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DBTL Performance Evaluation: Insights from the world's largest subsidy benefit transfer scheme

April 2016

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Executive Summary

Liquefied petroleum gas (LPG) has been universally subsidized in India for last 40 years to provide clean domestic cooking energy at an affordable price. With a rise in LPG consumption, the annual subsidy outlay has more than tripled over the last 10 years. Apart from a rising subsidy burden, the LPG subsidy program has been facing the challenges of: (i) diversion of subsidized product for unintended purposes; (ii) multiple connections in many households; and (iii) skewed distribution of LPG subsidies (and consumption) among urban and relatively high-income classes.

With the aim to curb diversion and weed out duplicate connections, the Government of India launched the Direct Benefit Transfer for LPG (DBTL) scheme to provide LPG subsidies directly into consumers' bank accounts. The scheme was first launched in June 2013 on a pilot basis, but was later suspended due to consumer grievances. Based on the recommendations of an expert committee, the modified DBTL scheme was launched across the country on January 1, 2015. With close to 150 million enrolled beneficiaries (households), it is now recognized as the world's largest benefit transfer scheme.

We conducted an independent performance evaluation of the modified DBTL scheme, with a focus on assessing the efficacy of the scheme against its stated objectives and its implementation process, as well as the experiences of key stakeholders with the scheme's implementation and impact. The study also unravels the difficulties faced by different stakeholders and puts forward suggestions for reforms. Finally, it provides insights into the lessons learned from the scheme's implementation. We used the mixed methods approach of research comprising a primary survey of 1,270 households and 92 LPG distributors, and semi-structured interviews with field officers and bank managers across the three states of Gujarat, Haryana and Kerala. In addition, we interviewed senior officials at the oil marketing companies (OMCs) and the Ministry of Petroleum and Natural Gas (MoPNG).

Efficacy of the Implementation Process

We assessed the efficacy of the implementation process in terms of the extent of consumer enrolment under the scheme, awareness about the scheme among the consumers and the overall experiences of the key stakeholders during the implementation process.

- a) The survey recorded high rates of enrolment across all three states. The distributors reported 85 per cent of their domestic consumers as enrolled, on average, which corresponds well with actual enrolment rate of 83 per cent (as on March 30, 2015). However, during consumer survey, 94.6 per cent of households reported as being enrolled, reflecting a lack of information about status of enrolment. Further, 5.4 per cent of the households reported as *not enrolled* under DBTL, of which 45 per cent were either not interested in the subsidy or had no time to enrol. The rest cited lack of awareness about the process, absence of a bank account and rejection of documents by banks as the reasons.
- b) **The DBTL scheme was well publicized through different media and stakeholders.** Despite the majority of respondents knowing about the scheme in general, we found that customer awareness about the objectives of the scheme, enrolment process, subsidy transfer status and the grievance redressal mechanism was low.
- c) The study recorded high levels of consumer satisfaction and a positive outlook of key stakeholders towards the scheme. Almost three quarters of the enrolled consumers found the enrolment process easy (96 per cent in Haryana) and only 2.5 per cent of households reported the process as *difficult*. Less than 1 per cent of the households enrolled reported instances of corruption, indicating a significantly transparent implementation process. Distributors informed that OMCs provided adequate support and compensation throughout

the implementation process; yet 88 per cent stated having faced challenges. Lead District Managers (LDMs) of the banks expressed mixed levels of satisfaction due to the lack of dedicated resources in the banks and the lack of ownership of the scheme by the bank, in the initial period.

Difficulties Faced by the Key Stakeholders

Even though the scheme was being constantly improved during the implementation, most stakeholders reported having faced one or more challenges.

- a) Of the 2.5 per cent enrolled households who faced difficulty, 80 per cent cited *spelling mismatch or wrong entry* (of bank account number or Aadhaar number) as the prime reasons. Separately, 45 per cent of households had to make three or more visits to complete the enrolment process, indicating the inconvenience of the process.
- b) A majority of the distributors faced difficulties during the seeding process, mainly due to delays in document verification and/or high rate of rejection (due to spelling mismatch) by the banks. Multiple bank accounts, lack of bank accounts and delays by the banks in uploading the seeding details on the central database (NPCI mapper) were also highlighted as challenges.
- c) At the banks' end, variations in protocols followed across the banks, lack of dedicated resources and lack of coordination between the banks' headquarters and local branches were cited as the major issues. LDMs felt significantly overburdened by the transaction-related queries.

Efficacy of the DBTL Scheme to Meet its Stated Objectives

We assessed the scheme's efficacy in terms of the extent to which it could achieve its stated objectives.

- a) Close to 75 per cent of the consumers enrolled in DBTL reported receiving their subsidy in their bank accounts, evenly across the rural and urban areas. However, issues such as non-receipt of subsidy (higher in rural areas) and lack of information about subsidy transfer (16.6 per cent consumers were unaware) need to be resolved urgently to ensure that the subsidy reaches all deserving households.
- b) Of the distributors surveyed, 85 per cent reported the significant impact of the scheme on controlling both the diversion of cylinders and having multiple connections. Analysis of the sales data of domestic, non-domestic and auto LPG also confirm a decline in diversion of subsidized LPG. However, a more careful assessment is required to estimate the scheme's impact on weeding out duplicate connections, while acknowledging the possible withdrawal of poor households due to constraints of cash flow or lack of effective financial inclusion.
- c) Every second household surveyed reported improved, timely delivery of LPG cylinders in the months following the scheme's implementation. This could be attributed to the avoided convolutions at the delivery end, as there was no change in the supply schedules at the OMCs' end.

Lessons Learned

Besides achieving its objectives to a significant extent, the DBTL scheme elicited high levels of consumer satisfaction. Moreover, all the key stakeholders expressed a positive outlook towards the scheme, except the banking personnel. Following are the *six key factors* that made the scheme successful and would be useful for designing and implementing other public schemes:

- a) *Strong leadership* from the central government and institutional coordination across multiple stakeholders.
- b) Incorporating the *lessons learned from the past experience* of the scheme's implementation; the modified scheme was designed in a holistic manner, with clearly defined procedures, timelines for different activities and phases, stakeholder responsibilities and a centralized grievance redressal mechanism.
- c) Effective utilization and *convergence of other government schemes* and efforts, such as the Unique Identification (UID) project, Know Your Customer (KYC) drive, ongoing schemes on financial inclusion, etc.
- d) *Effective human resource management* through hand-holding and periodically training different stakeholders, setting individual targets and monitoring the scheme's progress on a daily basis.
- e) Strong emphasis on *awareness generation* and organization of intensive Information Education Campaigns (IECs) to publicize the scheme and its process.
- f) *Independent performance* assessment exercises to refine the scheme's design and implementation process by assessing the stakeholder's experiences and verifying the outputs and outcomes of the scheme.

To conclude, it is true that DBTL only changes the nature of subsidy disbursement, without changing the entitlements for different socioeconomic groups, and hence may not be considered a "subsidy reform" in the conventional sense of the word. However, DBTL provides a way to set a common market price for the commodity to subsequently enable subsidy targeting and differential subsidy, without allowing diversion. Hence, it paves the way for effective subsidy reforms. Exclusion of well-to-do households from the LPG subsidy net, based on their annual income, is one such step recently announced by the government.

Finally, while the government should celebrate the successful implementation and largely positive reception of the scheme by consumers, it is important to note that, going forward, as the government tries to increase LPG penetration in rural areas, DBTL may pose a barrier to LPG access unless financial inclusion is made effective.

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List of Abbreviations

CBS	Core banking system
CTC	Cash Transfer Compliant
DBT	Direct Benefit Transfer
DBTL	Direct Benefit Transfer for LPG
DFS	Department of Financial Services
FO	Field officer
FY	Fiscal year
IEC	Information, Education and Communication
KYC	Know Your Customer
LDM	Lead District Manager
LPG	Liquefied petroleum gas
MoPNG	Ministry of Petroleum and Natural Gas
NPCI	National Payment Corporation of India
OMC	Oil marketing company
PAHAL	Pratyaksha Hastaantarit Laabh
PMJDY	Pradhan Mantri Jan Dhan Yojana
RGGLVY	Rajiv Gandhi Gramin LPG Vitaran Yojana
UID	Unique Identification

1.0 Introduction

Liquefied petroleum gas (LPG) is the predominant "clean" cooking fuel in India. Much of the growth in the consumption of LPG, which is replacing traditional cooking fuels, has been carried on the back of massive subsidies. The Indian government has been providing LPG subsidies since late 1970s, in order to make clean cooking fuel affordable for Indian households (Jain, Agrawal, & Ganesan, 2014). With the rise in LPG consumption and prices, the overall annual subsidy burden on the government has more than tripled over the last 10 years, from INR 10,246 crore (USD 1.57 billion) in 2005/06 to INR 36,580 crore (USD 5.62 billion) in 2014/15 (Petroleum Planning and Analysis Cell, 2015).

Various studies have highlighted three major issues currently being faced by the LPG subsidy program in India: (i) the rising subsidy burden; (ii) the skewed distribution of LPG subsidies (and consumption) among urban versus rural areas and across income classes; and (iii) the diversion of subsidized LPG for unintended purposes (Clarke, Sharma, & Vis-Dunbar, 2014; Clarke & Sharma, 2014; Expert Group, 2010; Global Subsidies Initiative, 2014; Jain et al., 2014; Lang & Wooders, 2012; Pandey & Morris, 2006; Soni, Chaterjee, & Bandhopadhyay, 2012). In order to address some of these challenges, these studies have proposed diverse measures ranging from reducing the subsidy amount and imposing a realistic per-household cap on subsidized cylinders to direct cash transfer of subsidy and targeting the beneficiaries.

In line with some of these recommendations, particularly those by the Expert Group (2010), the Government of India launched the Direct Benefit Transfer for LPG (DBTL) scheme on June 1, 2013, which was expanded to 291 districts in six phases. The scheme aimed at curbing leakages and preventing black marketing by providing a subsidy directly in the LPG customers' bank accounts (Ministry of Petroleum and Natural Gas [MoPNG], 2013). Even though the scheme was successful in curbing the leakages in the LPG distribution system, the speed at which it was rolled out and the pre-requisite that the consumer have an Aadhaar number for availing the LPG subsidy led to numerous consumer grievances (Expert Committee, 2014). In view of such issues, the DBTL scheme was suspended, effective March 10, 2014, and an expert committee was constituted to review it.

Based on the extensive recommendations of the Expert Committee (2014), a modified DBTL scheme, also known as PAHAL (*Pratyaksha Hastaantarit Laabh*), was re-launched in 54 districts on November 15, 2014 and was expanded to the rest of the country on January 1, 2015 (MoPNG, 2015a). The modified scheme was launched with the following key objectives (MoPNG, 2015b):

- a) Remove incentive for diversion
- b) Protect entitlement and ensure the subsidy to the consumer
- c) Improve the availability/delivery of LPG cylinders for genuine users
- d) Weed out fake/duplicate connections

The scheme covered 149.7 million domestic connections (more than 90 per cent of the total active user base) as of January 28, 2016 (MoPNG, 2015f). Owing to its larger base of enrolled beneficiaries, DBTL has become the world's largest direct benefit transfer (DBT) scheme (MoPNG, 2015e).

As part of the third-party evaluation, on request from MoPNG (the nodal ministry for LPG), we conducted an independent performance evaluation of the "modified" DBTL scheme.¹ With such a background, this study has following key objectives:

¹ This will be referred to as simply "the DBTL scheme" henceforth.

- (i) Assess the efficacy of the implementation process in terms of the extent of consumer enrolment under the scheme, awareness about the scheme among the consumers and the overall experiences of the key stakeholders during the implementation process.
- (ii) Identify the gaps in implementation and issues faced by different stakeholders and suggest reforms.
- (iii) Analyze the overall efficacy of the scheme in terms of the extent to which the scheme could achieve its stated objectives.
- (iv) Identify the lessons learned from DBTL for improving the scheme's implementation and further expansion, as well as for design and implementation of other similar schemes.

2.0 Methodology and Data Collection

We used a *mixed methods* approach² for the performance evaluation of the DBTL scheme. We focused on key stakeholders, including consumers, distributors, oil marketing companies (OMCs), banks and MoPNG. Though the scheme is implemented across all the states, in order to get an in-depth picture of on-ground realities within the limited time and resources available, we chose to focus on three states only. To capture sufficient diversity and get a representative picture, the choice of the state was governed by following considerations:

- 1. LPG penetration in the state proportion of households with LPG connection (both rural and urban combined)
- 2. Share of LPG connections that are Cash Transfer Compliant (CTC) (i.e., successfully enrolled in DBTL)
- 3. Proportion of households that are in rural areas

Based on the above criteria, the states of Gujarat, Haryana and Kerala, which show a variation in the combination of these above attributes, were chosen. They also represent three different geographies (south, west and north). Most of the states in the eastern part of the country exhibit low penetration of LPG and, due to limited resources, could not be represented in the study.

For consumers, in order to capture the views of a user base across the entire state, we chose to conduct telephonic surveys. The choice of telephonic surveys resolved the logistical limitation of physically reaching out to consumers in different parts of the state, while ensuring a completely random sampling approach for selection of households. In all, we surveyed 1,270 households, equally split across the three states. The sample was largely representative of the market share split of three OMCs in each of the states, as well as the LPG penetration in urban and rural areas of these states. The share of rural households among those interviewed was about 25.6 per cent.

To guide the survey and questionnaire design, we first analyzed the data on consumer complaints, which was shared with us by the OMCs. Outcomes from the analysis of complaint data were used to guide some parts of the questionnaire. After the inputs from MoPNG and the OMCs, the 22-question survey was finalized, and lasted for around 8–12 minutes. The questionnaire was designed to comprehensively understand consumer awareness, their perspective and their experience of the scheme, as well as the issues faced during and after the enrolment process. We also tried to elicit the users' views on how the scheme has affected them. The survey questionnaire is provided in Annex 1.

For distributors, again, we followed the similar approach of telephone interviews. We interviewed 92 distributors across the three states, representatively split across OMCs and urban-rural areas. Of these, about 18 per cent were distributors under the Rajiv Gandhi Gramin LPG Vitaran Yojana (RGGLVY), and the rest were urban and rural distributors. The questionnaire focused on understanding the distributors' perspective and experience of the scheme (during and after enrolment), as well as their views about how the scheme has affected them and other stakeholders. We also tried to capture their feedback (wherever provided) in terms of specific suggestions to improve the scheme going forward.

For OMCs, two sets of stakeholders were engaged in the study. The choice of these stakeholders was based on the need for better understanding of both the local-level issues (from those who were playing an active role in the scheme's on-the-ground implementation) and the national-level perspective (from those who were leading the entire DBTL implementation in respective OMCs). For the first

² Mixed methods is an evaluation approach that systematically integrates quantitative and qualitative methodologies and methods at all stages of an evaluation (Bamberger, 2013).

set, we engaged with OMC field officers who directly oversaw the distributors for implementation of the scheme across districts under their jurisdiction. We conducted nine semi-structured (telephone) interviews of the field officers, across all OMCs and all three states. For the second set, we conducted in-person unstructured interviews with the LPG business lead (or equivalent) of all three OMCs.

For banks, we conducted semi-structured telephone interviews with the Lead District Managers (LDMs), managers of the lead bank of the district. LDMs played a critical role in implementation of the scheme at the banks' end, and were involved very closely in liaising with OMC personnel and the local administration, particularly the respective District Collector's office. One LDM from each state was interviewed for the study.

In addition, we interviewed the director (LPG) at MoPNG, who played a critical role in the implementation of the DBTL scheme from the ministry's end.

All of the interviews, by telephone and in-person, were conducted in May 2015. We adopted a slightly staggered timeline for interviews with different stakeholders, which helped in corroborating the findings, as well as in enriching the discussions from one stakeholder to another, particularly for semi-structured and unstructured interviews.

3.0 Results and Key Findings

3.1 EFFICACY OF THE IMPLEMENTATION PROCESS

The efficacy of the implementation process was assessed in terms of the extent of consumer enrolment under the scheme, awareness about the scheme among the consumers and the overall experiences of the key stakeholders during the enrolment process.

3.1.1 Extent of Consumer Enrolment in the DBTL Scheme

During the telephone survey, distributors reported 85 per cent of their domestic consumer base as enrolled under DBTL. The rate of enrolment, as reported by distributors, was highest in Kerala (87 per cent), followed by Gujarat (85 per cent) and Haryana (81 per cent). The findings correspond well with the official data reported by MoPNG, according to which, the rate of enrolment across Kerala, Gujarat and Haryana stood at 86.3 per cent, 82 per cent and 78.8 per cent, respectively, as on March 30, 2015.

However, during the consumer survey, a higher percentage of households (94.6 per cent) reported as being enrolled in the DBTL scheme across the three states, against the actual enrolment rate of 83 per cent (as on March 30, 2015). One reason for the higher reporting by households could be due to those households who had submitted their application and perceived themselves as being enrolled, even though the enrolment process was not over for them. This is reflective of the scheme's implementation process, but also highlights the lack of information with the end user regarding their state of enrolment. It should be noted that the rate of enrolment was reported evenly across the rural and the urban areas.

3.1.2 Awareness About the Scheme

The consumer survey indicates that the DBTL scheme was well publicized through different media and stakeholders, with OMCs playing a lead role. All of the households surveyed, irrespective of their enrolment status, knew about the scheme. However, about 11 per cent of households could not relate to either of the scheme's names (i.e. PAHAL or DBTL). Gauging the effectiveness of various modes of communication, Figure 1 highlights the respective proportion of households that came to know about the scheme through particular modes (households were allowed to cite more than one mode of information). It appears that newspapers and various forms of advertisements had maximum reach.

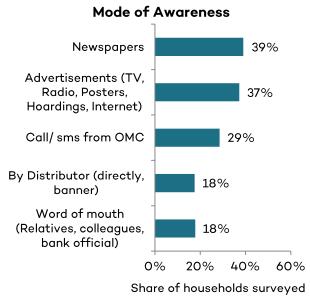


Figure 1: DBTL scheme was well publicized Source: CEEW Analysis The awareness about the scheme was close to 100 per cent; however, when asked about the objective of the scheme, 16 per cent of households claimed ignorance while others stated varied reasons, as illustrated in Figure 2. Clearly, there existed an information gap among people about the stated objectives of the scheme, which could have affected the public acceptance for the scheme.

In the consumer survey, 5.4 per cent of the households reported as not enrolled under DBTL scheme. Upon being asked the reasons for nonenrolment, 32 per cent of such households cited lack of awareness about the enrolment process, while 10 per cent had submitted the documents, but were unaware of their registration status (see Figure 3 for details). Another 10 per cent of these households reported that banks did not accept the documents, highlighting either a weak grievance redressal mechanism or the lack of awareness about the same.

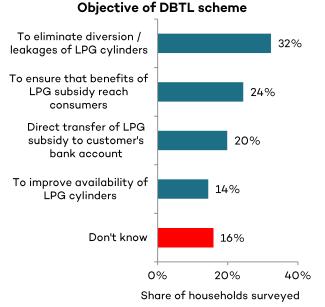
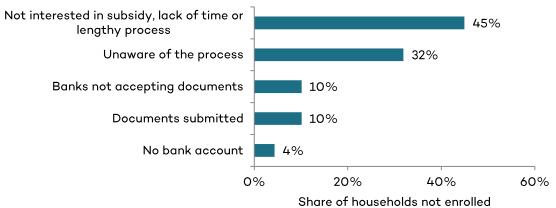


Figure 2: Need for more effective awareness generation about the objectives of DBTL

Source: CEEW Analysis



Reasons for not enrolling in DBTL

Figure 3: Need for better information flow to the customers

Source: CEEW Analysis

The fact that the customers lacked information about the process as well as the grievance redressal mechanism was further confirmed during the distributor survey. One fifth of all the distributors interviewed cited "customer queries related to subsidy transfer" as a challenge, indicating that even distributors were not completely aware about the grievance redressal processes. Experiences shared by the field officers of the OMCs as well as the LDMs also concur with the above findings. It was repeatedly reported that customers were unaware of the grievance redressal process for issues such as non-receipt of subsidy in their account.

Absence of bank accounts was also cited as a reason by 4 per cent of non-enrolled households. Even though this number is small (effectively, 0.22 per cent of the total respondents), it highlights an important issue of unbanked households being left out of the scheme's coverage and the benefits of LPG subsidies. Ensuring subsidy benefits to such households would be critical to enable sustained use of clean cooking fuel by them. In fact, the survey was carried out in states where financial inclusion is relatively better than average in India (Government of India, 2011). Thus, it is important for the government to focus on financial inclusion to minimize the number of households excluded due to non-availability of a bank account.

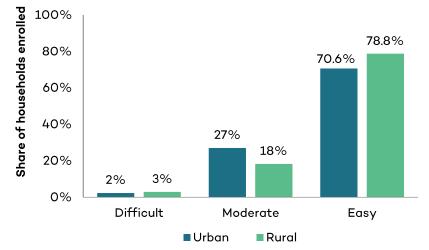
Of all the households reportedly enrolled in DBTL, 14 per cent had to open new bank accounts and half of these were opened under the *Pradhan Mantri Jan Dhan Yojana* (PMJDY).³ This indicates that there was some level of convergence between different government schemes. However, the DBTL scheme could further leverage PMJDY, the financial inclusion scheme, to cover the unbanked households. A sustained effort to provide meaningful access to banking services to all households would be required to ensure that every willing household gets enrolled in DBTL.

Issues related to the lack of adequate information and access to banking services affected the DBTL rollout to some extent and need to be addressed in order to enable a smooth and hassle-free enrolment process for new customers and subsidy transfer for those enrolled. This would also improve the overall outlook of the scheme for the public at large.

3.1.3 Stakeholder Experiences During the Enrolment Process

As per our survey, the implementation of the DBTL scheme brought mixed experiences for different stakeholders, namely, the consumers, OMC personnel, distributors and the bank managers.

LPG consumers are the primary stakeholders of the DBTL program. The majority of the enrolled households reported the DBTL enrolment process to be *easy*. Only 2.5 per cent found the process to be *difficult*, while a whopping 97.5 per cent found the enrolment process *easy* or *moderate* (see Figure 4). In fact, a higher share of rural households (79 per cent) as compared to urban households (71 per cent) rated the process as *easy*. The share of households that found the process easy was the highest in Haryana (96 per cent), followed by Gujarat (69 per cent) and Kerala (52 per cent). Kerala was among the first states for the DBTL rollout as a pilot, and the teething troubles could explain the lower proportion of households reporting enrolment process as easy.



Consumer perception of the enrolment process

Figure 4: The enrolment process was largely user friendly

7

³ **PMJDY** is the National Mission on Financial Inclusion, which was launched on August 14, 2015, with the aim to ensure universal access to banking facilities to all households, and also to facilitate channelling all government benefits to the beneficiaries' accounts through the DBT scheme of the Union Government (Ministry of Finance, 2014).

Consumer perception about the enrolment process indicates that the process was largely smooth. Such consumer perception could be attributed to various efforts taken by MoPNG, constant improvisation in the enrolment process by the OMCs and innovative approaches adopted by the distributors. For instance, as per the field officers, distributors in some urban areas of Haryana distributed as well as collected the DBTL forms at the doorsteps of the households through their deliverymen, which could have had a bearing on the fact that a significantly higher proportion of households in Haryana reported the enrolment process as *easy*.

Distributors, the LPG service providers and the customers' first point of contact, had been the prime actors in the scheme's implementation. As informed by the OMC personnel, all of the approximately 15,930 distributors were quickly roped in for the implementation of the DBTL scheme. The OMCs provided extended support to the distributors, both in terms of capacity building and financially, by compensating the distributors at a flat rate for each enrolment. However, despite the support and handholding by the OMCs, given the very short time frame for schemes' implementation, 88 per cent of surveyed distributors reported having faced one or more challenges during the enrolment process (details in the next section).

Field Officers (FOs) of the OMCs also played a critical role in training and hand-holding the distributors' personnel for the scheme's implementation. At the back-end, as described by one of the LPG business leads, the in-house IT teams of the OMCs also played a phenomenal role. The IT teams promptly handled the requests for modifying the software, which were emerging due to various on-the-ground challenges being faced during the enrolment process. These challenges ranged from non-streamlined digits in the account numbers of different banks to mismatched spelling between Aadhaar cards and the LPG database.

However, the **LDMs of the banks**, responsible for co-ordination between the banks and other stakeholders, expressed mixed levels of satisfaction about the way scheme was rolled out and the banks were engaged. LDMs shared that the Department of Financial Services (DFS), Ministry of Finance, issued notifications to the banks to ensure successful implementation of scheme. However, the banks were not prepared well, both in terms of resources and capacity, to effectively facilitate the enrolment process. Interviews with the senior officials at the OMCs and MoPNG further confirmed that the DFS played an important role and worked in close coordination with MoPNG, but the banks were slightly reactive in their approach. This led to significant on-the-ground problems, especially during the first few weeks of nationwide roll-out of the scheme. However, towards the later stages, the coordination between banks, FOs and distributors improved significantly.

From the series of stakeholders' interviews and surveys, it is evident that the DBTL enrolment process was being constantly improved during implementation, which led to its largely smooth rollout. A major driver behind the scheme's smooth implementation was the lead role played by the OMCs and the strong leadership from the central government, especially MoPNG, which created a vibrant sense throughout the entire value chain involved in the implementation process. Another key factor had been the Know Your Customer (KYC) exercise, which was conducted by the OMCs in 2012/13. The KYC exercise provided a foundation in terms of a streamlined customer database, which enabled the massive enrolment process of more than 140 million customers.

3.2 DIFFICULTIES FACED BY THE KEY STAKEHOLDERS DURING THE SCHEME'S IMPLEMENTATION

3.2.1 Difficulties Faced by the Consumers

As per the survey, 2.5 per cent households enrolled under DBTL found the enrolment process to be *difficult* (refer to Box 1 for details on the enrolment process). Upon being asked why, 43 per cent of these households cited *spelling mismatch* between Aadhaar card details and their LPG or bank account. Figure 5 highlights the various challenges reported by the customers during the enrolment process. Our interviews with the field officers revealed that cases of minor mismatch in spelling were quickly resolved at the distributor end, by updating the LPG customer database. However, spelling mismatches encountered by the banks led to high rejection rates.

Box 1: Enrolment process under the DBTL scheme

Under the modified scheme, LPG consumers had to become Cash Transfer Compliant (CTC) in order to receive the subsidy in their bank account. The consumers could become CTC by linking their bank account number with their LPG consumer number, either through their Aadhaar number (Aadhaar-based CTC or seeding) or direct bank account-based CTC (or seeding). The secondary option of seeding without Aadhaar number is the most significant revision over the earlier scheme under which many beneficiaries were left out due to an absence of Aadhaar number.

In Aadhaar-based CTCs, the consumer is required to link his or her Aadhaar number with his or her bank account, as well as with the LPG database by submitting forms at the bank branch and LPG distributor, respectively. In bank-based CTC, the consumer has to provide either bank details to the LPG distributor or his or her LPG consumer ID to the bank. Initially, the scheme had four different forms for this purpose, which were later combined into a single unified form (refer to Annex 1) for consumer convenience.

Source: MoPNG (2015a)

A reason given by 37 per cent of the households for their difficulty rating was wrong entry of bank account number or Aadhaar number during the seeding process. Although customers reported instances of wrong entry of Aadhaar number by the banks, no consumer reported incorrect Aadhaar entry by a distributor. As learned during the interviews with the LPG leads of the three OMCs, the latter could be attributed to an inbuilt fuzzy logic that prevented the entry of invalid Aadhaar number by the distributors. However, customers reported instances of wrong entry of the bank account number by the distributors, during direct bank account-based seeding. These could be attributed to higher probability of manual error during entry of bank account details, as more fields (including long chains of digits) had to be filled. Variation in the number of digits in bank account numbers for different banks and the occurrence of multiple zeros further made the direct bank account-based seeding process tedious and error prone.

Reasons for difficulty faced during enrolment process

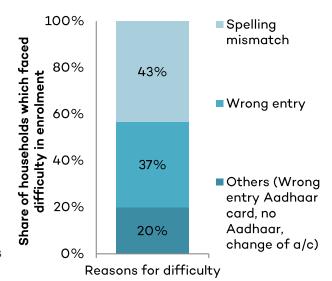
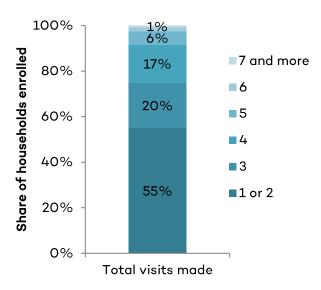


Figure 5: Spelling mismatches and manual errors in data entry were the leading issues in the enrolment process

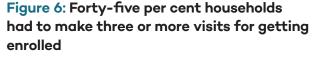
Source: CEEW Analysis

Close to 20 per cent of the households who found the process difficult attributed it to issues such as the need to change the seeded bank account, wrong entries in Aadhaar card or the inability to obtain the Aadhaar card itself.

Although, we could not find a strong correlation between customer satisfaction with the enrolment process and the number of visits they had to make, the latter offers significant insights. As per the procedures, households opting for Aadhaarbased seeding were required to make two visits, one each to the bank and the distributor for enrolling in DBTL, while those opting for bankbased seeding were required to make just one visit, either to the distributor or to the bank. However, as per the survey, 45 per cent of the households had to make three or more visits to their banks and distributors combined (see the details in Figure 6). This number was highest in Gujarat (72 per cent) and lowest in Haryana (28 per cent). Further, overall about 8.4 per cent of households had to make more than four visits to



Total visits made by households for DBTL enrollment



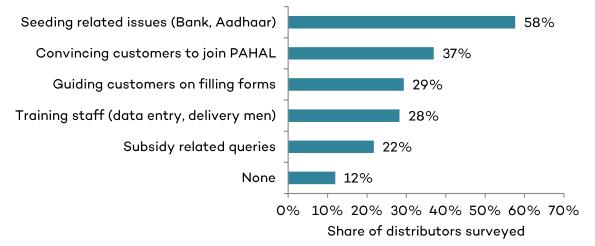
Source: CEEW Analysis

complete the enrolment process, reflecting hassles faced by a significant number of customers.

Admirably, less than 1 per cent of the households enrolled reported instances of corruption at the hands of distributors or bank officials, which indicates a significantly transparent process.

3.2.2 Difficulties Faced by the Distributors

Given the strict timelines for implementation of the scheme, 88 per cent of the distributors reported having faced various challenges (distributors often reported more than one challenge). Handling of issues related to the seeding process (Aadhaar-based as well as bank-based seeding) was the most frequently reported challenge (by 58 per cent respondents). Among the other issues faced, convincing the customers to join PAHAL or guiding them on filling in the forms and training the staff for data entry were each reported as major challenges by close to a third of the surveyed distributors (see Figure 7).



Challenges faced by the distributors during DBTL rollout

Figure 7: Given the aggressive implementation timeline, distributors faced multiple challenges, despite the OMCs providing adequate support

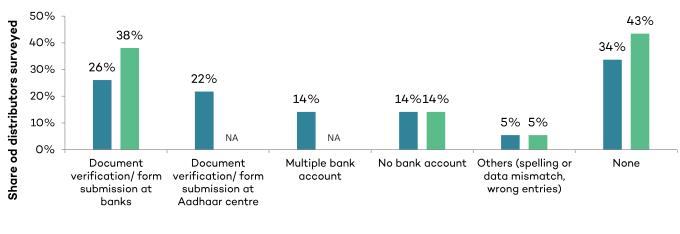
Source: CEEW Analysis

Even as the distributors cited various difficulties, an overwhelming 87 per cent of them acknowledged that the OMCs provided adequate support during the whole process. On the flip side, 26 per cent of the distributors reported non-receipt of compensation from the OMCs and 32 per cent of those who received it found the compensation to be insufficient. However, our discussions with authorities at MoPNG revealed that OMCs had already made the payments as a flat-rate compensation against each enrolment to all the distributors. This again points towards an important issue of information gap in the process.

Due to the lag in timely disbursal of the subsidy and the lack of proactive information about the same, distributors had to tackle multiple subsidy-related queries from the customers, and felt they did not have sufficient information or capacity to deal with those queries. This was quoted as a challenge by 22 per cent of the distributors surveyed, most of which also highlighted the need for timely information to customers about subsidy transfer and/or the reasons for its failure.

Challenges Faced During the Seeding Process

The seeding-related issues were among the most common difficulties faced by the distributors. We further found that 75 per cent distributors reported that Aadhaar seeding process was easier than the bank seeding one. In the latter, the distributors are required to enter various data fields related to bank account details, which is a relatively tedious and error-prone process. In the former, distributors have to enter only the Aadhaar number. However, distributors encountered several problems during each seeding process, as illustrated in Figure 8.



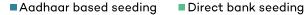


Figure 8: Problems encountered during Aadhaar and bank seeding process

Source: CEEW Analysis

Document verification or form submission at bank was quoted as the major challenge under both categories. Interviews with LPG leads and field officers further corroborated the finding. Banks often delayed the verification process and rejected high volumes of applications due to spelling mismatch. Field officers and LDMs also cited the delay in uploading the Aadhaar details on the centralized database (National Payment Corporation of India [NPCI] mapper), which is necessary to complete the enrolment process, as a challenge. Consequently, in order to meet the scheme's timeline, MoPNG directed OMCs and distributors to enrol customers through direct bank seeding, skipping the banks' verification process in the short run, conducting a retroactive verification at a later date. Though this significantly increased the rate of enrolment, it also led to wrong entries of bank details by the distributors and, thus, affected the effectiveness of subsidy transfer process.

Customers who did not have bank accounts also posed a difficulty to the distributors. It put the onus of guiding the customers (about opening new accounts) on the distributors, who had strict timelines to achieve the enrolment targets. Further, results reveal that about 36 per cent distributors did not find banks to be cooperative in handling and solving the customer complaints.

Multiple bank accounts with consumers were a challenge only under the Aadhaar seeding process. As per NPCI's Aadhaar-linked payment system, only the latest seeded account details remain linked to the Aadhaar number. So if a customer has multiple bank accounts and provides Aadhaar details to get his account seeded, *only the account that was last seeded to the Aadhaar will remain active for Aadhaar-based payments*. Moreover, when an Aadhaar number is linked to an account, the customer is not informed about the change in status of the Aadhaar-seeded bank account. Furthermore, interviews with LDMs revealed that often customers provide their Aadhaar card merely as an address proof for banking purposes, but the bank automatically seeds the Aadhaar number against the account, thus replacing the previously Aadhaar-linked account of the customer, without any information to the customer or his/her prior consent.

3.2.3 Challenges Pertaining to Banks

Based on our interviews with LDMs in the three states, it can be said that LDMs received varied levels of coordination support from the distributors and field officers. The distributors were responsible for collecting the forms to be submitted to the banks and delivering them to the LDMs or the banks. Often, these forms were collected by the distributors, but not delivered to the LDMs, who then had to collect them by visiting each distributor and subsequently distribute them to the respective banks.

LDMs also highlighted the issue of poor information flow. They recounted multiple instances when the LPG distributors had displayed their contact numbers to the consumers, for any queries related to subsidy transaction. As a result, consumers started reaching out to the LDMs to resolve queries unrelated to their responsibilities, they did not have the capacity or information to deal with the problems.

LDMs also highlighted issues related to the banks such as different protocols followed by different banks and lack of standardization of the processes and protocols pertaining to the enrolment process. For instance, banks were following different protocols to handle whether a joint account could be used for seeding with DBTL (with or without Aadhaar), and if they were, whether the name of the first person against whose name the account is held must match with LPG connection name. These discrepancies often created hassles for the customers along with the distributors and the LDMs.

Respondents also emphasized the lack of dedicated resources in the banks for DBTL as an issue, which often led to repetitive capacity building (and wasteful effort), as the responsibility was frequently changed from one employee to another.

Another challenge that the banks at the local level faced was a lack of information about the Aadhaar seeding status of the accounts. Typically, bank personnel at the local branches linked the Aadhaar details to the bank account, but uploading of details to the NPCI mapper happened centrally at the bank's headquarters. The local bank personnel were not being informed about the status of Aadhaar seeding, in the event of its being delayed at the central level.

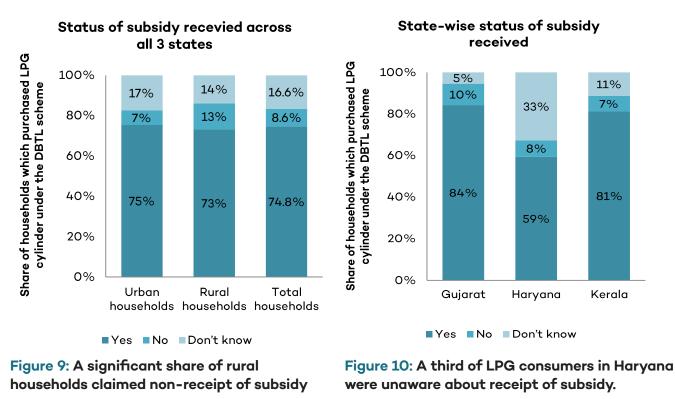
3.3 EFFICACY OF THE DBTL SCHEME TO MEET ITS STATED OBJECTIVES

The overall efficacy of the scheme was assessed in terms of the extent to which the scheme could achieve its stated objectives. These include impacts on: (i) effectiveness of subsidy disbursal to the consumers, (ii) diversion of subsidized LPG, (iii) weeding out duplicate and fake connections, and (iv) availability/delivery of LPG cylinders.

3.3.1 Effectiveness of Subsidy Disbursal to Consumers

The households enrolled in the DBTL scheme recounted mixed experiences in receiving the subsidy in their bank account upon the purchase of LPG cylinders. Close to 75 per cent of the households, which purchased the LPG cylinder after enrolling under DBTL, reported that they received the subsidy in their bank accounts. This share was marginally lower in the rural areas (73 per cent). It was further reported that the subsidy was received only for 88 per cent of total cylinders purchased by these households.

Notably, 16.6 per cent of households did not know about the status of the subsidy transfer (see Figure 9 for details). However, of significant concern, 8.6 per cent households reported non-receipt of subsidy for any cylinder purchased, and the proportion of such households was higher in rural areas (approximately 13 per cent). Figure 10 highlights the status of subsidy received by consumers across the three surveyed states. The share of households reporting non-receipt of the subsidy across the three states ranges between 7 to 10 per cent. However, Haryana has an astonishingly high proportion of households (33 per cent) claiming ignorance about the status of subsidy received and, thus, the lowest share of households reporting receipt of the subsidy. Further, this share was higher among urban households (34 per cent), when compared to rural households (30 per cent) in Haryana.



Source: CEEW Analysis

Source: CEEW Analysis

Apart from ensuring foolproof transfer of the subsidy, consumer awareness about the status of receiving the subsidy remains a major concern and a barrier to fully realizing the scheme's objective to "protect entitlement and ensure subsidy to the consumer."

Confirming the above concerns, upon being asked for suggestions to improve the DBTL scheme, close to a quarter of the surveyed distributors suggested that there is a need to ensure timely delivery of the subsidy as well as the information about the same to the LPG consumers.

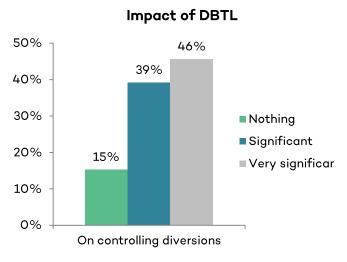
During the interviews held with field officers, distributors and the LDMs, instances of non-receipt of the subsidy were repeatedly cited as an issue. However, all stakeholders agreed that the rate of complaints significantly decreased over time. People were often not aware about whom to approach in case of non-receipt of the subsidy. They usually approached the distributors, who handled the complaints depending upon their interest, engagement, information and competency level. One of the LDMs interviewed also reported that the distributors tend to provide LDMs' phone numbers for any subsidy related queries. Given that LDMs have no access to any information on actual transactions, it becomes frustrating for them to deal with consumer complaints. The only role they could play and had been playing is to re-direct these complaints to respective banks and sometimes to the field officers of OMCs.

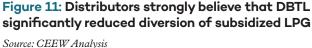
Overall, it can be said that, under the scheme, a majority of consumers reported receipt of subsidy in their bank accounts; however, issues such as non-receipt of the subsidy and lack of information about the subsidy transfer need to be resolved urgently to ensure that the subsidy reaches all qualified households.

3.3.2 DBTL's Impact on Diversion of Cylinders

About 85 per cent of the distributors surveyed reported that the scheme has significantly affected the diversion of cylinders (see Figure 11 for details).

To validate our findings from the survey, we further assessed the impact of the modified DBTL scheme on limiting the diversion of the subsidized product, on the basis of secondary data. Our analysis, based on the Petroleum Planning and Analysis Cell data on the consumption of non-domestic LPG (cylinders) and "auto-LPG" consumption, indicates that DBTL has a significant impact on reducing the diversion of domestic subsidized LPG for unintended uses. The growth in the sales of nondomestic packed LPG has been declining since 2009–2010, with negative growth rates in FY 2013/14 and FY 2014/15 (until November 2014,





when modified DBTL was introduced). Since, December 2014, non-domestic packed LPG sales have shown a significant positive rate of growth, as opposed to negative growth rates for 14 continuous months before that. Subsequently, in the first three quarters of FY 2015/16, from April 2015 until January 2016, the overall growth in the sales of non-domestic packed LPG has been a phenomenal at 44.4 per cent. The extent of growth could be partly due to a lower base and low fuel prices. But given no other major change in the economic situation, it could be broadly attributed to DBTL, which limited the diversion of subsidized commodities for non-domestic use (from the distributor's end).

Similarly, the auto-LPG sales, which have witnessed a decline since 2010/11, has revived from January 2015 (concurrent to nationwide launch of modified DBTL). In the first three quarters of FY 2015/16, from April 2015 until January 2016, the overall growth in the sales of non-domestic packed LPG has been 6.4 per cent.

One important point to be noted is that, even though the DBTL scheme has facilitated the uniform market price of domestic LPG cylinders (both subsidized and non-subsidized), there still exists a differential in the market price of domestic LPG and non-domestic LPG (for commercial/industrial uses). Such a price differential could still lead to diversion of domestic LPG towards non-domestic purposes. This differential in market price is due to the different tax structures applicable to domestic and non-domestic LPG. Domestic LPG, including non-subsidized, is exempt from any taxes or duties, while this is not the case with non-domestic LPG. A further reform on taxation of LPG to ensure uniform pricing, which is also being considered by the government, would be necessary to further reduce the diversion of domestic LPG for unintended uses (Business Standard, 2015).

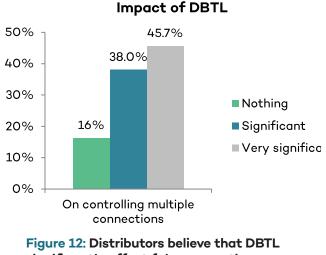
3.3.3 Impact of DBTL on Eliminating Multiple and Fake Connections

About 84 per cent of the distributors surveyed reported that the scheme had a significant impact on controlling duplicate or multiple connections (see Figure 12 for details).

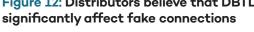
The Government of India has repeatedly cited that the goal of the DBTL scheme has been to eliminate close to 33 million ghost connections (MoPNG, 2015g). All of these ghost connections are

basically inactive LPG connections.⁴ However, in order to estimate the extent of the scheme's impact on controlling multiple connections, it is important to consider the number of dormant connections before the re-launch of the DBTL scheme, as of November 2014.

Secondly, a dormant connection might not necessarily mean a ghost or multiple or second connection. An unintentional impact of the DBTL scheme could be the conversion of a genuine LPG consumer into an inactive one, especially those from poorer economic backgrounds who might not have sufficient cash to buy LPG cylinders at the market price. Under the scheme, the initial subsidy amount is transferred to the households' bank account in advance, so as to ensure that there is no additional outlay by the consumers while refilling a cylinder



Distributors' perception about



Source: CEEW Analysis

at the market price. However, often the quantum of money to be disbursed in one go becomes a major decision factor for low-income daily wage households (both urban and rural). One major reason for such perceptions in the poorer households is the lack of meaningful financial inclusion, particularly in rural areas, where access to banking services is poor. Taking money out of the bank could mean losing half a day's wage (as bank branches are far away), in addition to losing wages in getting the cylinder refilled at the distributor (as there is no provision of delivery of LPG cylinders with rural distributors). The ongoing efforts to increase the number of bank branches in rural areas and innovative measures such as banking correspondents and mobile money transactions could help improve access to financial services in rural and remote areas (CGAP, 2013; Hindustan Times, 2013; Keshavamurthy, 2014).

On the basis of the distributor's survey, this study verifies that the DBTL scheme did have an impact on controlling multiple connections. Of the 30 million inactive connections, a significant proportion could be ghost or duplicate connections. However, a more careful assessment is required to estimate the exact impact of the DBTL scheme in limiting such connections, while acknowledging the possible withdrawal of genuine households away from LPG, the clean cooking fuel, due to the reasons discussed above.

3.3.4 Impact on Availability and Delivery of LPG Cylinders

One of the many objectives of the DBTL scheme was to "improve the availability/delivery of LPG cylinders for genuine users." To assess the extent to which this objective was achieved, we asked the consumers about their perception about the delivery time of the cylinders, and whether it improved, deteriorated or remained same in the previous two months (i.e., after completion of the main enrolment period). Interestingly, more than 52 per cent households surveyed reported that the timely delivery of cylinders improved in the previous two months.⁵ Another 39 per cent households reported no change in delivery time, while close to 9 per cent households felt that the service had deteriorated. While these trends were similar across rural and urban households, households reporting

⁴ OMCs deem an LPG connection as inactive when a connection holder doesn't refill a cylinder in 6 months. Reactivation of such connections requires the customers to visit the distributor to go through the necessary formalities including the KYC exercise, if not already done.

⁵The scheme was launched across the country on January 1, 2015, and initial enrolment was complete by end of March 2015. The survey was conducted in May 2015.

deterioration in service delivery was highest in Kerala (18 per cent). Discussions with the director of LPG reveals that Kerala has been facing distribution issues due to lobbying of transport unions in the state, suggesting a much greater impact of the same on LPG cylinder deliveries to distributors.

As per our interviews with the senior officials at the OMCs, the perception of improved regularity in cylinder delivery could only be attributed to the avoided convolutions at the delivery drivers' end, as there was no change in the supply schedules at the OMCs' end.

In all, it could be stated that the DBTL scheme was fairly successful in achieving its objective of direct transfer of subsidy to the consumers, though some gaps remain to be fulfilled. Second, it also succeeded in limiting the diversion of subsidized product and eliminating duplicate connections; however, the extent of the same needs to be carefully evaluated. Third, the consumer perception of improved timely delivery of LPG cylinders following the scheme's implementation could also be attributed to DBTL.

4.0 Lessons Learned from the DBTL Scheme

Apart from highlighting the challenges faced during the implementation of the DBTL scheme, we also explore the factors behind the scheme's successful implementation and the high level of consumer satisfaction as recorded during the survey. The success factors behind the scheme, as well as the hurdles faced, offer important insights for policy-makers and other stakeholders, which would be useful for designing and implementing other public schemes. This section discusses these insights from the DBTL scheme.

A. Strong leadership and institutional coordination

Based on the interactions with various stakeholders during the course of this study, an element that was repeatedly quoted and became evidently visible was strong leadership from the central government, which drove the implementation of the entire scheme. The scheme was regularly reviewed by the prime minister (PMO, 2015) and monitored directly by the Minister of Petroleum and Natural Gas (MoPNG, 2015d), which highlights the importance given to the scheme and its timely implementation.

The implementation of the DBTL scheme involved multiple stakeholders, such as MoPNG; DFS (Ministry of Finance); the entire LPG retail supply chain, with the OMCs at the helm; lead district managers of the banks; and the district-level administration (office of the district collector or district magistrate). An elaborate multi-tiered structure of project management teams at different levels (see Annex 2 for detailed layout) was created to facilitate co-ordination between different stakeholders and enable troubleshooting during the scheme's implementation. Co-ordination with the banks was initially weak, but improved towards the later stages of implementation, upon facilitation by the DFS, Ministry of Finance.

B. Learning from the past experience

Effective use of insights from past experience in the scheme's implementation contributed to its successful implementation. Following the discontinuation of the previous DBTL scheme, the government constituted a committee to look into the challenges, which affected the scheme's implementation, particularly the exclusion of LPG consumers due to absence of an Aadhaar number (Expert Committee, 2014). One of the major recommendations of the committee led to the provision of enrolling in the scheme without an Aandhaarnumber, directly through bank account linking.

Further, the review enabled identification of the difficulties faced by different stakeholders, which helped the OMCs to devise robust systems (such as improvised IT systems and software), along with teams of experts, to quickly respond to real-time on-the-ground enrolment issues. A comprehensive and central grievance redressal system was also set up in line with the recommendations of the expert committee report.

The DBTL scheme was designed in a holistic manner, with clearly defined procedures, timelines for different activities and phases, stakeholder responsibilities and a centralized grievance redressal mechanism.

C. Effectively leveraging existing systems and infrastructure, and convergence of efforts

The DBTL scheme is a good example of effective utilization and convergence of various other government schemes and efforts (past and present), which were critical to the scheme's successful implementation. These include:

- a. The Government of India's Unique Identification (UID) project, which was launched in 2009 with the aim to provide an Aadhaar (UID) number to every resident of the country. As of January 2015, when the DBTL scheme was launched nationwide, 753 million individuals had an Aadhaar number, which has increased to approximately 945 million (as of December 2015) (Unique Identification Authority of India, 2015). The scheme offered a centralized technology infrastructure, which enabled online authentication and identification of beneficiaries for transfer of subsidy under the DBTL scheme across the country.
- b. The Aadhaar Payment Bridge System⁶ implemented by NPCI, along with the Core Banking System⁷ (CBS), collectively provided the foundation for electronic transfer of money to beneficiaries' bank accounts in any part of the country.
- c. The KYC drive conducted by the OMCs about two years before the implementation of DBTL enabled a streamlined and digitized LPG consumer database, while weeding out duplicate connections. This digital database has been critical to the rapid and massive enrolment under the DBTL scheme.
- d. Past efforts towards the financial inclusion of households and the recent *Pradhan Mantri Jan Dhan Yojana* (PMJDY) scheme (rolled out three months before the launch of the modified DBTL), which allowed unbanked LPG consumers to open new bank accounts to enrol in the DBTL scheme. In the absence of such a scheme (PMJDY), a significant number of LPG consumers would have been excluded from DBTL and hence the subsidy benefits.

D. Effective human resource management through sense of ownership

The higher and mid-management of the OMCs, along with the officials and the minister at MoPNG, were each made the guardian officers for one district. This created a sense of individual ownership and responsibility to ensure effective implementation of the scheme in their respective districts (MoPNG, 2015c). At the implementation level, the annual performance appraisal of the field officers of the OMCs was linked to the enrolment rate under the DBTL scheme.

Apart from the field officers, who supervised and coordinated the implementation at the local level, the LPG distributors played a key role in implementation of the scheme. The last mile distribution of LPG cylinders takes place through the highly condensed and well-regulated network of just 15,930 distributors. These distributors were quickly mobilized, trained, given individual daily/weekly targets and monitored on a daily basis for the scheme's implementation, particularly during the grace period. The field officers of the OMCs conducted periodic training and provided hand-holding to the LPG distributors, regarding the procedures, protocols, data entry and use of new features in the software.

Similarly, the bank personnel were trained by the LDMs of the banks, in coordination with the field officers. However, absence of dedicated personnel for DBTL along with the reactive approach of the banks towards the scheme gave rise to delays and difficulties in the enrolment process.

In order to ensure dedicated involvement of distributors and smooth roll-out of the scheme, adequate financial compensation was provided to the distributors to cover the costs incurred during the enrolment process. However, there was no such direct compensation to the banks for the enrolment process.⁸

⁶ The Aadhaar Payment Bridge System uses the Aadhaar number as a central key for electronically channelling government subsidies and benefits into the Aadhaar Enabled Bank Accounts (AEBA) of the intended beneficiaries.

⁷ CBS is a network of branches, which enables customers to operate their accounts, and avail banking services from any branch of the bank on the CBS network, regardless of where the account is maintained.

⁸ There was no compensation to the banks for the expenditure incurred during the enrolment process. However, after much delay, the banks were given a commission for every transaction of the LPG subsidy under the scheme.

E. Strong emphasis on awareness generation

The DBTL scheme was very well publicized through an intensive Information Education Campaign (IEC) comprised of advertising through different media, directly reaching out to consumers through use of SMSs, calls and public announcements, and by employing innovative measures such as guardian officers for each district (Expert Committee, 2014; MoPNG, 2015d). The Minister of Petroleum and Natural Gas himself regularly monitored the preparations for DBTL implementation, including IEC, even at the district level before relaunch and during the implementation of DBTL. An IEC action plan was devised and implemented for each district, the result of which was that almost all households surveyed, even those not enrolled, knew about the DBTL scheme.

F. Independent review of the scheme post-implementation

MoPNG commissioned independent impact assessment exercises across different states in India, in order to verify the outputs and outcomes of the DBTL scheme and to gauge the stakeholders' experience, particularly that of the LPG consumers. Insights from these evaluation exercises were used to refine the scheme's design and implementation process further, to ensure the smooth transaction of subsidy benefits in the long run.

5.0 Recommendations to Improve the Scheme Further

Given the massive scale and aggressive pace of implementation and largely positive stakeholder experiences, the DBTL scheme has many insights to offer for future cash transfer programs. However, as the study findings suggest, many gaps afflicted the rollout of the scheme, particularly those related to lack of proactive information to the customers, and the proactive involvement of banks in the scheme. Addressing these concerns would be instrumental in improving the customer experience and outlook towards the scheme as well as the hassle-free enrolment of new customers and subsidy transfer for enrolled customers. Based on our assessment, the following recommendations address the issues highlighted and support the scheme's expansion going forward. These recommendations are particularly critical in light of the fact that the majority of future adoption of LPG would be witnessed in rural and/or poor income households.

5.1 SUSTAINED EFFORTS FOR CONSUMER AWARENESS

- i) Even though the majority of the LPG consumers have enrolled in the scheme, consumer awareness about the objectives of the scheme was low. Awareness campaigns should increased their focus on the scheme's objective, to increase public awareness about the issues of diversion.
- ii) There should be a continued focus on spreading awareness about the specifics of the enrolment process, opening new bank accounts, the subsidy transfer process and the grievance redressal mechanism, in order to improve the scheme's coverage as well as to address the hassles faced by the consumers and different stakeholders.
- iii) At all stages of the scheme, consumers should be informed about the success or failure (along with the reasons) of each process through SMSs, including the seeding process, confirmation upon enrolment, cash transfer and receipt of the subsidy.

5.2 HUMAN RESOURCE MANAGEMENT

- i) In order to ensure smooth implementation of the scheme, banks should be directed by the Ministry of Finance to assign dedicated resources to the DBT schemes, including PAHAL.
- ii) Further, the bank personnel should be periodically trained about the enrolment procedure and transaction flows, with a special emphasis on hand-holding the Co-operative/Grameen banks.

5.3 STANDARD PROTOCOLS AND TIME-BOUND RESPONSES BY BANK ENTITIES

- i) In order to overcome the delays at the banks' end (during enrolment as well as the grievance redressal), there is a need put a cap on the maximum allowed turn-around time for different activities. Such a cap, along with a penalty for violation, could be incorporated within the provisions of Service Level Agreements (between the OMCs and the lead banks), for the following activities:
 - a. Verification of the account details by the banks and communication of reasons for rejection, if any.
 - b. Updating the OMCs/consumers about the status of Aadhaar seeding (i.e., whether the Aadhar details are uploaded to the NPCI mapper).
 - c. Updating the OMCs about the transaction status of the subsidy, once triggered from the sponsor bank, in a standardized format (as different banks use different error codes)
- ii) In order to prevent unintended bank accounts from getting linked to DBT schemes, customer consent for linking Aadhaar with any bank account should be made mandatory.

- iii) To address the problems faced by the customers due to different protocols followed by the banks, standardized protocol should be agreed upon by the banks for:
 - a. Dealing with the joint account cases
 - b. Number of days of inactivity to deem an account as dormant

5.4 FINANCIAL INCLUSION

A sustained effort is required to provide meaningful access to banking services to all households and ensure that every existing and willing household gets enrolled in DBTL. Going forward, financial inclusion would need to have a larger focus.

6.0 Conclusion

As LPG is increasingly becoming the preferred clean cooking fuel in India, there has been a growing emphasis on the need for reforming the LPG subsidy program. The Government of India launched the DBTL scheme with the aim to reduce diversion of subsidized LPG and improve the subsidy transfer efficiency through better identification.

The performance evaluation of DBTL reveals that the scheme has been largely successful on account of the efficacy of the implementation process as well the achievement of stated objectives. The study further indicates that the strong political will and leadership, juxtaposed with institutional co-ordination and intensive advertising and communication campaigns, were the key drivers behind the scheme's successful implementation. However, challenges pertaining to delay in subsidy transfer, information gaps and lack of financial inclusion remain.

It is true that DBTL only changes the nature of subsidy disbursement, without changing the entitlements for different socioeconomic groups, and hence may not be considered a "subsidy reform" in conventional sense of the word. However, it provides a way to have common market price of the commodity, which could enable advanced reform measures, such as differential subsidies to households, classified on the basis of socioeconomic condition, family size, urban or rural location, etc., without allowing diversion.

Building on the DBTL scheme, the Government of India has decided to exclude well-to-do households from the subsidy cover, on the basis of the income information. The largely positive experience with the DBTL scheme has also inspired the government to adopt DBT for other social benefit schemes, such as kerosene and food subsidies, to improve the efficacy of government subsidy expenditure. However, implementing DBT for kerosene and food subsidies would be much more challenging than the DBTL. A larger and wider network of dealers and retailers is involved in the kerosene supply-chain, and different practices followed in different states of India (for beneficiary data management) would make DBT for kerosene subsidy difficult to implement. Besides, meaningful access to banking services remain a major barrier to effectively transition towards DBT for other basic commodities, particularly in rural areas of less-developed states.

The government should continue to strive further to ensure that none of the deserving households are excluded from the LPG subsidy benefit due to lack of information, difficulty during enrolment or poor access to banking services. Our study highlights that such a category of LPG consumers is not insignificant. Sustained efforts to bring such consumers within the scheme's fold will be required, particularly as the penetration of LPG in rural areas increases, where access to banking services is a challenge.

Lessons from the DBTL scheme offer invaluable insights for the national and international communities to enable fossil fuel subsidy reform.

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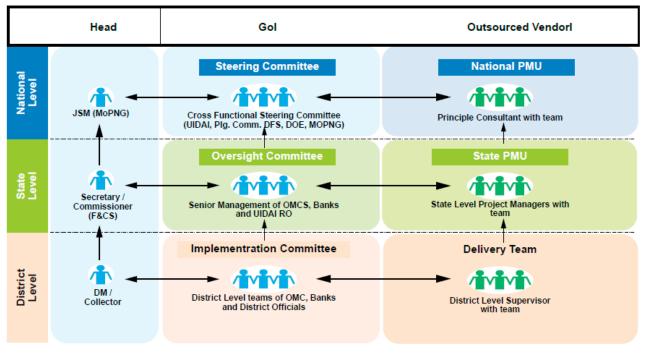
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Annex 1: PAHAL (DBTL) Scheme Joining Form

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Annex 2: Project Management Team Structure



Project Management Team Structure

GOI – Government of India • F&CS – Food and Civil Supplies • PMU – Project Management Unit MOPNG – Ministry of Petroleum and Natural Gas • DM – District Magistrate

Source: (Expert Committee, 2014)

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