

Barriers to Direct Benefit Transfers for Fertiliser subsidy

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Key findings

Targeting beneficiaries for both in kind and cash transfers for fertiliser subsidy is a major challenge as long as a defined and designed beneficiary database, and entitlement are not in place.

Additional financial burden on farmers to pay upfront for fertilisers, inadequate banking network, and issues in pricing policy of urea are the major challenges for cash transfers in fertiliser subsidy

Fertiliser subsidy is the second-largest that the Government of India provides after food subsidy of which the budget amounted to [INR 700 billion \(USD 10.78 billion\)](#) in the financial year 2018–19. In the Union Budget 2016–17, the Indian government proposed to bring fertiliser subsidy under the Direct Benefit Transfer (DBT) programme to streamline its distribution.

Direct Benefit Transfer in Fertiliser (DBT-F) is a modified subsidy payment system, where the government pays a subsidy to fertiliser companies only after fertiliser retailers have sold fertiliser to farmers or buyers. Successful *Aadhaar*¹-based authentication through Point of Sale (PoS) machines authorises the payment. However, in its present form, DBT-F is distinct from other DBT schemes, such as [Direct Benefit Transfer in Liquefied Petroleum Gas \(DBTL\)](#), or even [DBT in Public Distribution System \(DBT-PDS\)](#) (see table below).

DBT Parameters	DBTL	DBT-PDS	DBT-F (present form)
Beneficiary database	Present	Present	Absent
Unique identifier	<i>Aadhaar</i> / Bank account	<i>Aadhaar</i>	None
Beneficiary entitlement	Defined	Defined	Not Defined
Benefit transfer mode	Conditional cash transfer	In-kind transfer	In-kind but not similar to DBT-PDS

The Indian government initiated DBT to plug leakages and bring transparency to the benefit delivery system. As on 31st December, 2016, the government saved [INR 140 billion \(USD 2.15 billion\)](#) in PDS by deleting 23.3 million fake or “ghost” ration cards and INR 264.08 billion (USD 4.06 billion) in DBTL by identifying 31.1 million fake or “ghost” beneficiaries. Given the importance of beneficiary targeting, how does the government identify the beneficiaries for the fertiliser subsidy? And why cannot farmers receive the fertiliser subsidy as a direct credit into their bank accounts?

This note highlights the major barriers to distributing fertiliser subsidy through cash transfers and transfers that are in-kind – similar to DBT-PDS. In-kind transfers and cash transfers for fertiliser subsidy are more complex than DBT for other schemes. This is for the following reasons:

- Absence of a beneficiary database:** Unlike other schemes where the beneficiary database is defined and digitised, no such database exists for farmers. One way to define the farmer database might be by [digitising land records](#). However, the following issues arise with the use of land records:
 - It will lead to exclusion errors by leaving out tenant farmers and sharecroppers.
 - [Differences in tenancy laws among states](#) and changes in landowner-tenant relationships would make the process of recording the tenancy formally difficult.
 - The land records are outdated and inaccurate, and would risk leading to incorrect identification of beneficiaries.
 - Land fragmentation and hereditary division further complicate the matter, as dealing with such complications would require a dynamic database.
- Undefined beneficiary entitlement:** Farmers can buy any quantity of fertiliser, irrespective of the land size they possess or cultivate. In contrast, the defined beneficiary entitlement under schemes such as DBTL and DBT-PDS enables precise quantification of the deliverable benefit. Currently, large farmers benefit more than smaller and marginal farmers as they purchase more fertiliser than their peers.

1. Aadhaar is India's national identity number based on biometrics, <https://uidai.gov.in/>
 2. Macro- and micro-nutrients needed by the soil are identified and translated into specific, measured quantities of fertilisers. This information, printed on the SHC, is made available to the farmers.

In-kind transfers and cash transfers for fertiliser subsidies would not work efficiently unless the government defines beneficiary entitlement. The entitlement should be defined for [small and marginal](#) farmers enabling them to purchase their full requirement of fertiliser at subsidised prices. Large farmers would also be able to purchase some fertiliser at the subsidised rate but would have to pay the non-subsidised price to buy fertiliser in amounts exceeding their entitlement.

Theoretically, farmers can use [soil health cards \(SHC\)](#)² as a proxy for fertiliser requirement and hence to define the entitlement. However, many [ground-level challenges](#) remain. The first pilot project on DBT in fertiliser in Krishna and West Godavari districts of Andhra Pradesh attempted to link SHC, land records, and *Aadhaar* to determine entitlement.

However, the government did not enforce entitlement and only meant to nudge farmers to buy the appropriate quantity of fertiliser based on the holding and type of land. The government discontinued the use of SHC in the next pilot project for [several reasons](#).

3. **Incomplete Aadhaar-seeding with Land Records:** *Aadhaar*-seeding of land records is currently underway, but still has a long way to go. As of November 2017, [only 7.66% of records had linked Aadhaar](#) with [Record of Rights \(ROR\)](#).

The three barriers outlined above hold true for both in-kind transfers and cash transfers for fertiliser subsidy. The following barriers affect the cash transfers:

1. **Financial burden in case of cash transfers:** Farmers will face an additional financial burden if they have to pay upfront for fertiliser. For instance, the Maximum Retail Price (MRP) of subsidised urea ranges between INR 295 (USD 4.53) and INR 326 (USD 5); whereas non-subsidised urea costs approximately at INR 1,171 (USD 18) per bag.

Currently, a typical small farmer with one hectare of land who cultivates paddy and applies seven bags of subsidised urea needs to invest INR 2,282 (USD 35). But with cash transfers, the farmer would have to pay INR 8,197 (USD 126) for the same quantity of urea. Additionally, the amount required to purchase other fertilisers (phosphorous, potassium-based, and NPK complexes) will further increase the financial burden. In contrast, [DBTL](#) or [cash transfer in PDS](#), the upfront cash requirement is less than with fertiliser.

2. **Delayed Subsidy Delivery:** Buying fertiliser is time-sensitive. Farmers buy fertiliser only after the seasonal rains arrive. The farmers would need subsidy in advance for the reasons outlined in point 1 above. However, existing cash transfer programmes do not guarantee subsidy delivery on a fixed date, making delays in receiving the money common. Moreover, the time for applying fertiliser varies across the

country depending upon the seasonal rain and type of crop. This makes the process of calculating entitlement and deciding on its delivery time difficult. Farmers cannot afford delays in fertiliser input as crop growth and productivity depend on the timing of inputs.

3. **Varying degree of subsidy for multiple products:** There are 72 different types of fertilisers, each with different amounts of subsidy. In the absence of fixed entitlement, managing the sales of all these products uniformly on a single platform makes cash transfers in fertilisers a more complex proposition than DBTL or DBT-PDS.
4. **Inadequate banking and bank agent network:** Presently, there are around [47,000 bank branches](#) and [112,621 bank agents](#) in rural India. The banking network and infrastructure need strengthening to implement cash transfers for fertiliser. Agent networks were expected to provide the much-needed access to banking and financial services in the rural areas, but have had limited success. [Agent banking has been suffering because of a number of issues](#), such as non-transparency, irregular and insufficient commission, dormancy of accounts, and lack of support from the parent bank.

Further, in the case of cash transfers, farmers have to make two trips: one to the bank to withdraw cash and the second to the fertiliser shop to purchase fertiliser. This creates additional cost, time, and hassle. There is a clear need to create more user-friendly processes. These pre-requisites will take time as many villages still lack basic facilities like round-the-clock electricity, mobile, Internet, and road network.

5. **Issues in pricing policy:** The government should consider a urea pricing policy before implementing cash transfers in fertiliser subsidy. Urea, which accounts for [approx. 71% of the fertiliser subsidy](#), is the only [controlled fertiliser and sells at the statutory notified uniform sale price](#). The government pays the difference between the cost of production and the selling price as subsidy or concession to manufacturers. Hence, [inefficient naphtha-based units](#), which have a [higher cost of production than gas-based units](#) (domestic and imported) receive more subsidy.

If the government implements the cash transfers and a decontrolled market, the higher cost of production would force naphtha-based units to sell their produce at higher MRP in the market than the gas-based fertilisers. The naphtha-based units would be unlikely to survive this market competition unless the government provided an additional subsidy for these units. Subsidising these units would undermine the purpose of the shift to cash transfers.

The in-kind and cash transfers in fertilisers are much more complex than other DBT schemes for all the reasons outlined above. In-kind and cash transfers, if implemented efficiently, have the potential to plug leakages and bring transparency to the benefits delivery system.

However, they could create more structural and operational issues if the challenges above are not resolved. The next note in this series, '[Enablers to Direct Benefit Transfers for Fertiliser Subsidy](#)' will discuss how we might address these challenges.