Elephant in the Room
Implications of subsidy practices on DISCOM finances
A report in snapshots
About the Infographics

This booklet contains a series of infographics based on the analysis and key observations from 'Elephant in the Room: Implication of subsidy practices on DISCOM finances', a study of electricity revenue subsidy commitments and payments in six states in India. The focus of the report is not to document state specific realities in detail but to highlight state-level observations pointing to larger trends in the sector. The entire report can be accessed here: http://www.prayaspune.org/peg/publications/item/419

The objective of the infographics is to provide a quick snapshot of analysis from the above-mentioned report and in that respect, these infographics should be read in the context of the report. The analysis, observations, information, sources and references are all available in the report.

The infographics broadly trace the chapters in the report as shown below:

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Gives a brief overview of the nature and extent of subsidy payments in India, the potential reasons for its future growth and relevance, and the need to understand state-level trends from various sources.</td>
</tr>
<tr>
<td>Gujarat</td>
<td>State level trends on extent of subsidy, major subsidised categories, payment practices, delay in subsidy payment and channels of regulatory accountability are discussed.</td>
</tr>
<tr>
<td>Haryana</td>
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<tr>
<td>Punjab</td>
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<tr>
<td>Tamil Nadu</td>
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<tr>
<td>Uttar Pradesh</td>
<td></td>
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<tr>
<td>Bihar</td>
<td></td>
</tr>
<tr>
<td>Commentary</td>
<td>Based on key trends from the states, some observations and suggestions are discussed.</td>
</tr>
</tbody>
</table>

Each of the panels contain graphs, tables and pictorial representations of information. The table below provides a key to some of the symbols and abbreviations used:

- 🌐 Agricultural consumers
- 🏢 Industrial consumers
- 🏠 Domestic consumers
- 🏛 Regulatory institutions
- ↗️/↘️ Increase/Decrease
- 🌱 Unmetered consumers
- DISCOM Electricity Distribution Company
- ARR Annual Revenue Requirement
- E Act Electricity Act
- ERC Electricity Regulatory Commission
- UDAY Ujwal DISCOM Assurance Yojana
- BPL Below Poverty Line
- UP Uttar Pradesh
- T&D Transmission and Distribution
Why is subsidy important?

- Original revenue gap in FY17
- Revenue gap in the absence of government subsidy in FY17

In these states subsidy forms 12% to 33% of the ARR

Subsidy will continue to be important...

- Increase in newly electrified, small consumers who need affordable power supply
- Increase in open access and captive consumption which limits cross subsidy
- Increasing cost of supply for DISCOMs

Who are subsidised?

- Agriculture
- Industries
- Domestic

GUJARAT

Significant subsidy not reported

- Reported
- Unreported

Break-up of subsidy in FY15

- Comptroller Auditor General finding: subsidy at Rs. 3,000-5,000 Crore
- Regulatory reporting: subsidy at Rs. 1,100 Crore

Agricultural = Agricultural fuel surcharge
45%

Subsidy for tariff comparable to subsidy for fuel surcharge of agricultural consumers!

Pending subsidy payments

Cumulative outstanding subsidy payments = Working capital borrowings of GUVNL!

No regulatory accountability for unreported subsidy and pending payments from the government!
**HARYANA**

1. **Categories receiving subsidy**
   - Subsidy at ~30% of tariff for new units for 3 years from release of power connection
   - Subsidy at Rs. 677 Crore for consumption less than 150 units a month
   - Subsidy to agriculture: Rs. 6550 Crore, 91% of total government subsidy and 26% of aggregate revenue requirement!

**Negligible cross subsidy** in overall tariff design!

2. **Pending subsidy payments**

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>Subsidy Paid</th>
<th>Subsidy Promised</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY10</td>
<td>297</td>
<td>297</td>
</tr>
<tr>
<td>FY11</td>
<td>511</td>
<td>511</td>
</tr>
<tr>
<td>FY12</td>
<td>1,605</td>
<td>1,605</td>
</tr>
<tr>
<td>FY13</td>
<td>1,892</td>
<td>1,892</td>
</tr>
<tr>
<td>FY14</td>
<td>2,910</td>
<td>2,910</td>
</tr>
<tr>
<td>FY15</td>
<td>3,802</td>
<td>3,802</td>
</tr>
</tbody>
</table>

Pending subsidy strains working capital requirement of DISCOMs

Consolidated outstanding subsidy at the end of financial year including interest from previous years

Subsidy released by the state government for the given year

Government may be unable to fulfill commitment

**PUNJAB**

1. **How high is it?**

   - Tariffs
   - Subsidy

   Revenue for DISCOMs

   - 25% of total revenue

   > Rs. 8,000 Crore in FY19 (and growing at 8% per annum)

   - Subsidies play a crucial role

   - 3/5th of sales to domestic & agriculture
   - Industrial sales falling
   - Distribution utility in financial distress: outstanding liabilities > Rs. 20,800 Crore

   Equivalent to three year budget for Ujjwala Yojana, a centrally sponsored LPG connection programme

2. **Who gets the subsidies?**

   - Free power to farmers ~ 30% of sales, mostly unmetered.

   - 70% of total subsidy

   - Free power to Scheduled Caste, Backward Caste and BPL homes

   - 14% of total subsidy

   - Free power to industrial consumers since FY18. Caps energy charge @ Rs. 4.99/unit

   - Subsidised power for industrial consumers since FY18

   » 16% of total subsidy

3. **Good Practice by Regulatory Commission**

   - Scrutiny of subsidy promised, paid for each category
   - Quarterly reporting of subsidy paid
   - Subsidy commitment calculated:
     - Annual subsidy + Pending payment + interest

   » Regulatory Practice is commendable, should be adopted by other states
   » Political commitment essential for timely payments

4. **Yet... delays persist!**

   Cumulative pending payments by FY18 @ Rs. 13,000 Crore

   - Subsidy Paid
   - Subsidy Promised
**Subsidy promised**

Agriculture and BPL consumers are unmetered and receive free supply.

**Sales mix in FY18**

- Domestic + BPL: 33%
- Agriculture: 14%
- Others: 14%
- Industry: 10%
- Commercial: 10%

FY18 Subsidy promised: ~ Rs. 7,700 Crore

**Effect of subsidy on domestic category tariffs in FY18**

Consumers using:

- 500 units/month: 1.6
- 200 units/month: 1.3
- 100 units/month: 0.9
- 50 units/month: 0.3

<table>
<thead>
<tr>
<th>Tariff payable by consumer after receiving subsidy (Rs./unit)</th>
<th>Amount of subsidy (Rs./unit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 units/month FREE for all domestic consumers. Even for &gt; 500 units/month!</td>
<td></td>
</tr>
</tbody>
</table>

FY16 was an election year ➞ 48% ↑ in domestic subsidy without a corresponding change in sales or tariff.

**Regulatory accountability**

Regular subsidy orders with category-wise subsidy promised + payment schedules

No regular true-up of actual subsidy payments ➞ reduces accountability for delayed payments.

**Subsidy allocation**

- FY19: Rural domestic, Subsidy adjustment against electricity duty payments, Agriculture
- FY18: Rural domestic
- FY17: Subsidy adjustment against electricity duty payments, Agriculture
- FY16: Subsidy adjustment against electricity duty payments
- FY15: Subsidy adjustment against electricity duty payments
- FY14: Subsidy adjustment against electricity duty payments
- FY13: Subsidy adjustment against electricity duty payments
- FY12: Subsidy adjustment against electricity duty payments
- FY11: Subsidy adjustment against electricity duty payments
- FY10: Subsidy adjustment against electricity duty payments
- FY09: Subsidy adjustment against electricity duty payments
- FY08: Subsidy adjustment against electricity duty payments

Agriculture subsidy used to cover entire difference between cost of supply and tariff in initial years but has reduced to 4% in FY19.

**Subsidy commitment** has seen slow growth except in election years.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Subsidy</th>
<th>Additional subsidy deemed to be recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY08</td>
<td>71%</td>
<td></td>
</tr>
<tr>
<td>FY09</td>
<td>71%</td>
<td></td>
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<tr>
<td>FY10</td>
<td>71%</td>
<td></td>
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<tr>
<td>FY11</td>
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<td></td>
</tr>
<tr>
<td>FY17</td>
<td>71%</td>
<td></td>
</tr>
<tr>
<td>FY18</td>
<td>71%</td>
<td></td>
</tr>
</tbody>
</table>

Since FY08, UPERC has approved additional subsidy deemed to be recovered from state governments to cover cost of supply.

~Rs. 46,000 Crore outstanding with carrying cost @ 10.85%

This is ~86% of UDAY debt takeover in 2015.

**Tamil Nadu**

55% of subsidised sales was unmetered.

6X agriculture tariff hike was subsidised by the government ➞ 579% ↑ in subsidy.

FY18 Subsidy promised: ~Rs. 7,700 Crore

Subsidy commitment has seen slow growth except in election years.

Subsidy promised has seen slow growth except in election years.

No cross subsidy in UPERC tariff design for subsidised categories.

~31% of total sales received subsidy

> 1/2 of subsidised sales was unmetered.

**UTTAR PRADESH**

Major categories subsidised in FY18

- Rural domestic
- Rural agriculture

~31% of total sales received subsidy ➞ > 1/2 of subsidised sales was unmetered.

No cross subsidy in UPERC tariff design for subsidised categories.

Additional subsidy required

Average cost of supply

Subsidy promised

Tariff revenue

But is additional subsidy being paid?

Not likely!
Regulatory Commissions & State Governments:

- Subsidy commitment to include pending payments + interest

Ministry of Power (MoP):

- Track delays on UDAY portal

Reserve Bank of India & MoP:

- Track DISCOM borrowing, pressure for timely payments

Delays persist despite mandates:

- Political commitment & accountability

Charging regulated tariffs to address delay:

- Tariff shock, politically infeasible
- Thus, DISCOMs bear financial brunt of delays

Despite mandates, subsidies↑

- Even high end domestic consumers & industries get subsidy

It was 73% in FY13!

Subsidy announcement not part of tariff process >> less accountability for final tariff!

Tariff shock even after subsidy for all consumers >> Rural domestic tariff↑ by 29%

Subsidy contribution to net revenue requirement reduced by more than half!

Previous good transparency and accountability practices lost:

Subsidy promised:

- Reported till FY18
- FY18
- FY19

Subsidy paid:

- ✔
- ✔
- ✗

Regulatory mandate to charge unsubsidised tariff in case of delayed subsidy payment:

- >> Infeasible – will lead to 60% to 400% tariff shock!
- >> DISCOM finances are likely to suffer

Gradual, phase-wise inflation linked tariffs for subsidised consumers

- More pilots for Direct Benefit Transfer, bulk efficient appliance procurement for newly electrified homes

Limited information on key parameters

Information available in central / state government and regulatory documents

<table>
<thead>
<tr>
<th>Parameter (Rs. Crore)</th>
<th>Bihar</th>
<th>Gujarat</th>
<th>Haryana</th>
<th>Punjab</th>
<th>Tamil Nadu</th>
<th>U P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidy promised</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Subsidy paid</td>
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<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Outstanding/Pending payment</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Interest payments due to delay</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Category-wise subsidy</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
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</table>

Need for calibrated, phase-wise approach which pays attention to state level details

Without such efforts, subsidy commitments and delays will increase leaving DISCOMs to face a crisis unmanageable in scale

Subsidy is a vexed issue with multiple dimensions

Some ideas to address this:

- Regulatory Commissions: mandate public reporting of category-wise subsidy and delays
- Forum of Regulators: publish model formats to aid this
- Ministry of Power: publish annual report on subsidies
- Amend E Act: to ensure reporting (similar to Section 59)
About Prayas

Prayas (Initiatives in Health, Energy, Learning and Parenthood) is a non-governmental, non-profit organisation based in Pune, India. Members of Prayas are professionals working to protect and promote public interest in general, and interests of the disadvantaged sections of society, in particular. Prayas (Energy Group) works on theoretical, conceptual, regulatory and policy issues in the energy and electricity sectors. Our activities cover research and engagement in policy and regulatory areas, as well as training, awareness, and support to civil society organisations. Prayas (Energy Group) has contributed in the development of energy sector policy as part of several official committees constituted by ministries, the erstwhile Planning Commission and NITI Aayog. Prayas is registered as SIRO (Scientific and Industrial Research Organization) with the Department of Scientific and Industrial Research, Ministry of Science and Technology, Government of India.

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The infographics can be downloaded here: http://www.prayaspune.org/peg/publications/item/419

For other visualization of major power sector related trends and IoT metering based projects of Prayas (Energy Group), please see:

1. Renewable Energy Data Portal
   http://prayaspune.org/peg/re

2. Website for the Electricity Supply Monitoring Initiative (ESMI)
   https://www.watchyourpower.org/index.php

3. Website for the Monitoring and Analysis of Residential Electricity Consumption (eMarc) Initiative
   http://emarc.watchyourpower.org/