

# 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

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**Prayas (Energy Group)**



# Scope and Nature of Study

- State-level observations only to highlight major trends :
  - Links between **subsidy provision** and DISCOM finances
  - Varied practices in subsidy provision and **regulatory accountability**
  - Major trends **over a decade** highlighted
  - Focus on **Gujarat, Haryana, Punjab, Tamil Nadu, Uttar Pradesh and Bihar**
  
- Does not focus on:
  - **De facto** processes for deciding subsidy
  - Subsidy impact on state **exchequer**
  - Agricultural subsidies , **unmetered** demand

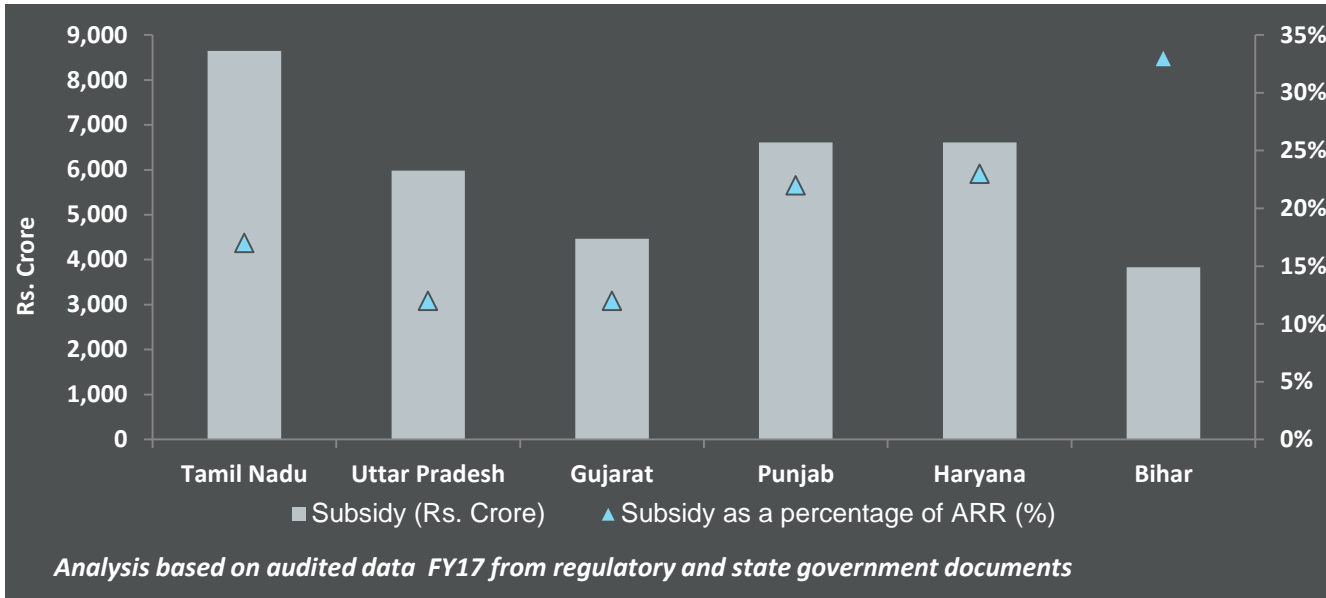
*Vexed issue with multiple dimensions → need for a better understanding  
Especially while contemplating major reforms in the state sectors*



# 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:**

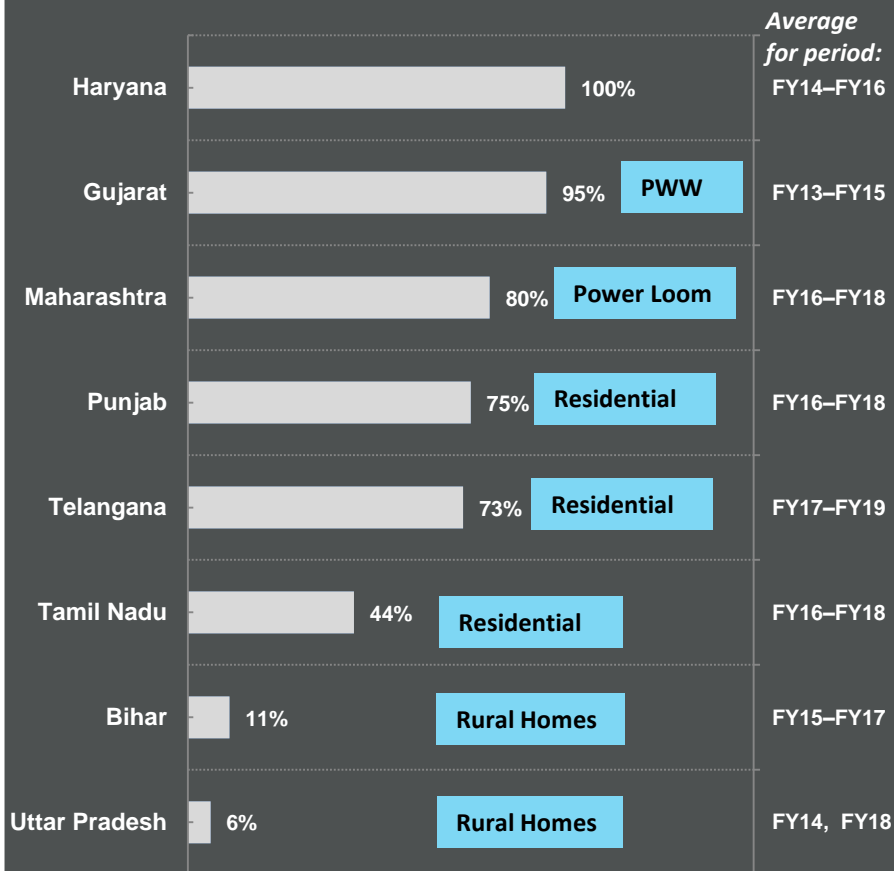
- Increase in cost of supply, already > Rs. 7/unit , ↑ at 6% per year
- Millions of newly electrified consumers needing affordable power
- ↓ in cross subsidy with larger consumers finding alternative supply options

Revenue gap (Expenses-Revenue) for FY17	Tamil Nadu	Uttar Pradesh	Gujarat	Punjab	Haryana	Bihar
Revenue gap after accounting for subsidy	4,772	3,521	1,237	4,571	996	1,633
↑ in revenue gap in the absence of subsidy	3x	3x	5x	2x	8x	3x



# So, who are subsidised?

## Agriculture is not the only subsidised category



% 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

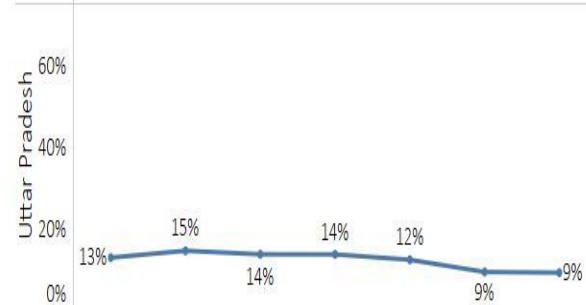
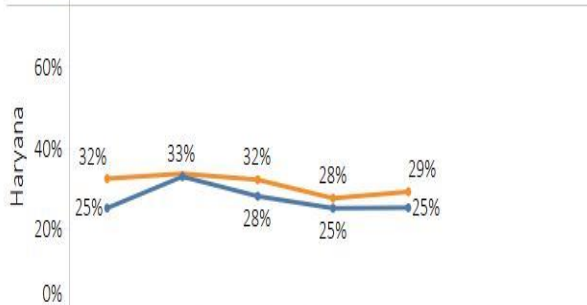
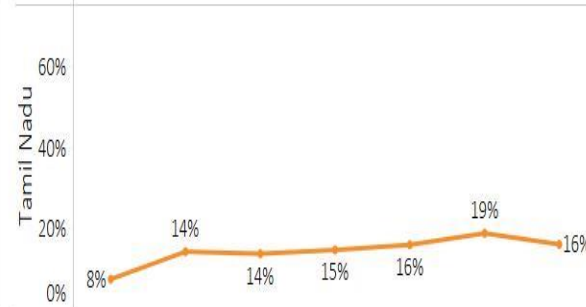
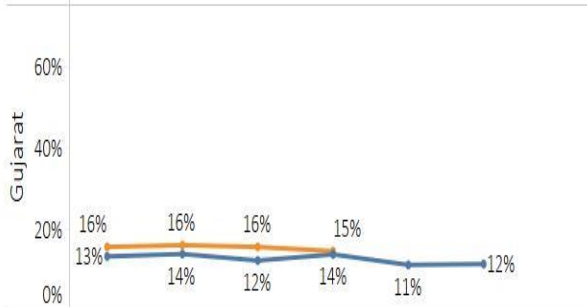
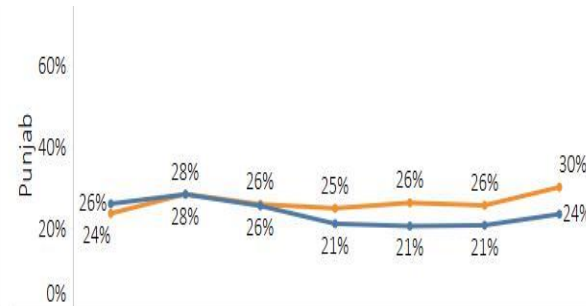
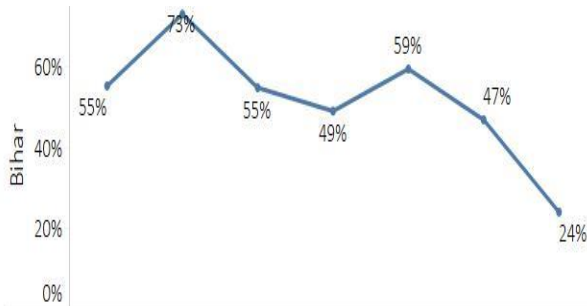


# Tariff, subsidy design in the face of shrinking cross subsidies

- **‘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



Parameter

■ Subsidy Paid as a % of ARR

■ Subsidy promised as a % of ARR\*

- 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

## 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

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

- **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

Parameter (Rs.Crore)	Bihar			Gujarat			Haryana			Punjab			Tamil Nadu			Uttar Pradesh		
Subsidy promised	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Subsidy paid	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Outstanding/Pending payment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interest payments due to delay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Category-wise subsidy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Legend</b>	<input checked="" type="checkbox"/> Central Govt tracking			<input checked="" type="checkbox"/> State Govt documents			<input checked="" type="checkbox"/> Regulatory documents											

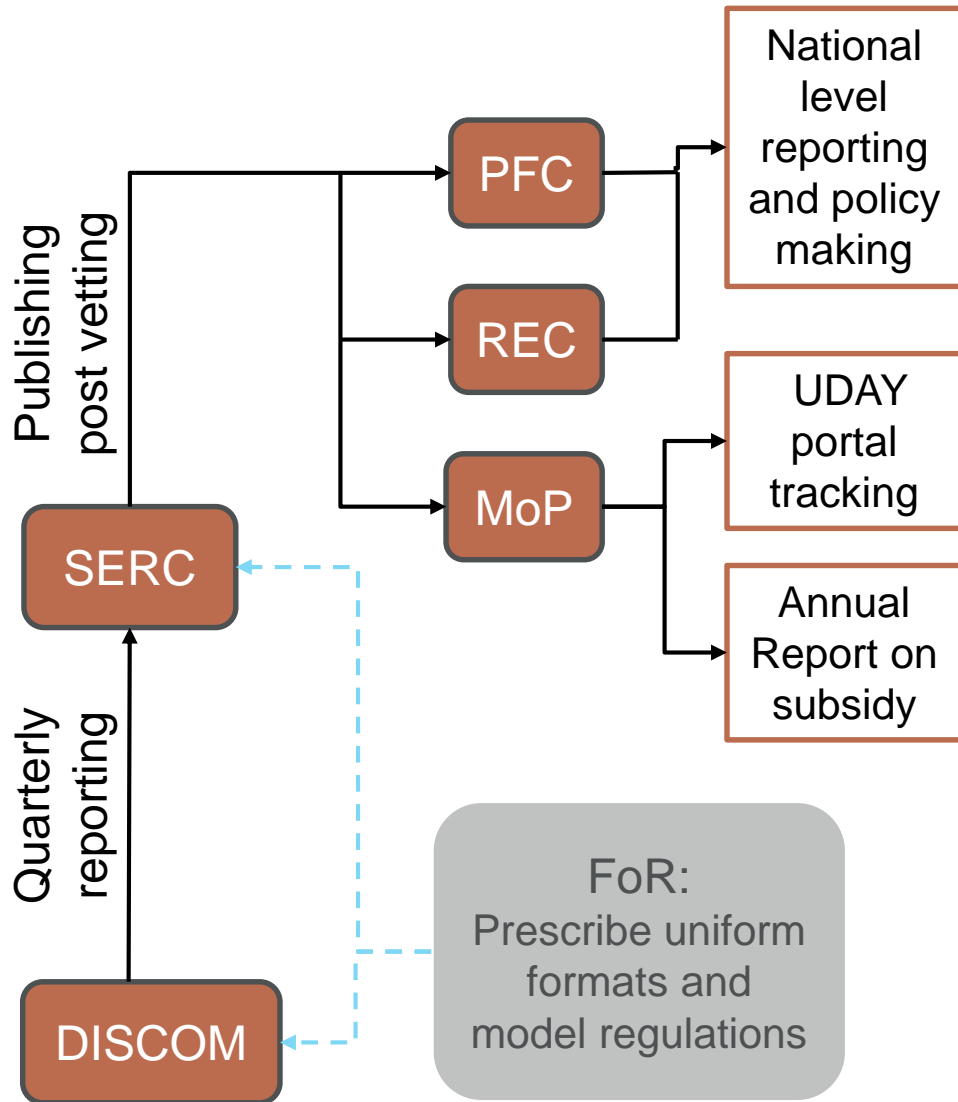
- **No tracking on Ujwal DISCOM Assurance Yojana portal**
  - Despite commitment to financial turnaround, subsidy payments and delays not tracked on UDAY portal
  - Working capital borrowings also not tracked
- **Limited tracking in Power Finance Corporation (PFC) reports on utility finances**
  - Information 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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