Electricity Subsidies in India and its impact on distribution company finances

Analysis based on study of subsidy trends in six states

Webinar based on:

**Elephant in the Room: Implications of subsidy practices on DISCOM finances**

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Webinar presentation by Ann Josey and Maria Chirayil
Q&A by Ann Josey and Shantanu Dixit
Moderation by Nikita Das

29th May, 2019

Prayas (Energy Group)
Scope and Nature of Study

• State-level observations only to highlight major trends:
  o Links between subsidy provision and DISCOM finances
  o Varied practices in subsidy provision and regulatory accountability
  o Major trends over a decade highlighted
  o Focus on Gujarat, Haryana, Punjab, Tamil Nadu, Uttar Pradesh and Bihar

• Does not focus on:
  o De facto processes for deciding subsidy
  o Subsidy impact on state exchequer
  o Agricultural subsidies, unmetered demand

Vexed issue with multiple dimensions → need for a better understanding
Especially while contemplating major reforms in the state sectors
Outline

• Nature and extent of subsidies
  – Growing dependence on subsidies
  – Major consumer categories receiving subsidies
  – Trend towards broad-basing of subsidies
  – Tariff, subsidy design in the face of shrinking cross subsidies

• Delay in subsidy payments and its implications
  – Need for commitment and payment of subsidies
  – Impact of delays on DISCOM finances
  – Measures to ensure accountability for timely payments and their effectiveness

• Lack of consistent data on subsidies
  – Highlights from reporting practices

• Some ideas to address highlighted issues
Growing dependence on subsidies

**Subsidy dependence high**
- Subsidy paid → 10 to 30% of DISCOM Aggregate Revenue Requirement (ARR)
- Rising at a rate of 11% per annum in 5 states

**Will grow in the future with:**
- Increase in cost of supply, already > Rs. 7/unit, ↑ at 6% per year
- Millions of newly electrified consumers needing affordable power
- ↓ in cross subsidy with larger consumers finding alternative supply options

### Analysis based on audited data FY17 from regulatory and state government documents

<table>
<thead>
<tr>
<th>State</th>
<th>Subsidy (Rs. Crore)</th>
<th>Subsidy as a percentage of ARR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tamil Nadu</td>
<td></td>
<td></td>
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<tr>
<td>Uttar Pradesh</td>
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<tr>
<td>Gujarat</td>
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<td>Punjab</td>
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<td>Haryana</td>
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<tr>
<td>Bihar</td>
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</tr>
</tbody>
</table>

**Revenue gap (Expenses-Revenue) for FY17**

<table>
<thead>
<tr>
<th>State</th>
<th>Tamil Nadu</th>
<th>Uttar Pradesh</th>
<th>Gujarat</th>
<th>Punjab</th>
<th>Haryana</th>
<th>Bihar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue gap</td>
<td>4,772</td>
<td>3,521</td>
<td>1,237</td>
<td>4,571</td>
<td>996</td>
<td>1,633</td>
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<tr>
<td>after subsidy</td>
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</tbody>
</table>

↑ in revenue gap in the absence of subsidy

<table>
<thead>
<tr>
<th>Tamil Nadu</th>
<th>Uttar Pradesh</th>
<th>Gujarat</th>
<th>Punjab</th>
<th>Haryana</th>
<th>Bihar</th>
</tr>
</thead>
<tbody>
<tr>
<td>3x</td>
<td>3x</td>
<td>5x</td>
<td>2x</td>
<td>8x</td>
<td>3x</td>
</tr>
</tbody>
</table>
### So, who are subsidised?

#### Agriculture is not the only subsidised category

<table>
<thead>
<tr>
<th>State</th>
<th>FY13–FY15 Average for period: FY14–FY16</th>
<th>FY16–FY18 Average for period: FY17–FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haryana</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Gujarat</td>
<td>95%</td>
<td></td>
</tr>
<tr>
<td>Maharashtra</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>Punjab</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td>Telangana</td>
<td>73%</td>
<td></td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>Bihar</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>6%</td>
<td></td>
</tr>
</tbody>
</table>

% share of agricultural subsidies and listing of the other major subsidised category in each state

#### Many consumer categories get free power

- **Tamil Nadu**
  - Agriculture
  - Residential (first 50 units)
  - Below poverty line (BPL) homes
  - Powerloom (up to 325 units) and Handloom (up to 100 units)

- **Punjab**
  - Agriculture
  - Residential (up to 200 units and 1 kW for Scheduled Caste, Backward Caste and BPL homes)

- **Gujarat**
  - Public Water Works (PWW) in Gram Panchayats

#### Agriculture not only unmetered category receiving subsidies

- **Uttar Pradesh**
  - Rural Homes

- **Bihar**
  - Rural Homes and BPL
  - Rural Commercial

- **Tamil Nadu**
  - BPL or Hut Consumers
Broader base, rising commitments

• Rising share of subsidies to residential consumers
  – Punjab: Free power for up to 200 units per month since FY11.
  – Tamilnadu: All residential consumers (even if using > 500 units), receive 50 units free
  – Haryana: Since FY19, residential subsidy for up to 150 units
  – Bihar: BPL sales have tripled in 3 years due to electrification

• Growing trend to subsidise industrial and commercial consumers
  – Punjab: Cap industrial energy charges at Rs. 4.99 per unit → > 16% of total subsidies
  – Bihar: Subsidy for industrial and commercial consumers in FY18
  – Gujarat: Rs.2-3/unit subsidy for new textile industrial units
  – Haryana: Rs. 2/unit subsidy for new small and medium industries since FY18

• Subsidies due to increase in overall losses or tariffs
  – Bihar: To finance power purchase costs in excess of T&D loss norms (FY12 to FY17)
  – Bihar and Uttar Pradesh: To finance operational losses with government subsidy
  – Gujarat and Bihar: Subsidy to all to avoid tariff hike due to levy of fuel surcharges
**Tariff, subsidy design in the face of shrinking cross subsidies**

- **‘Additional Subsidy’ deemed by the Regulator in Uttar Pradesh**
  - No cross subsidy since FY 08 for agriculture and rural domestic consumers
  - ERC: unrecovered cost would be financed by State Govt. → additional subsidy
  - State government: not committed to pay and is unlikely to pay
  - From FY08 to FY17 → Rs. 32,000 Crores w/o carrying costs, ~60% of debt under UDAY

- **No cross subsidy for agriculture in Haryana:**
  - Subsidy alone at Rs. 7.1/unit and at Rs. 7,000 crores per year
  - How sustainable is this with growing costs and competing budgetary needs?

- **Increase in subsidy to meet tariff increase in Tamil Nadu:**
  - Even 50% and 600% tariff hikes fully met with growth in subsidy
  - Subsidy has increased by 34% between FY12 and FY17

- **Subsidy disincentivises metering in Gujarat**
  - Unmetered consumers charged more tariffs by ERC to incentivise metering
  - With subsidy, metered tariffs at par with unmetered → removing any incentive
Need for commitment and payment of subsidies

Subsidy growth barely keeping up with growing DISCOM costs

- Proportion of subsidy falling in 4 states
  - Growth in ARR: 16%
  - Subsidy growth: 11%

- Tamil Nadu and Punjab are exceptions w.r.t subsidy promised

- Contribution falling in Punjab with subsidy paid

- Widening gap between subsidy promised and paid

- Delays persist despite mandates and affect DISCOM finances
What mandates? What impact on DISCOM finances?

- **Section 65 of Electricity Act 2003**
  - Mandated advance payment of subsidy
  - Allowed charging unsubsidised tariff in case of delay

<table>
<thead>
<tr>
<th>State</th>
<th>Impact of delays or shortfall in subsidy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gujarat</td>
<td>13% shortfall (FY10 to FY15), comparable to DISCOMs’ regulated working capital requirement.</td>
</tr>
<tr>
<td>Haryana</td>
<td>Cumulative outstanding subsidy + interest in FY14 → Rs. 4,334 Crore.</td>
</tr>
<tr>
<td>Punjab</td>
<td>Pending payments + interest at Rs. 13, 700 Crores in FY19</td>
</tr>
</tbody>
</table>

To cope with strain in working capital, DISCOMs:
- Borrow → increase in short-term liabilities
- Reduce expenses on operation and maintenance
- Unable to ensure supply quality especially in newly electrified areas

- **Rising liabilities → increased debt burden → more bailouts**
  - Lack of timely subsidy payments identified as a major driver of DISCOM debt
    - Shunglu committee report, Financial Restructuring Plan
    - Timely payment could have avoided the interest burden, provided clarity
Accountability for timely payments

• Punjab
  – ERC→ accounts for pending subsidy + interest with next year subsidy commitment
  – Good practice: interest cost borne by State Govt. deters non-payment
  – Not very effective → Given delays since FY 14, PSERC directed DISCOM to:
    • Provide information on subsidy paid and due fortnightly (implemented)
    • Charge consumers unsubsidised tariffs when subsidy is not provided (infeasible)

• Bihar
  – Tariff announced without subsidy declaration → subsidy paid monthly (Since FY18)
  – In case of delay, regulated tariffs to be charged
    • Could result in 400% ↑ in tariffs → build-up of arrears, AT&C loss, disconnection.
    • Politically infeasible → Discoms continue to suffer financially with delays
Lack of consistent data on subsidies

<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>Uttar Pradesh</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>
<td>✔️</td>
<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>
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</tr>
</tbody>
</table>

Legend: 
- ✔️ Central Govt tracking
- ✔️ State Govt documents
- □ Regulatory documents

- **No tracking on Ujwal DISCOM Assurance Yojana portal**
  - Despite commitment to financial turnaround, subsidy payments and delays not tracked on UDAY portal
  - Working capital borrowings also not tracked

- **Limited tracking in Power Finance Corporation (PFC) reports on utility finances**
  - Information on category-wise subsidies, impact of delay in payments not reported
Reporting practices

• Data reported by PFC not consistent with DISCOM reporting to ERCs, CAG
  – Gujarat: PFC - Rs. 1,100 Crore, CAG - Rs. 3,000 to 5,000 Crore (FY13-FY15)
  – Maharashtra: PFC - no subsidy, Regulatory documents: Rs. 11,000 Crore (FY15)
  – Tamil Nadu and Uttar Pradesh: 24% to 60% variation in reported data in FY15

• Reporting by ERCs better than other agencies but lacunae persist
  – Delays and pending payments not captured systematically.
  – Subsidy to write-off arrears affects receivables but not reported
  – Subsidy quantum to many categories not captured systematically:
    – Uttar Pradesh, Bihar: Power loom, Gujarat: Primary schools, Textile industry, Haryana: Residential and Industrial subsidy

• Good practices by SERCs which can be adopted
  – Punjab: Subsidy paid, delay in payment and interest costs reported and trued-up
  – Tamil Nadu: ERC releases an annual subsidy order ➔ category-wise subsidy
Some ideas to address highlighted issues

**Limited Data Reporting**

- DISCOMs to report information regarding payment, delays, and breakup of subsidy on a quarterly basis to SERCs for vetting.
- Post vetting, information can be used by PFC, REC, CAG, MoP etc.
- MoP to release annual report on subsidies (similar to RBI report on state finances).
- Forum of Regulators to prescribe uniform formats and model regulations to standardise reporting.
- To ensure adoption of reporting formats by SERCs ➔ amendment of Sec 65, E Act 2003.
Some ideas to address highlighted issues

• **Limited accountability:**
  – Current year subsidy commitment to include pending payments and interest costs, as accounted for by **Punjab ERC**
  – Delay in subsidy payments and working capital borrowings of DISCOMs to be tracked on UDAY portal
  – UDAY scheme limits working capital borrowing to 25% of ARR
    • Limit can be reduced over time (1 p.p per year for 5 years)
    • Will pressure state government to ensure timely payments

• **Rationalising and targeting of subsidy:**
  – Need for calibrated approach which pays attention to state level details
  – Phase-wise, inflation linked tariff increase for subsidised consumers
  – Some ideas can be tried on a pilot basis:
    • Direct Benefit Transfer
    • Bulk efficient appliance procurement for newly electrified homes

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

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