Chapter 4 *Separation of feeders*

Feeder separation refers to supply of electricity to agricultural consumers and to 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). Separation of feeders helps in flattening of the load curve by shifting the agricultural load to off-peak hours and thus facilitates peak load management. The core objective of separation of feeders is to provide regulated supply to agricultural consumers and continuous power supply to non-agricultural consumers in rural areas. GoI had sanctioned ₹ 2,199.49 crore for separation of feeders.

4.1 Non Assessment of requirement for feeder separation

In the 1st stage of project formulation, utility had to identify the need for separation of agricultural feeders. It was observed that JBVNL prepared DPRs without taking into consideration details like feeders with mixed load where feeder separation was required, total number of existing and prospective agriculture consumers, total area and location of cultivated land, water catchment area from where consumers may draw water for irrigation etc. SLSC also did not verify these requirements and forwarded the DPRs to REC for approval. Further, no existing feeders with mixed load were identified or separated. Agriculture feeders were either constructed in newly constructed PSS or a new feeder was constructed in existing PSSs.

4.2 Status of separation of feeders

Status of target for erection of agricultural feeders/ lines *vis-à-vis* actual achievement as of March 2020 is shown in **Table 4.1**.

Table 4.1: Target and achievement of erection of agricultural feeders/ lines

District	No. of feeders to be erected	No. of feeders erected	Agricultural lines to be erected (Ckm[74])	Agricultural lines erected (Ckm) (*per cent*)
Dhanbad	15	13 (87)	450.00	425.74 (95)
Deoghar	21	14 (67)	669.00	619.00 (93)
Pakur	2	0 (0)	31.55	0 (0)
Palamu	3	0 (0)	37.75	0 (0)
Giridih	5	4 (80)	122.98	91.38 (74)
Dumka	4	3 (75)	18.90	49.20 (260)
Ranchi	13	13 (100)	795.97	795.97 (100)
Total	**63**	**47**	**2126.15**	**1981.29**

(Source: Compiled from data furnished by ESCs of JBVNL)

It can be seen from **Table 4.1**, that no work was executed in two districts. This was due to non-execution of work by TKC in Pakur, ultimately leading to termination of the contract and slow pace of work in Palamu. Besides, only 47 feeders (81 *per cent*) and 1,981 Ckm lines (96 *per cent*) could be erected against the given scope in the other five districts even after a lapse of four to nine months from the scheduled date of completion.

Further, it was noticed that erection of separate feeders for agricultural purpose were taken up without conducting survey regarding existing and prospective agricultural consumers, requirement of load in this sector and availability of water in a particular area for irrigation.

This assumes significance in view of the fact that TMKPY, a State scheme meant for providing free electric connections to agricultural pumps, was closed (October 2018) due to lack of demand from prospective consumers as sufficient water was not available for irrigation in the rivers or canals.

Further, 2,966 DTrs[75] and 1,840.71 Ckm[76] agricultural lines were also erected (November 2018 to June 2020) at a cost of ₹ 90.61 crore[77] for agriculture connections. However, even the 16,406 existing agricultural consumers[78] connected with the existing feeders were not shifted to the separate agriculture feeders erected for the purpose for reasons not available on record. Thus, the separate feeders along with its related infrastructure were not put to use as of July 2020 i.e., one to 20 months since their erection and assets worth ₹ 90.61 crore remained idle.

- Three agriculture feeders were erected (July 2019) comprising 675 DTrs of 25 KVA connected to two PSSs (one new and one upgraded) in Chanho block of Ranchi district where 1,174 agriculture service

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74 Circuit km

75 Ranchi (1,803), Dhanbad (612) and Deoghar (551)

76 Ranchi, Dhanbad and Deoghar.

77 2,966 x ₹ 81,332 (average cost of DTrs) + 1,840.71 x ₹ 3,61,189 (average cost of agricultural line) = ₹ 90.61 crore

78 Dhanbad (239), Deoghar (3,563), and Ranchi (12,604) under Irrigation and Agricultural Service (IAS) tariff as per Revenue Statement-I of April 2019).

consumers were active on the existing feeders. However, existing agricultural consumers were not shifted to the agriculture feeders for more than 11 months as of July 2020.

While accepting (May/October 2021) the audit observation regarding erection of feeders, lines and non-connection of existing agricultural consumers on agricultural feeders, the Management/Department stated that the feeders and lines has now been erected and 2,295 new agricultural connections has been provided under a new scheme[79] in the test-checked districts and field offices has been directed to shift the existing agriculture connections to the newly erected agricultural feeders.

However, the reply was silent on preparation of DPRs without doing survey regarding existing and prospective agricultural consumers, requirement of load in this sector and availability of water in a particular area for irrigation. Hence the focus of JBVNL was on construction activities without assessing the actual requirement.

JBVNL should investigate failure to shift existing agricultural consumers to the separated agricultural feeders despite completion of feeders, transmission lines and erection of DTrs and fix responsibility.

To sum up, *although 47 feeders and 1,981.29 Ckms of agricultural electric lines were erected as a part of separation of agriculture feeders, none of these were charged. Out of these, 40 feeders and 1,840.71 Ckm of agricultural lines were not put to use even after installation of 2,966 DTrs in Deoghar, Dhanbad and Ranchi districts at a cost of ₹ 90.61 crore[80] for agriculture connections though 16,406 agriculture consumers already existed in these districts.*

[79] TMKPY scheme was reintroduced (July 2019) taking ₹ 98.62 crore left from old TMKPY scheme which was closed (October 2018) and LoI were issued (October 2019 to July 2020).

[80] 2,966 x ₹ 81,332 (average cost of DTrs) + 1,840.71 x ₹ 3,61,189 (average cost of agricultural line) = ₹ 90.61 crore