DISCOMs - Strength and Challenges

Mains: *GS III – Energy Security*

Why in News?

India's power distribution sector, long considered the weakest link in the electricity value chain, is witnessing signs of recovery.

What are DISCOMs?

- **DISCOMs** – Distribution Companies (DISCOMs) are power distribution utilities responsible for purchasing electricity from generators and supplying it to end consumers.
- They form the critical last-mile interface in the power sector value chain.
- **Importance** – Their importance stems from:
  - Ensuring uninterrupted power supply to households, agriculture, and industries
  - Maintaining grid stability
  - Facilitating economic growth and industrial development
  - Enabling social welfare through electrification
- **Indian scenario** – In India, there are 72 DISCOMs:
- 44 State-owned utilities,
- 16 private entities,
- 12 power departments.
- **Tariff regulation** – Consumer tariffs are regulated by State Electricity Regulatory Commissions (SERCs).
- The financial health of DISCOMs is crucial because inefficiencies at this stage directly impact generators, transmission companies, and ultimately the broader economy.

What are the two critical indicators reflect their chronic stress?

- **Aggregate Technical and Commercial (AT&C) Losses –** AT&C losses represent the total energy loss in the system, including:
  - Technical losses (transmission and distribution losses)
  - Theft and pilferage
  - Inefficiencies in billing
  - Defaults and poor collection efficiency

Formula: **AT&C Loss = (Energy Input – Energy Billed) × 100 / Energy Input**

- High AT&C losses reflect systemic inefficiencies and revenue leakage.
- **ACS-ARR Gap –** This measures the gap between:
    - **Average Cost of Supply (ACS)**
    - **Average Revenue Realised (ARR)**
- A widening gap indicates that utilities are supplying power below cost, leading to mounting financial losses.
- Between 2020–21 and 2024–25:
    - Accumulated losses rose from ₹5.5 lakh crore to ₹6.47 lakh crore
    - Outstanding debt increased to ₹7.26 lakh crore
    - Non-cost-reflective tariffs and delayed subsidy payments were major contributors.
- **Historical scenario** – DISCOMs have been synonymous with financial distress.
- Their predecessor entities, the State Electricity Boards (SEBs), formed under the Electricity (Supply) Act, 1948, were largely loss-making despite Section 59 of the Act mandating a minimum 3% profit.
- **Present situation** – Distribution Companies (DISCOMs) have shown measurable improvement in key performance indicators such as:
    - Aggregate Technical and Commercial (AT&C) losses,
    - The Average Cost of Supply–Average Revenue Realised (ACS-ARR) gap,
    - Overall financial discipline.
- **Signs of a Financial Turnaround –** Recent data indicate a positive Profit After Tax (PAT) in 2024–25, marking a significant shift from the massive losses recorded a decade ago.
- **Recent performance data** – It suggest significant improvements:
    - Profit After Tax (PAT) of ₹2,701 crore in FY 2024–25
    - A major turnaround from a loss of ₹67,962 crore in 2013–14
    - AT&C losses reduced from 22.62% to 15.04%
    - ACS-ARR gap reduced from 78 paise/unit to 0.06 paise/unit
- These figures indicate improved cost recovery and operational efficiency.

What is the role of Government Interventions?

- **Revamped Distribution Sector Scheme (RDSS) –** The RDSS aims to:
    - Improve operational efficiency
    - Enhance reliability and quality of supply
    - Link financial assistance to reform milestones
- It promotes smart metering, feeder segregation, and infrastructure modernization.
- **Late Payment Surcharge (LPS) Rules, 2022 –** These rules:
    - Allowed DISCOMs to clear legacy dues in up to 48 equated monthly instalments
    - Arrested mounting surcharge liabilities
    - Improved payment discipline
- Outstanding legacy dues of ₹1,39,947 crore in June 2022 were reduced drastically.
- By January 2026, dues declined to ₹4,927 crore, with current payments being made largely on time.
- This improved liquidity across the power value chain, benefiting generators and fuel suppliers.
- **The Role of State Government Support –** While operational metrics have improved,

financial sustainability remains questionable.

- Many DISCOMs achieved profits largely due to:
  - Tariff subsidies from State governments
  - Direct takeover of accumulated losses
- **For instance,**
  - **Tamil Nadu**, TNPDCL recorded a profit of ₹2,073 crore in 2024–25 only after receiving ₹15,772 crore as tariff subsidy and ₹16,107 crore toward loss takeover. Without this support, it would have posted a loss of ₹14,034 crore.
  - **Rajasthan (JDVVNL)**, Recorded a profit of ₹92 crore after receiving ₹11,625 crore in subsidy and ₹2,540 crore in loss takeover.
  - Thus, profitability in several cases is subsidy-driven rather than efficiency-driven.

What are the structural concerns and future risks?

- **Dependence on Subsidies** – Overreliance on State support burdens public finances.
- **Non-Cost-Reflective Tariffs** – Political reluctance to revise tariffs distorts finances.
- **Unmetered Agricultural Supply** – Particularly in States like Tamil Nadu, free and unmetered supply prevents accurate energy accounting.
- **Future Pay Revisions** – Employee pay revisions may widen revenue deficits again.
- **Political Freebies** – Universal free electricity schemes disproportionately benefit economically stronger sections.
- The current surplus position may therefore be transient.

What should be done?

- **Feeder Segregation –** Separating agricultural feeders from non-agricultural ones:
  - Enables accurate measurement of farm consumption
  - Improves load management
  - Reduces cross-subsidisation distortions
  - States like Gujarat, Rajasthan, and Karnataka have implemented this effectively.
- **Smart Metering and Digitalization –** Prepaid smart meters can:
  - Improve billing efficiency,
  - Reduce theft
  - Enhance real-time monitoring
- **Promotion of Solar Pumps –** As recommended by NITI Aayog (2021), encouraging solar pumps in agriculture can:
  - Reduce procurement costs
  - Decrease subsidy burden
  - Promote renewable energy
- **Rational Tariff Design –** Tariffs must gradually move toward cost-reflectiveness while:
  - Protecting vulnerable consumers through Direct Benefit Transfers (DBT)
  - Avoiding universal free electricity schemes
- **Strengthening Regulatory Independence –** State Electricity Regulatory Commissions must ensure:
  - Timely tariff revisions
  - Transparent subsidy accounting

    - Strict compliance with financial discipline
- **Political Will and Administrative Accountability –** Reforms require:
    - Political courage to rationalize tariffs
    - Bureaucratic efficiency in implementation
    - Consumer awareness about responsible energy use

What lies ahead?

- The recent financial turnaround of DISCOMs marks an encouraging phase for India's power distribution sector.
- Reduced AT&C losses, narrowing ACS-ARR gaps, and improved payment discipline indicate that reforms are yielding results.
- Initiatives such as the RDSS and the Late Payment Surcharge Rules have strengthened financial governance.
- However, the sustainability of this progress remains contingent upon deeper structural reforms.
- The continued reliance on tariff subsidies and State-led loss takeovers signals underlying vulnerabilities.
- Without rational tariff structures, universal metering, feeder segregation, and political restraint in offering populist subsidies, DISCOMs risk reverting to financial distress.
- A viable, efficient, and consumer-friendly distribution sector is indispensable for India's aspiration of becoming a $5 trillion economy and achieving energy transition goals.
- With sustained reform momentum, regulatory discipline, and political will, DISCOMs can transform from perennial loss-makers into engines of reliable and sustainable power delivery.

Reference

[The Hindu| DISCOMs]