issues around subsidy qualification and receipt, issues around access to the subsidy amount, and impacts of the scheme on household behaviour.

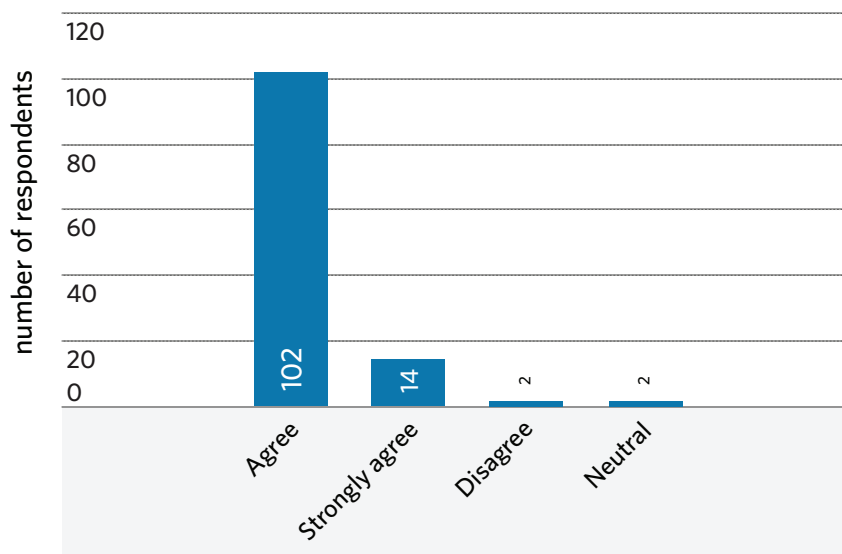
### 3.1 Subsidy Qualification and Receipt

The majority of individual interview and focus group respondents already possessed at least one household bank account, and had previously registered with the *Aadhaar* scheme. Despite this, 96 per cent of the households surveyed (116 out of 120) agreed or strongly agreed with the statement that the DBT required too much paperwork, with focus group respondents also reporting requests from multiple authorities (including the local district administration, gas agencies and banks) for a range of documents including electricity bills, ration cards, bank passbooks and *Aadhaar* cards.<sup>8</sup>

---

<sup>7</sup> Mysore also adopted the DBT payment system for seven minor social welfare programs in January 2013 as part of a pilot programme (Sinha, 2013).

<sup>8</sup> Carrying a significant time cost for beneficiaries. One focus group also reported additional out-of-pocket expenditure to provide document copies.

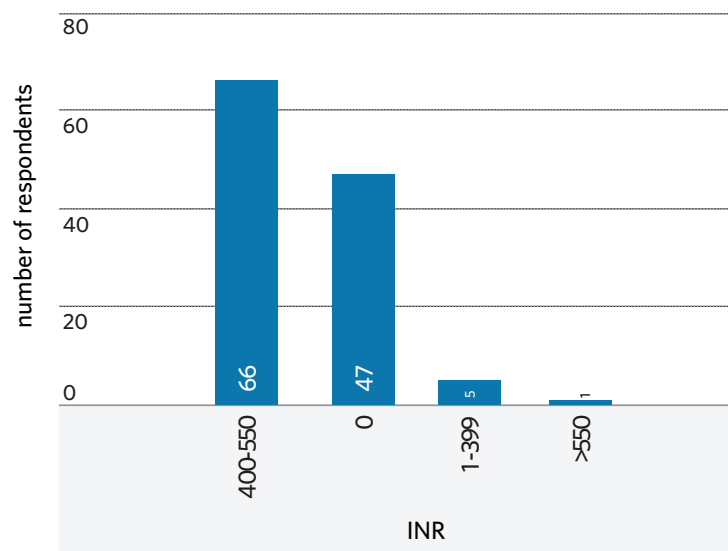


**FIGURE 1. SUBSIDY QUALIFICATION AND RECEIPT (RESPONSES TO STATEMENT “DBT SCHEME ASKS FOR TOO MANY DOCUMENTS”)**

Source: Beneficiary survey.

In addition, several focus group respondents reported an inability to qualify for subsidy payment due to their gas connection being in a relative's name, with delays in the processing of changes to connection details leading to denial of subsidy.<sup>9</sup>

Across both respondent groups there was a consistent lack of understanding regarding the subsidy amount, and the methodology for calculating it. In addition, significant problems were reported with the process of subsidy transfer itself, with 47 individual survey respondents (40 per cent) reporting non-receipt of subsidy, and a further 72 respondents reporting receipt of several different subsidy amounts.<sup>10</sup> It is unclear to what extent non-receipt of subsidy was related to respondent qualification for subsidy, or to a failure of the transfer modality itself.<sup>11</sup>



**FIGURE 2. REPORTED AMOUNT RECEIVED FOR FIRST SUBSIDY**

Source: Beneficiary survey.

<sup>9</sup> A problem also recorded in other pilot DBTL districts: for example, in Nashik it was reported that over 9,000 LPG consumers were awaiting connection name changes in order to qualify for subsidy receipt (Times of India, 2014).

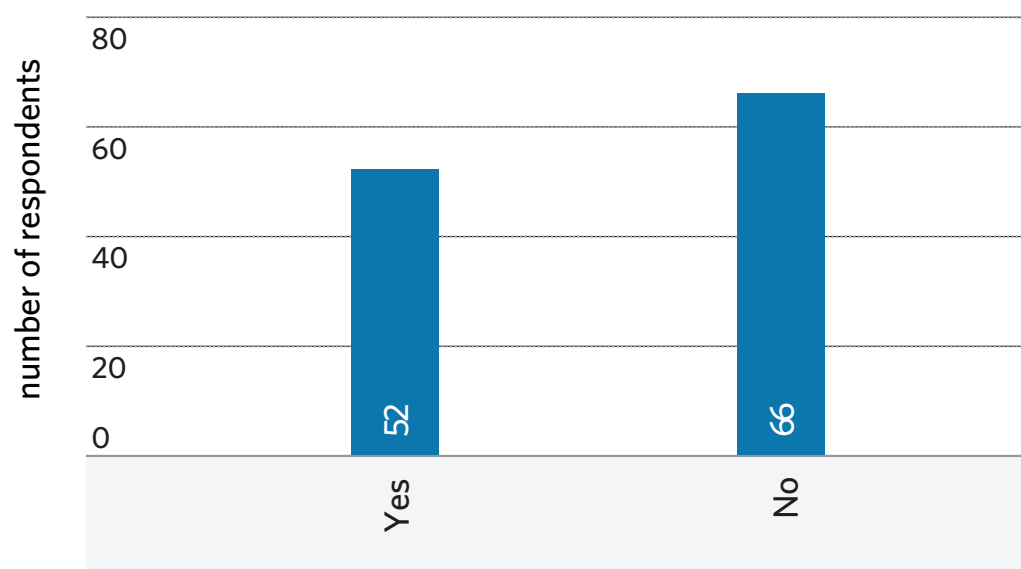
<sup>10</sup> Problems with subsidy transfer have been widely reported in other pilot districts (Madaan, 2014).

<sup>11</sup> The number of respondents reporting non-receipt of subsidy for the second subsidy payment was even higher (92 of 119); however, it is unclear what percentage of this reported non-payment related to non-ordering of cylinders.

In addition, both individual and focus group respondents reported an increase in the delivery charges for LPG cylinders levied by LPG distributors, typically of between INR 10 and INR 20 per cylinder.

### 3.2 Access to Subsidy

Alongside the challenges in confirming eligibility and receiving the subsidy amount in a bank account, households reported significant issues in confirming subsidy receipt and accessing the subsidy amount. First, payment of the subsidy directly into a bank account imposed a significant time cost on beneficiaries—respondents reported multiple visits to the bank to confirm and withdraw the subsidy payment, thereby foregoing household tasks and income-generating activities, and potentially resulting in additional out-of-pocket expenditure. This was a particularly important problem for rural LPG consumers. In the focus group discussions, one respondent from Kurimandi village explained that visiting a bank branch to withdraw subsidy was a “time consuming as well as tiresome process,” sometimes lasting a day. Often the women visit the branch to check if the subsidy has been deposited and then the male wage earner of the household visits the branch to withdraw it. The majority of individual survey respondents (56 per cent) and focus group respondents reported that they had never used an ATM to withdraw money before; in at least two focus groups, the large majority of respondents did not possess an ATM-compatible bank card, with the majority of respondents in at least one focus group reportedly unaware of the existence of ATMs.



**FIGURE 3. ATM USE (RESPONSES TO QUESTION: “WHETHER USE ATM TO WITHDRAW MONEY”)**

*Source: Beneficiary survey.*

A second issue raised by beneficiaries was that almost all of the household gas connections were in the name of the male head of household, and under the new system the subsidy amount had to be deposited in their bank accounts. Women, who were typically responsible for managing household expenditure, were therefore dependent on male members of households to withdraw the subsidy and provide it for the purchase of the LPG cylinder, with several of the focus group respondents reporting that the subsidy amount was not provided to them for LPG purchase (thus destabilizing household budget management). Even where the subsidy amount was passed to the women in full, the collection of the subsidy added an implicit financial burden to the household, with women visiting the bank to confirm receipt, and men (who were typically the chief wage earners, and frequently working on a daily wage basis) then being required to attend the bank in order to withdraw the subsidy amount, foregoing income as a result.

### 3.3 Impacts on Household Behaviour

Respondents reported two principal household-level responses to the introduction of the DBTL scheme and the associated issues with subsidy receipt and access. The first, connected both to subsidy qualification and receipt and subsidy access, was a shift in household expenditure related to the disruption of household budgets, and an increase in short-term household borrowing—especially by poorer households, and often on an interest-bearing basis<sup>12</sup>—in order to facilitate purchase of LPG cylinders at the new decontrolled price (which increased during the period of the fieldwork to over INR 1,100).

The second was an attempt by households to limit the consumption of LPG, including replacing it with firewood or other biomass (such as coconut husks or tobacco waste) for some heating and cooking tasks (although some households, particularly in urban and peri-urban areas, reported being unable to switch to firewood and other biomass fuels due to lack of supply and lack of space to use firewood in their rented accommodation). This shift back to biomass use due to household budget constraints compromises the government's stated policy objective of promoting increased adoption of cleaner fuels, and has been compounded by the parallel reform of entitlement to subsidized kerosene (the predominant reported alternate fuel) through the Public Distribution Scheme (PDS), with households possessing a gas connection having their PDS kerosene entitlement cancelled.<sup>13</sup>

### 3.4 Other Findings

Alongside issues directly related to the introduction of the DBT scheme, several other themes emerged from the focus group discussions. One consistent message expressed in the focus group discussions was that the Public Distribution System (PDS) was highly valued by beneficiaries; however, in some locations it faced operational challenges including erratic ration distribution (both in terms of delivery timing and product availability), Fair Price Shop (FPS) understaffing and infrequency of opening hours, and exclusion and inclusion errors related to ration card distribution. In addition, the stamping of ration cards with a gas connection seal—a step intended to ensure cancellation of subsidized kerosene entitlement through the PDS system—was reportedly affecting access to other services for some Below Poverty Line ration card holders, including concessional treatment at government hospitals and access to anganwadis (childcare centres).

A further recurring theme in the focus group discussions was that households (and particularly women) valued LPG as a clean, efficient and cost-effective fuel, and were keen to continue to use it. Respondents, all of whom had previously used kerosene or firewood stoves in either their own or their parent's households, identified numerous benefits of LPG use, including cleaner cooking, time and labour savings (both in preparation and cooking time, and accruing particularly to women), the ability to cook multiple items simultaneously, and the ability to use more efficient cooking utensils (including pressure cookers).

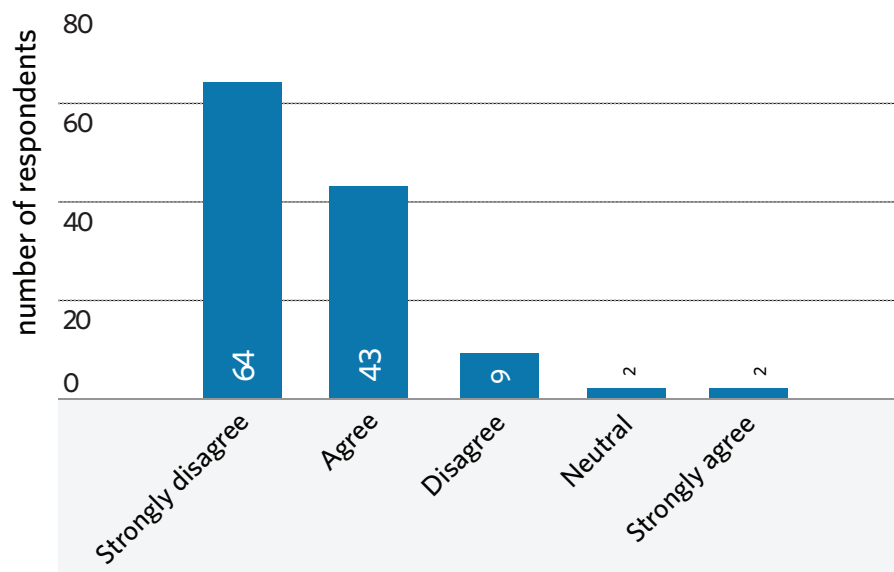
## 4. Summary

Attitudes towards the DBTL were generally negative. The majority of respondents felt the scheme was poorly implemented, led to higher prices, and was overly complex. Indeed, the results of the individual surveys and focus group discussions outlined above indicate that the pilot reforms to LPG subsidy distribution in Mysore were problematic in both design and implementation. This is clearly reflected in beneficiary opinions—over 60 per cent of respondents to the individual surveys (73 of 120) either disagreed (9) or strongly disagreed (64) with the statement that DBTL is preferable to the previous LPG subsidy system, and this pattern was repeated within the focus group discussions, with the large majority of respondents stating that they preferred the previous system of administering LPG subsidies.

<sup>12</sup>One focus group reported the interest cost at up to INR 50 per month.

<sup>13</sup> PDS kerosene is currently supplied at INR 15 per litre, against a market price of approximately INR 50 per litre. For details of the negative impact of this policy, see for example Kattimani (2013).





**FIGURE 4. BENEFICIARY VIEWS ON DBTL (RESPONSES TO QUESTION 210 “I PREFER THE NEW DBT SYSTEM BECAUSE IT IS BETTER THAN THE OLD SYSTEM”)**

*Source: Beneficiary survey.*

The suspension of the DBT for LPG program and the constitution of a committee by the MoPNG to examine the scheme therefore represents an important opportunity to reconsider both the objectives and methods of implementing subsidy reform, and to ensure that any future proposals to reform LPG subsidies at a national level reflect the lessons learnt from the pilot districts.

---

## References

---

- Kattimani, B. (2013, July 31). Rain-hit, they live in darkness. *Times of India*. Retrieved from <http://timesofindia.indiatimes.com/city/hubli/Rain-hit-they-live-in-darkness/articleshow/21494929.cms>
- Kurup, D. (2012, September 18). LPG cap part of larger Aadhaar-linked plans. *The Hindu*. Retrieved from <http://www.thehindu.com/news/cities/bangalore/lpg-cap-part-of-larger-aadhaarlinked-plans/article3911174.ece>
- Madaan, N. (2014, January 10). Calculation of subsidy stumps LPG consumers. *Times of India*. Retrieved January 2014, from <http://timesofindia.indiatimes.com/city/pune/Calculation-of-subsidy-stumps-LPG-consumers/articleshow/28606184.cms>
- Milton, L. (2013). From today, pay Rs 941 for LPG cylinder. *Times of India*. Retrieved from <http://timesofindia.indiatimes.com/city/mysore/From-today-pay-Rs-941-for-LPG-cylinder/articleshow/23330231.cms>
- Times of India. (2014, January 16). Over 9,000 LPG consumers await name change. Retrieved from [http://articles.timesofindia.indiatimes.com/2014-01-16/nashik/46262912\\_1\\_name-change-subsidy-transfer-system-lpg-companies](http://articles.timesofindia.indiatimes.com/2014-01-16/nashik/46262912_1_name-change-subsidy-transfer-system-lpg-companies)
- Petroleum Planning and Analysis Cell (PPAC). (2013). *Fiscal subsidy on PDS kerosene and domestic LPG ( under Subsidy Scheme, 2002)*.
- PPAC. (2014a, April). *Petroleum prices and under recoveries*.
- PPAC. (2014b, April). *Price build up of sensitive products*.
- PPAC. (2014c, April). *Revision in RSPs*.
- Raghunandanan, P. (2012, June 20). Aadhaar number must to get LPG cylinder in Mysore. *Deccan Herald*. Retrieved from <http://www.deccanherald.com/content/258517/aadhaar-number-must-get-lpg.html>
- Sinha, S. (2013, February). *The Hindu Businessline*. Retrieved from <http://www.thehindubusinessline.com/economy/direct-cash-transfer-of-subsidy-for-cooking-gas-in-20-districts-before-april-1/article4400617.ece>



© 2014 The International Institute for Sustainable Development  
Published by the International Institute for Sustainable Development.

## About IISD

The International Institute for Sustainable Development (IISD) contributes to sustainable development by advancing policy recommendations on international trade and investment, economic policy, climate change and energy, and management of natural and social capital, as well as the enabling role of communication technologies in these areas. We report on international negotiations and disseminate knowledge gained through collaborative projects, resulting in more rigorous research, capacity building in developing countries, better networks spanning the North and the South, and better global connections among researchers, practitioners, citizens and policy-makers.

IISD's vision is better living for all—sustainably; its mission is to champion innovation, enabling societies to live sustainably. IISD is registered as a charitable organization in Canada and has 501(c)(3) status in the United States. IISD receives core operating support from the Government of Canada, provided through the International Development Research Centre (IDRC), from the Danish Ministry of Foreign Affairs and from the Province of Manitoba. The Institute receives project funding from numerous governments inside and outside Canada, United Nations agencies, foundations and the private sector.

International Institute for Sustainable Development

Head Office

161 Portage Avenue East, 6th Floor, Winnipeg, Manitoba, Canada R3B 0Y4

Tel: +1 (204) 958-7700 | Fax: +1 (204) 958-7710 | Web site: [www.iisd.org](http://www.iisd.org)

## About GSI

GSI is an initiative of the International Institute for Sustainable Development (IISD). GSI puts a spotlight on subsidies—transfers of public money to private interests—and how they impact efforts to put the world economy on a path toward sustainable development. In cooperation with a growing international network of research and media partners, GSI seeks to lay bare just what good or harm public subsidies are doing; to encourage public debate and awareness of the options that are available for reform; and to provide policy-makers with the tools they need to secure sustainable outcomes for our societies and our planet.

Global Subsidies Initiative

International Environment House 2, 9 chemin de Balexert,

1219 Châtelaine, Geneva, Switzerland

Tel: +41 22 917-8373 | Fax: +41 22 917-8054

Further details and contact information

For further information contact Damon Vis-Dunbar at:

[dvis-dunbar@iisd.org](mailto:dvis-dunbar@iisd.org) or +41-22-917-8848



**GSI** Global  
Subsidies  
Initiative

**iisd**

International  
Institute for  
Sustainable  
Development

Institut  
international du  
développement  
durable