

# Feeder Separation

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**In news :** The Union Minister for Finance in her budget speech of 2021-22, proposed an outlay of Rs 3,05,984 crore over 5 years for a revamped reforms-based result-linked power distribution sector Scheme. The Scheme will provide assistance to DISCOMS for infrastructure creation, including pre-paid smart metering and feeder separation etc.

## What is Feeder Separation?

- Feeder separation refers to the **supply of electricity to agricultural and non-agricultural consumers** (domestic and non-domestic) separately through dedicated feeders.
- This arrangement allows the distribution company to regulate power supply to agricultural consumers as and when needed for effective demand side management (DSM).
- The core objective of feeder separation is to provide regulated supply to agricultural consumers and continuous supply to non-agricultural consumers in rural areas.

## Current status of Feeder separation in India

Feeder separation programmes have been successfully completed in Gujarat, Andhra Pradesh, Punjab, Rajasthan, Haryana and Madhya Pradesh, among other states.

## Advantages

- It ensures better load management and increased power supply to rural households and small industries.
- It helps in flattening the load curve by shifting the agricultural load to off-peak hours, thus facilitating peak load management.
- For states with low levels of metered sales, feeder segregation allows greater revenue potential for discoms

- as it helps in reducing the theft and technical losses that prevail in unmetered agricultural consumption.
- It also helps in reducing the peak power purchase cost through better distribution of agricultural load, leading to savings for discoms.
    - As per the survey conducted by the World Bank in 2014, prior to feeder segregation, more than 80 per cent of consumers in Rajasthan and Gujarat complained of low voltage problems; post segregation, this came down to 6 per cent.
  - Due to the increase in the rural labour force involved in non-agricultural activities, the increase in electricity supply through feeder segregation has also led to several socio-economic benefits, including job creation and improvement in the quality of life.

### **Feeder Separation under Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY):**

- Government of India has approved DDUGJY) in December, 2014 for separation of agriculture and non-agriculture feeders facilitating judicious rostering of supply to agricultural & non-agricultural consumers in the rural areas, strengthening and augmentation of sub-transmission & distribution infrastructure in rural areas, including metering at distribution transformers/feeders/consumers.
- Feeder separation under DDUGJY involves ensuring judicious rostering of supply to agricultural and non-agricultural consumers in rural areas.
- Under DDUGJY, Feeder separation includes the **physical separation** of high tension (HT) feeders for agricultural and non-agricultural consumers, and the **virtual separation of feeders**
- Virtual feeder separation involves installation of single phase DTs on existing HT lines for domestic consumers

- This entails the erection of HT lines for drawing new feeders and the reorientation/re-alignment of existing lines, installation of new distribution transformers (DTs) and augmentation of existing DTs, and relocation of DTs and associated low tension (LT) lines for re-grouping of agricultural and non-agricultural consumers.
- Feeders already segregated by the utilities are not covered under this scheme