

CHAPTER-II
PERFORMANCE AUDIT
RELATING TO
STATE PUBLIC SECTOR ENTERPRISES

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PERFORMANCE AUDIT RELATING TO STATE PUBLIC SECTOR ENTERPRISES

2.1 Performance Audit on the Working of Assam Seeds Corporation Limited

Highlights

There was an overall shortfall 1,223.04 MT (34.02 *per cent*) in achievement of annual targeted production of paddy seeds during 2018-2024 ranging between 6.70 *per cent* (2023-24) and 49.86 *per cent* (2018-19). The production of non-paddy seeds (35.12 MT) during 2018-2024 was negligible as compared to the targeted production of 366.75 MT.

(Paragraph 2.8.1)

During 2018-2024, the Department of Agriculture (DoA), Government of Assam (GoA) prepared Seed Rolling Plan (SRP) containing crop wise and variety wise production plan for different seed producing agencies including the Company. Audit observed that the Company did not prepare any perspective or long term plan during 2018-2024 for carrying out its production activities duly linking with the SRP prepared by DoA, GoA. GoA also did not insist the Company for implementation of the SRP.

Further, DoA, GoA had been placing the indents on the Company for supply of seeds for distribution under various schemes on 'annual basis'. Despite Company's request to communicate their seed requirement at least three years in advance, DoA, GoA continued to place indents on 'annual basis'. As a result, the Company had to plan its production targets on annual basis without linking with the SRP, thereby defeating the objectives of GoI's Seeds Policy.

(Paragraphs 2.8.1.1)

During 2018-2024, the Company supplied 1.59 lakh MT of seeds to DoA, out of which 437.54 MT (0.28 *per cent*) was supplied from its own production. The Company, however, could not expand its market potential by increasing its own production of seeds as well as production through Registered Growers. Thus, the Company's activity was predominantly dependent upon the procurement of seeds from private seed producing farms/suppliers to meet the demand of GoA.

(Paragraphs 2.8.1.5)

Against total cultivable land of 250.50 ha in each year during 2018-2024, the unutilised land for production of seeds ranged between 39 ha (15.57 *per cent*) and 124.50 ha (49.70 *per cent*). The Company's average yield of paddy seeds during 2018-2024 was 2.38 MT *per ha* as against State average yield of 3.49 MT *per ha*.

(Paragraph 2.8.2.1 and 2.8.2.2)

The Company neither had any marketing information of its neighbouring States nor formulated a strategy to discover yearly total requirements of seeds, pricing policies adopted by other suppliers including the qualities and varieties of seeds etc. The Company also did not have any brand name which would create a unique identity of its product to attract the customer.

(Paragraph 2.12.1)

2.1 Introduction

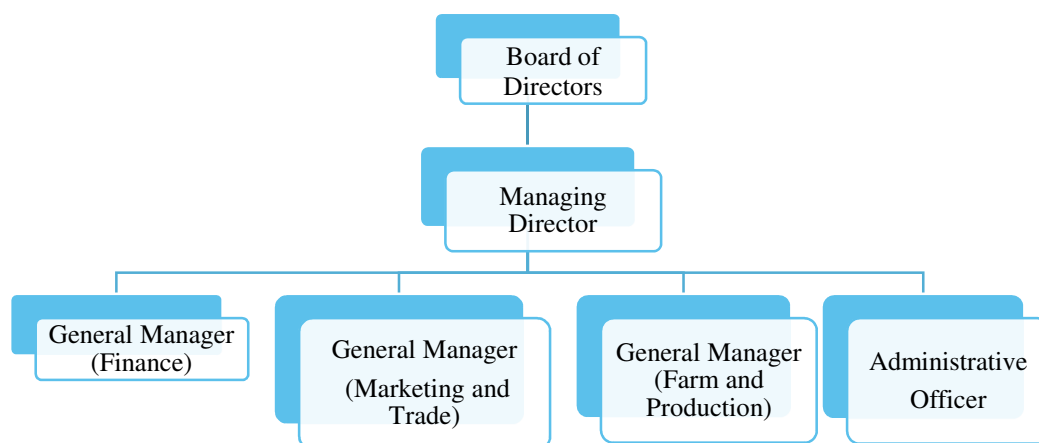
Assam Seeds Corporation Limited (Company) was incorporated (27 January 1967) under the Companies Act, 1956, with 100 *per cent* shareholding of Government of Assam (GoA). The main objective of setting up of the Company was production and procurement of agricultural seeds and marketing of such seed in the State. Against 20,27,500 hectares (ha) of cultivable land available in the State of Assam, the Company had a meagre cultivable area of 250.50 ha (0.012 *per cent*).

The present activities of the Company were limited to production of seeds in its own farms and procurement of Foundation/Certified Seeds for supply to the Department of Agriculture (DoA), GoA, for implementation of various developmental schemes. During 2018-19 to 2023-24, the Company's own production, however, catered to 0.28 *per cent* of DoA's seed requirement only, while the balance requirement was met from other sources.

The Head Office of the Company was located in Guwahati, which was operating with 29 branches (including nine sub-branches and seven sale points), 12 seed farms and six nurseries, where saplings/seedlings/plants and grafts were grown for sale in the open market.

2.2 Organisational Setup

The Management of the Company was vested with the Board of Directors (BoD), consisting of nine Directors, including the Managing Director (MD). The Company is under the administrative control of the DoA, GoA. The MD, being the executive head, looked after the day-to-day affairs of the Company and was assisted by General Manager (Finance), General Manager (Marketing and Trade), General Manager (Farm and Production) and Administrative Officer. The MD and all the three General Managers were engaged in the Company as an additional charge, apart from the post they held in DoA. As on 31 March 2024, the Company had 87 employees against sanctioned strength of 325 employees. The organisational structure of the Company is depicted in *Chart 2.1*.

Chart 2.1: Organisation chart of the Company

2.3 Audit Objectives

The Performance Audit was conducted to assess whether:

- the production activities were carried out by efficiently utilizing the production capacities of the Company for producing quality seeds as per demand;
- the procurement process of seeds was transparent and competitive, following due financial rules;
- the infrastructure facilities for storage, processing and handling of seeds were utilised by the Company in an efficient manner; and
- an effective mechanism for marketing of seeds existed in the Company.

2.4 Audit Criteria

The audit criteria for the Performance Audit were derived from the following sources:

- Memorandum of Association/Articles of Association of the Company, Guidelines and instructions issued by GoA;
- Minutes of meetings of BoD and its committees;
- National Seed Policy 2002, Assam Public Procurement Act, 2017, Assam Public Procurement Rules, 2020;
- Annual Budget/Target of production of the Company; and
- Production norms of Government of India (GoI)/Company.

2.5 Scope and Methodology of Audit

The Performance Audit (PA) covered the activities of the Company with regard to production, procurement and sale of seeds, plants and grafts for the period from 2018-19 to 2023-24⁸⁶. The present PA involved examination of records maintained at Head Office. Further, 10 out of 29 branches, 5 out of 12 seed farms⁸⁷ and all the 6 nurseries were selected for detailed examination based on statistical sampling. Audit also

⁸⁶ Audit covered the period from 2018-19 to 2023-24, except the cases where the Management could not furnish the figures/records pertaining to 2023-24.

⁸⁷ In September 2022, DoA, handed over 48 farms to the Company for seed production. However, taking up of cultivation in these farms were in initial stages as of March 2024. Hence, Audit covered production and other details of 12 farms, which were in operation during 2018-2024.

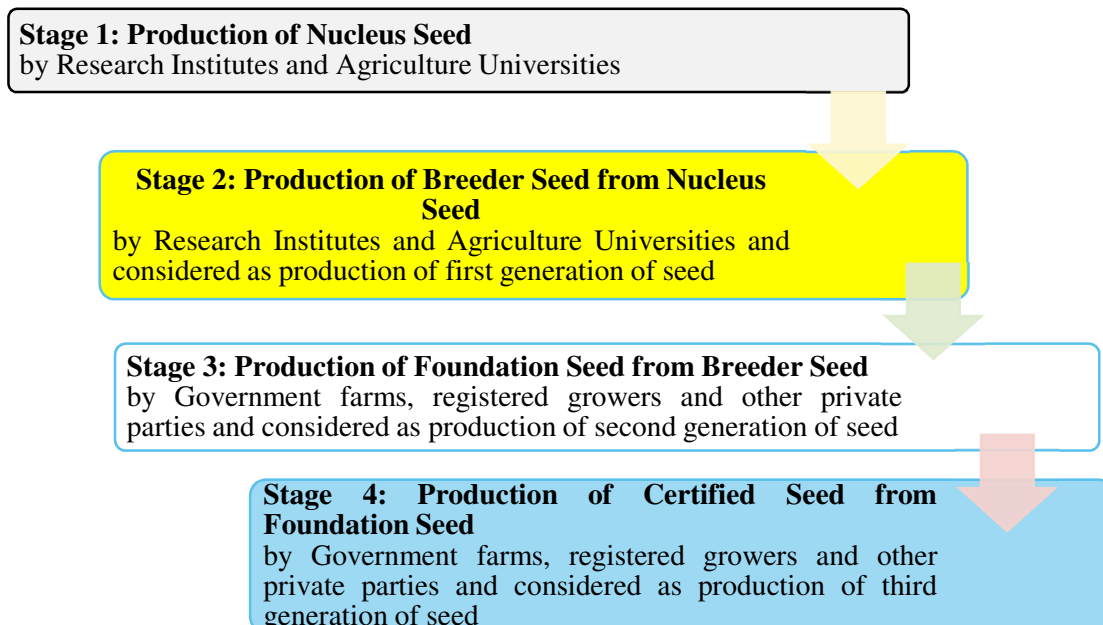
conducted beneficiary survey of ‘Seed Village Scheme’ in 8 branches⁸⁸ out of 10 selected branches using questionnaire to assess the achievement of scheme objectives.

The methodology adopted for attaining the audit objective consisted of explaining the audit objectives to the top management of DoA, GoA/Company in the Entry Conference (12 June 2023), analysis of data/records with reference to audit criteria, examination of annual reports, internal budget, *etc.* of the Company as well as agenda/minutes of the meetings of BoD, interaction with Company officials, raising audit queries, issuing draft audit reports to GoA/Company for comments. The draft report was also discussed with the DoA, GoA/Company in the Exit conference held on 11 November 2024. The replies received from DoA, GoA/Company as well as the comments offered by DoA, GoA/Company during the Exit conference had been considered in the PA report.

2.6 Seed Production Process

Seed is the basic and primary input for agricultural production. There are four main classes of seed, *i.e.*, Nucleus Seed, Breeder Seed, Foundation Seed and Certified Seed. The process of seed production from Nucleus seed to Certified seed is shown in *Chart 2.2*.

Chart 2.2: Stages of seeds production



⁸⁸ For beneficiary survey of ‘Seed Village Scheme’, 10 branches were selected on sampling basis covering 25 beneficiaries in each branch. However, two (*viz.*, Silchar and Hailakandi), out of selected 10 branches did not implement the scheme. Hence beneficiary survey was conducted in eight branches covering 250 beneficiaries.

2.7 Financial position and working results

The key indicators of financial position and working results of the Company (*Appendix 5*) for the period from 2018-2024 are given below:

- The Net Worth of the Company during 2018-19 to 2021-22 was negative in the range between (-) ₹ 8.82 crore (2018-19) and (-) ₹ 12.80 crore (2021-22). Due to improvement in operational activities of the Company after 2021-22, the Reserve and Surplus significantly improved from (-) ₹ 14.26 crore (2021-22) to (-) ₹ 0.79 crore (2022-23) and turned positive to ₹ 8.29 crore (2023-24), with corresponding improvement in Company's net worth from (-) ₹ 12.80 crore (2021-22) to ₹ 9.75 crore (2023-24). This turnaround in Company's financial position was mainly attributable to increase in Company's turnover against supply of seeds to DoA from ₹ 67.24 crore (2021-22) to ₹ 472.36 crore (2022-23) and ₹ 318.56 crore (2023-24).
- The increase in Company's turnover against supply of seeds to DoA after 2021-22 was mainly on account of significantly higher quantity of seeds indented by DoA during 2022-23 (46,485.23 MT) and 2023-24 (32,516.49 MT), compared to 2021-22 (11,272.91 MT). This had correspondingly increased the turnover of the Company from ₹ 70.36 crore (2021-22) to ₹ 473.35 crore (2022-23) and ₹ 319.20 crore (2023-24).
- As a result of significant increase in Company's turnover after 2021-22, the Company, which was a loss-making entity till 2021-22, registered profit of ₹ 14.03 crore (2022-23) and ₹ 9.09 crore (2023-24) after 2021-22.

Audit Findings

The core objectives of the Company as set out in its Memorandum of Association were to carry on production, processing, drying, storing, distribution and transportation of agricultural seeds in the State of Assam and to carry on business as seed merchants, to buy, sell, grow, prepare for market, import, export and deal in seeds of all kinds.

The Company has been functioning since 1967 and even after more than five decades of operation, the sustainability of the Company depends solely on the margin received from executing the orders of DoA, GoA for supply of seeds. The deficiencies in the achievement of core objectives are discussed in the subsequent paragraphs.

2.8 Production of seeds

Government of India declares availability of Breeder seeds for each State annually on its portal. The GoA in turn allocates the quantity of Breeder seeds to the Company to be procured from Research Institutes and Agricultural Universities for carrying out its production activities. Thereafter, the Company procures the allocated quantity of Breeder seeds from Research Institutes and Agricultural Universities for production of Foundation seed (paddy and non-paddy) in Company's 12 seed farms. The Foundation seeds are thereafter utilised for

production of Certified seeds. The deficiencies observed with regard to production of seeds are discussed in the subsequent paragraphs.

2.8.1 Shortfall in achievement of targeted production

The Company prepared annual budget, which included cropping programmes for each seed farm containing crop-wise and variety-wise targeted area of cultivation and the targeted quantity of seed to be produced by the farms. The targeted quantity of seed to be produced was derived by multiplying the targeted area of cultivation with the crop-wise standard norms of production.

Paddy crop requires a large amount of water and hence *Kharif* season (June-July) is best suitable for sowing of paddy seeds. On the other hand, non-paddy crops (such as mustard, maize, jute, pulses *etc.*), involved comparatively less water requirement and therefore, *Rabi* season (October-December) is suitable for sowing of non-paddy seeds.

During 2018-2024, the Company had aggregate production of 2,407.08 MT of seeds, which included 2,371.96 MT (98.54 *per cent*) of paddy seeds and 35.12 MT (1.46 *per cent*) of non-paddy seeds (such as mustard, maize, jute, pulses, *etc.*). The year-wise targeted production of seeds *vis-à-vis* the actual production achieved thereagainst during the period of six years (2018-2024) is given in **Table 2.1**.

Table 2.1: Production of Seeds against Target⁸⁹

(Figures in MT)

Particulars	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Paddy Seeds							
Target	712.50	715.50	670.50	594.00	400.00	502.50	3,595.00
Actual	357.26	432.44	492.59	379.66	241.17	468.84	2,371.96
Shortfall (in per cent)	355.24 (49.86)	283.06 (39.56)	177.91 (26.53)	214.34 (36.08)	158.83 (39.71)	33.66 (6.70)	1,223.04 (34.02)
Company's average yield <i>per hectare</i> ⁹⁰	2.21	2.28	2.40	1.99	2.54	2.84	2.38
State's average yield <i>per hectare</i>	3.68	3.38	3.44	2.90	4.06	NA	3.49
Non-paddy Seeds[#]							
Target	57.00	57.00	9.00	60.00	159.00	24.75	366.75
Actual	Nil*	1.90	1.00	Nil*	12.10	20.12	35.12
Shortfall (in per cent)	57.00 (100)	55.10 (96.67)	8.00 (88.89)	60.00 (100)	146.90 (92.39)	4.63 (18.71)	331.63 (90.42)

Source: Annual Budget of the Company

* Due to crop failure, there was no production.

[#]As the production of non-paddy seeds was insignificant, the yield was not compared with standard.

⁸⁹ Out of 12 seed farms, there was no target nor any production in four seed farms *viz.*, Tintingia (2019-20, 2022-23 and 2023-24), Fallangani (2022-23 and 2023-24), Moran (2023-24) and Monierkhal (2023-24) during 2018-2024.

⁹⁰ Worked out based on the land area harvested by the Company during 2018-19 (162 ha), 2019-20 (190 ha), 2020-21 (205.50 ha), 2021-22 (190.70 ha), 2022-23 (95 ha) and 2023-24 (165.50 ha).

As can be seen from **Table 2.1**:

- There was an overall shortfall of 1,223.04 MT (34.02 *per cent*) in actual production of paddy seeds during 2018-2024. Out of eight seeds farms which undertook production of paddy seeds during 2023-24, two farms (Dhekiajuli and Senchowa) could achieve the targeted production, while one farm (Darigaji Seed farm) exceeded its targeted production (171 MT) by 10.92 MT. The remaining five seed farms could not achieve the targeted production and their shortfall ranged between 1.70 MT and 20.43 MT.
- The six years' average yield of paddy for the Company was 2.38 MT *per ha* against the State average yield of 3.49 MT *per ha*. This average yield achieved by the Company (2.38 MT *per ha*) was even below the national standard yield of 2.50 MT *per ha*. Further, out of 12 individual seed farms of the Company, the paddy seeds yield in eight seed farms during 2018-2024 ranged between 0.63 MT *per ha* (Tingtingia seed farm) and 2.18 MT *per ha* (Golakganj seed farm), which was even below the Company's overall average yield of 2.38 MT *per ha*. The reasons for low yield across seed farms of the Company have been discussed in **paragraph 2.8.2.2**.
- The production of non-paddy seeds (35.12 MT) was negligible as compared to targeted production (366.75 MT) during 2018-2024. Audit observed that two (Dalgaon and Darigaji) out of 12 seeds farms had partial irrigation facilities, but no drainage facility. Remaining 10 farms did not have irrigation and drainage facilities and hence, cultivation of seed during *Rabi* season was not feasible in these farms. Despite this, the Company did not take any effort to create necessary infrastructure to address the issue of irrigation and drainage facilities under these farms.
- Audit further observed that due to non-availability of proper irrigation facilities in most farms, the sowing of non-paddy seeds in *Rabi* season (October-December) during 2018-2024 was restricted to two seed farms, *viz.* Dalgaon (2018-2024) and Darigaji (2022-23), which had partial irrigation facility. The Company, although had undertaken cultivation of non-paddy seeds in another seed farm (Golakganj) during 2022-23, there was no production due to crop failure, in absence of proper irrigation facilities.
- Audit also noticed that while fixing production targets for non-paddy seed, the Company did not consider the absence of adequate irrigation facility in its farms and the actual production achieved during previous years. As a result, the Company fixed unrealistic production targets during four out of six years (except 2020-21 and 2023-24), leading to significant shortfall in actual production, which was indicative of deficient planning on part of the Company.

Thus, absence of proper irrigation and drainage systems across most seed farms was a major operational constraint. Dependence on monsoon made farms highly vulnerable to crop failure, while lack of drainage facilities led to waterlogging in fields during heavy rains, which damaged crops and further reduced the yield.

Audit further observed that the Company could not achieve the production targets of paddy and non-paddy seeds during any of the six years covered under audit although, the shortfall in production showed a declining trend during 2019-24 from 49.86 *per cent* to 6.70 *per cent* (paddy) and 100 *per cent* to 18.71 *per cent* (non-paddy). Due to persistent shortfall in production of seeds during last six years (2018-24), the Company could not provide quality seeds to farmers of the State at a cheaper price making farmers dependent on private traders for their seed requirement.

The Company in its reply (October 2024), which was endorsed (November 2024) by Government, stated that shortfall in achievement of production target was attributable to lack of technical manpower and basic farm infrastructure/machinery support like irrigation and drainage facilities, farm fencing, *etc.* It was further stated that to address the above issues, the Company engaged a technical person under a World Bank Project during 2024-25. Besides, it had taken initiative to achieve the production target in line with State requirement and taken steps for development of required infrastructure facilities.

The reply is not acceptable in view of the fact that the Company had no system in place for periodical review of its performance and analyse the reasons for shortfall in production for taking timely corrective action.

Reason analysis for shortfall in production

The reasons for shortfall in achievement of production targets as analysed in Audit are discussed in the subsequent paragraphs.

2.8.1.1 Absence of long-term planning for production

The National Seeds Policy, 2002, required each State to prepare a Perspective Plan for seed production and distribution over a rolling period of five to six years. GoI also directed (January 2012) each State to prepare a crop wise Seed Rolling Plan (SRP). *Preparation of SRP is basically an exercise under which the States assess the seed requirement for different crops and their varieties suitable for Kharif and Rabi seasons⁹¹ three years in advance so as to achieve production targets as per prescribed seed rate, area under cropping and seed replacement rate⁹².*

During 2018-2024, the DoA, GoA prepared SRP containing crop wise and variety wise production plan for different seed producing agencies including the Company and uploaded the same on the portal of Ministry of Agriculture and Farmers Welfare, GoI. Audit observed that the Company did not prepare any perspective or long term plan during 2018-2024 for carrying out its production activities duly linking with the SRP prepared by DoA. GoA also did not insist the Company for implementation of the SRP, thereby defeating the purpose of preparing the SRP.

⁹¹ *Rabi* crops are grown in the winter (October-December) while *Kharif* crops are grown in the monsoon season (June-July).

⁹² Seed Replacement Rate (SRR) is the percentage of area sown out of total area of crop planted in the season by using certified/quality seeds other than the farm saved seed.

Audit further observed that DoA had been placing indents on the Company for supply of seeds for distribution under various schemes on 'annual basis'. The Company had requested DoA for placement of indent for at least three years in advance so that it could conveniently plan and execute the supply orders of DoA under various State sponsored schemes. The DoA, did not respond to the Company's requests and continued to place indents on 'annual basis'. As a result, the Company had to plan its production targets on annual basis without linking with the SRP, thereby defeating the objectives of GoI's Seeds Policy. As such, the Government was unable to monitor the performance of the Company, which was supposed to align with the seed production of the State with the needs of farmers.

Besides, due to non-receipt of indent in advance, instances of shortfall in supply of seeds to DoA were noticed. On review of 743 indents received from DoA during 2018-2024, it was noticed that there was shortfall in supply of seeds aggregating 2,168.73 MT (value: ₹ 16.86 crore) in 67 indents. Consequently, the Company had to forego margin money of four *per cent* (₹ 0.68 crore) of the value of short supply.

The Company in its reply (October 2024), which was endorsed (November 2024) by Government, stated that it had prepared the SRP for the State in consultation with DoA which would enable to link the production activity of the Company with the requirement of the State in coming years. Further, it had planned a four years' robust seed production plan in line with the State's SRP for increasing the Seed Replacement Rate of the State. Regarding the shortfall in supply of seeds, it was stated that the Company has introduced a digital business solution (software) to streamline, track and avoid delays in seed supply chain.

The reply is not acceptable due to the fact that lack of effective persuasion with GoA for advance placement of indents coupled with lack of Company's initiative for production of seeds in line with the SRP of GoA had adversely affected availability of quality seeds as per farmers' demand during the period covered under audit.

2.8.1.2 Under-production of seeds against norms

(i) Paddy seeds

The Company produced 1,490.59 MT of Foundation seeds and 881.37 MT of Certified Seeds during 2018-2024 by using 30.09 MT⁹³ of Breeder seeds and 13.96 MT of Foundation seeds respectively. However, as per the *seed multiplication norm*⁹⁴ of paddy, 44.05 MT seeds (30.09 MT of Breeder *plus* 13.96 MT of Foundation seeds) had the potential of producing 3,524 MT⁹⁵ of seeds (2,407.20 MT of Foundation seed *plus* 1,116.80 MT of Certified seeds). The Company, however, could produce

⁹³ 32.81 MT (Breeder seeds utilisation for production of Foundation seeds) - 2.72 MT (crop failure) = 30.09 MT.

⁹⁴ Source: "seednet.gov.in" (a portal of Ministry of Agriculture and Farmers Welfare, GoI).

⁹⁵ Foundation seed: 2,407.20 MT (Breeder: 30.09 MT x 80) + Certified seed: 1,116.80 MT (Foundation: 13.96 MT x 80).

2,371.96 MT (1490.59 MT *plus* 881.37 MT) of seeds with a shortfall of 1,152.04 MT (32.69 *per cent*) seeds worth ₹ 4.97 crore⁹⁶ during 2018-2024.

(ii) Non-paddy seeds

In case of non-paddy, the Company during the corresponding period (2018-2024) produced 21.08 MT of Foundation seeds and 14.04 MT of Certified seeds using 0.86 MT⁹⁷ Breeder seeds and 0.38 MT Foundation seeds respectively. However, as per seed multiplication norm of non-paddy, 1.24 MT seeds (0.86 MT Breeder seeds *plus* 0.38 MT Foundation seeds) had the potential of producing 49.60 MT⁹⁸ of seeds (34.40 MT of Foundation seed *plus* 15.20 MT of Certified seeds). The Company, however, could produce 35.12 MT (21.08 MT *plus* 14.04 MT) of non-paddy seeds with a shortfall of 14.48 MT (29.19 *per cent*) worth ₹ 0.17 crore⁹⁹ during 2018-2024.

Thus, there was a production shortfall of 1,166.52 MT (1,152.04 MT *plus* 14.48 MT) of seeds during 2018-2024, adversely affecting the availability of quality seeds to farmers of the State at reasonable price. As such, the Company under-performed its role of making the State self-sufficient in seed production. Reasons for shortfall in production as observed by Audit were as follows:

- absence of proper irrigation and drainage facilities due to which most of the seed farms were ‘rain fed’ as discussed under *paragraph 2.11.3*.
- uncontrolled cattle grazing in the harvested areas in absence of proper ‘boundary wall’ as discussed under *paragraph 2.11.1*.
- absence of a proper ‘soil testing mechanism’ before cultivation of seeds leading to ineffective nutrients management of crops.
- absence of a scientific pest control mechanism leading to damage to crops due to uncontrolled pests and diseases.
- damages to crops due to natural calamities like, floods and drought.

Audit observed that all the reasons listed above (except the last one) contributing towards production shortfall were controllable on Company’s part by taking timely action, like creation of irrigation and drainage facilities, construction of boundary wall, development of scientific management of pest control, soil testing, *etc.* The Company, however, did not take steps to mitigate the above deficiencies during 2018-2024. Further, the Company did not have any system in place for periodic review of the performance of seed farms or analyse the reasons for low productivity, which was indicative of absence of effective monitoring mechanism in the Company.

⁹⁶ 1,152.04 MT x ₹ 43,183.30 (least of average procurement price of paddy seeds approved by Departmental Bid Committee during 2018-19 to 2023-24) = ₹ 4.97 crore.

⁹⁷ 3.82 MT (Breeder seeds utilisation for production of Foundation seeds) - 2.96 MT (crop failure) = 0.86 MT.

⁹⁸ 1.24 MT x 40 (taking the least multiplication norms of non-paddy seeds) = 49.60 MT.

⁹⁹ 14.48 MT x ₹ 1,19,500 (least of average procurement price of non-paddy seeds approved by Departmental Bid Committee formed under DoA, during 2018-19 to 2023-24) = ₹ 0.17 crore.

2.8.1.3 Non-utilisation of Breeder seeds for production

During 2018-2024, 7.07 MT of Breeder seeds (paddy: 4.56 MT and non-paddy: 2.51 MT) remained unutilized and had become unsuitable for use as seeds. Non-utilisation of above mentioned quantity of seeds within their validity period was mainly attributable to the following:

- The Company had cultivable area of 250.50 ha land every year during 2018-2024, against which the unutilized land area ranged between 39 ha (2018-19) and 124.50 ha (2022-23), as discussed in **paragraph 2.8.2.1**. Despite having capacity to fully utilise Breeder seeds (paddy) allotted by GoI to produce Foundation seeds, the Company could not take up production program in all the cultivable areas due to constraints like shortage of technical manpower, inadequate basic farm infrastructure (like irrigation and drainage facilities, farm fencing, etc.) and mechanical support.
- The cultivation of Breeder seeds (non-paddy) is suitable in Rabi (winter) season during which rainwater is sparse. Hence, it was essential that the Company should have proper irrigation and drainage facilities for cultivation of seeds. Out of 12 seed farms of the Company, two farms (Dalgaon and Darigaji) had partial irrigation facilities. During 2018-2024, the cultivation of Breeder seeds (non-paddy) however, was restricted to one farm (Dalgaon), in absence of the required facilities. Resultantly, 2.51 MT Breeder seeds (non-paddy) remained unutilised during 2018-2024.

As a result of non-utilisation of 7.07 MT Breeder seeds for multiplication to Foundation seeds, the Company lost the opportunity to produce 465.20 MT¹⁰⁰ Foundation seeds worth ₹ 2.78 crore¹⁰¹ during 2018-2024. Besides, the farmers of the State were deprived of having quality Foundation seeds for further multiplication to Certified seeds and had to depend on private suppliers for their seed requirement.

The Company in its reply (October 2024), which was endorsed (November 2024) by the Government, accepted that there were issues of water stagnation, minimal soil moisture and lack of technical manpower. As a result, production was not taken in all the cultivable land of the farms.

The reply is not acceptable considering the lack of efforts on the part of the Company for effective utilisation of its resources.

2.8.1.4 Failure of crops

Audit observed that against 36.63 MT¹⁰² Breeder seeds used for production of Foundation seeds during 2018-2024, there were crop failure of 5.68 MT (paddy:

¹⁰⁰ 4.56 MT x 80 = 364.80 MT (as per seeds multiplication norm of paddy seeds) + 2.51 MT x 40 = 100.40 MT (as per seeds multiplication norm of non-paddy seeds) = 465.20 MT

¹⁰¹ 364.80 MT x ₹ 43,183.30 (least of average procurement price of paddy seeds during 2018-19 to 2023-24) = ₹ 1.58 crore + ₹ 1.20 crore for 100.40 MT x ₹ 1,19,500 (least of average procurement price of non-paddy seeds during 2018-19 to 2023-24)

¹⁰² Paddy seeds: 32.81 MT + non-paddy seeds: 3.82 MT.

2.72 MT and non-paddy: 2.96 MT). The failure of Breeder seeds (paddy) was noticed in Dalgaon (1.80 MT), Darigaji (0.40 MT) and Tingtingia (0.52 MT) seed farms. On analysis of the reasons for crop failure, Audit noticed the following:

- In **Dalgaon Seed Farm**, 1.80 MT of crop failed included 1 MT of Breeder seeds, which could not be transplanted (2018-19) due to delay in providing required funds by the Company's Head Office to the farm. Further, remaining 0.80 MT of Breeder seeds failed as it was sowed (July) and transplanted in the month of August instead of June (sowing) and July (transplantation) respectively due to delayed procurement (2021-22) of Breeder seeds, resulting in crop failure.
- In **Darigaji Seed Farm**, standing crops of 0.40 MT covering 16 ha of cultivated land were damaged (2018-19) by wild elephants in absence of proper farm fencing for protection from animals.
- In **Tingtingia Seed Farm**, 0.52 MT of standing crops failed (2019-20) due to flood.

As regards Breeder seeds (non-paddy), there was crop failure of 2.96 MT¹⁰³ of non-paddy seeds sown during 2018-2024. Audit noticed that more than 80 *per cent* (2.38 MT) of non-paddy seeds (Black gram seeds) suitable for sowing in Rabi season (October-December), was sown during Kharif season (June-July), which led to complete crop failure.

As a result of crop failure mentioned above, the Company incurred wasteful expenditure of ₹ 0.23 crore (cost of Breeder seeds: ₹ 0.08 crore and cost of cultivation: ₹ 0.15 crore) during 2018-2024.

The Company in its reply (October 2024), which was endorsed (November 2024) by Government, stated that inadequate infrastructure and insufficient manpower had caused low production in some seed farms.

The reply is not acceptable as the Company neither ensured availability of funds for timely transplantation of seeds nor adhered to the crop calendar to avoid failure of the crops.

2.8.1.5 Absence of agreement with Registered Growers for production of seeds

As per Seed Procurement Policy approved (September 1999) by GoA, the Company shall make effort for production of seeds in the State through its seed farms or by encouraging Registered Growers¹⁰⁴ (RGs) to undertake large scale production of seeds by entering into agreements for buying back of seeds produced by these RGs.

During 2018-2024, the Company supplied 1.59 lakh MT of seeds to DoA, out of which 437.54 MT (0.28 *per cent*) was supplied from its own production

¹⁰³ Black gram: 2.38 MT; Green gram: 0.10 MT; Lentil: 0.25 MT; Mustard: 0.15 MT and Toria: 0.08 MT.

¹⁰⁴ For sale of certified seeds in open market, Farmers need to be registered with Assam Seed Organic and Certification Agency (ASOCA) through the GoI's SATHI Portal (Seed Authentication, Traceability and Holistic Inventory), who are known as Registered Growers.

(2,407.08 MT) and the balance was supplied to DoA through outside procurement. The Company, however, could not expand its market potential by increasing its own production of seeds as well as production through RGs. Thus, it is evident that the Company's activity was predominantly dependent upon procurement of seeds from private seed producing farms/suppliers to meet the demand of GoA.

Audit observed that as on 31 March 2024, there were 1,810 RGs with cultivable land of 8,255.03 ha and production potential of 24,765.09 MT¹⁰⁵ paddy seeds per year within Assam. The Company, however, did not explore the possibility of tie-up agreement for supply of Foundation seeds to RGs and buyback of certified seeds produced by RGs, as was done by other Public Sector Enterprises¹⁰⁶ (PSEs) engaged in similar seed production activities. Further, it was also seen that for supply of seeds to DoA, the Company procured 35,312.60 MT¹⁰⁷ paddy seeds during 2018-2024 from private dealers, who were having tie-up agreement with seed producers/seed growing firms (including RGs). Thus, instead of engaging itself in procurement of seeds directly from RGs, the Company procured seeds produced by RGs through private dealers and thereby the scope for enhancing Company's revenue potential was foregone.

- ❖ **Telangana State Seeds Development Corporation Limited** organised production programme through 15,000 skilled progressive seed growers including 2,700 shareholders.
- ❖ The number of shares held by growers in **Odisha State Seeds Corporation Limited** was 9,421 as on 31 March 2021.
- ❖ **National Seeds Corporation Limited** has about 11,603 registered seed growers all over the country who are undertaking the seed production programmes in different agro-climatic conditions.

Source: Official website of the respective corporation.

Further, proper arrangements for such agreements would have helped the Company to decentralise seed production and create a more reliable and diversified supply chain. This would have encouraged local farmers to participate in the seed industry towards rural development and reducing dependence on private suppliers. In absence of any such agreement with RGs, the private suppliers had the opportunity to prioritise their own profit margins, leading to higher procurement cost to GoA. Further, dependence on external suppliers could have adverse impact on seed quality, crop productivity and farmer satisfaction.

The Company in its reply (October 2024), which was endorsed (November 2024) by the Government, stated that due to lack of adequate capital to bear such huge buyback expenses, the Company was facing difficulty for having advance agreement of buyback with Registered Growers. The Company also stated that GoA had provided

¹⁰⁵ 8,255.03 ha x 3 MT per ha as per Standard Production norms = 24,765.09 MT

¹⁰⁶ Telangana State Seeds Development Corporation Limited, National Seeds Corporation Limited.

¹⁰⁷ 35,750.14 MT (paddy seeds used for distribution under GoA schemes) - 437.54 MT (supplied to GoA from own production) = 35,312.60 MT

budgetary allocation of ₹ 3.90 crore¹⁰⁸ for buyback of certified seed from growers/farmers, which would be used as revolving/corpus fund for the purpose.

The reply is not acceptable as the Company could not avail the benefit of revolving fund under the Seed Bank Scheme of GoI as discussed under **paragraph 2.11.6**. Further, the Company did not place proposal to GoA for providing fund for buy-back arrangement with the RGs which resulted in losing the opportunity to provide quality seeds at cheaper rates to the farmers.

2.8.2 Operational performance of seed farms

The Company had 12 seed farms with land area of 382 ha during 2018-2024, out of which 131.50 ha of land was occupied by farms' buildings, roads, ponds *etc.* and the remaining 250.50 ha of land was available for cultivation. During 2018-2024, there was an overall loss of ₹ 0.43 crore in 12 seed farms. This included an aggregate profit of ₹ 1.02 crore relating to three seed farms and aggregate loss of ₹ 1.45 crore incurred by nine seed farms¹⁰⁹ during the above period (**Appendix 6**).

Audit observed that there was absence of long-term plan for improving the performance of under-performing seeds farms. Further, there was no effective monitoring mechanism for reviewing performance of the seed farms for taking timely remedial measures. The reasons for dismal performance of the seed farms are discussed in the succeeding paragraphs:

2.8.2.1 Land utilisation

The year-wise details of cultivated land for production of paddy seeds¹¹⁰ in Kharif season¹¹¹ against the cultivable land available (250.50 ha) during 2018-2024 are given in the **Table 2.2**.

Table 2.2: Details of utilisation of farms' land during 2018-2024

Year	Cultivated area (in Ha)	Harvested area (in Ha)	Harvested area to cultivated area (in per cent)	Unutilised area (in Ha)	Unutilised area (in per cent)
(i)	(ii)	(iii)	(iv) = {(iii) / (ii) x 100}	(v) = 250.50 Ha - (ii)	(vi) = {(v) ÷ 250.50} x 100
2018-19	211.50	162.00	76.60	39.00	15.57
2019-20	207.00	190.00	91.79	43.50	17.37
2020-21	207.50	205.50	99.04	43.00	17.17
2021-22	190.70	190.70	100.00	59.80	23.87
2022-23	126.00	95.00	75.40	124.50	49.70
2023-24	165.50	165.50	100.00	85.00	33.93

Source: As per information furnished by Company

¹⁰⁸ Budgetary allocation: ₹ 0.90 crore (2023-24) and ₹ 3 crore (2024-25).

¹⁰⁹ Cherlipathar (₹ 11.16 lakh), Dimoru (₹ 29.44 lakh), Fallangani (₹ 11.44 lakh), Golakganj (₹ 24.70 lakh), Monierkhal (₹ 2.76 lakh), Moran (₹ 26.26 lakh), Rohdoi (₹ 2.31 lakh), Senchowa (₹ 1.62 lakh) and Tingtingia (₹ 35.57 lakh).

¹¹⁰ Average Farmland targeted annually for production of non-paddy seeds in Rabi season during 2018-2024 was 32.50 ha. Hence, analysis has been restricted to production of paddy seeds (Kharif season).

¹¹¹ Cultivation of paddy seeds is suitable only in Khariff Season (June-July) and hence there was no cultivation of paddy during Rabi season (October-December).

As can be seen from **Table 2.2**, as against cultivable land of 250.50 ha available during all the six years under reference (2018-2024), the Company cultivated the land in the range of 126 ha (2022-23) and 211.50 ha (2018-19) leading to idling of available cultivable land ranging between 124.50 ha (2022-23) and 39 ha (2018-19). It can be noticed that the cultivated land was lowest in six years at 126 ha (50.29 per cent) during 2022-23 mainly due to restricting the production plan of seeds to eight seed farms out of 12 seed farms available with the Company. The main reason for underutilization of land were:

(i) **Encroachment of land:** Audit observed that around 5.74 per cent (14.38 ha) of cultivable land (250.50 ha) was occupied by local villagers (5.38 ha in three¹¹² farms) and Indian Technical Institute and others (9 ha in Golakganj seed farm). The Company, however, did not take any step to vacate the occupied land for carrying out production activities.

(ii) **Under-utilisation of cultivable land:** During 2018-2024, two seed farms (Dalgaon and Darigaji) had 57.73 per cent (144.62¹¹³ ha after netting off occupied land) of cultivable land (250.50 ha) held by 12 seed farms of the Company. Audit observed that significant portion of cultivable land available with these two major seed farms ranging between 33.22 ha (2020-21) and 61.62 ha (2022-23) remained underutilised during 2018-2024. The underutilisation of the cultivable land under these two seed farms was mainly attributable to non-availability of proper irrigation and drainage facilities as discussed below:

Farm Lease out model by Odisha State Seeds Corporation Limited (OSSCL): OSSCL has leased out their five seed farms to third party by a contract who have taken seed production activity in these farms. They give 25 per cent of the seeds produced (on minimum productivity fixed during the Tender) and 75 per cent to be sold only to OSSCL at grower procurement price. OSSCL work out seed production plan with the firm on years-to-years basis in advance.

Source: OSSCL official website.

- **Dalgaon seed farm:** The seed farm had proper irrigation facility in 28 Ha of cultivable land out of 90 ha (including occupied land of 2.78 ha) of land available with the farm. Further, there was no 'drainage system' in the cultivable land of the farm for distribution of water and removal of excess water from the field. Absence of these essential facilities largely caused underutilisation of cultivable land in the seed farm.
- **Darigaji seed farm:** The seed farm did not have adequate irrigation facilities and had three Shallow Tube Wells (STWs) against requirement of six STWs. There was also no drainage system for distribution of water and also removal of excess water from the field.

¹¹² Dalgaon (2.78 ha), Darigaji (0.60 ha) and Fallangoni (2 ha) seed farms.

¹¹³ Dalgaon: 87.22 ha + Darigaji: 57.40 ha

Audit observed that due to underutilisation of 259.02 ha¹¹⁴ of cultivable land in the above two seed farms, the Company had to forgo its potential to produce 777.06 MT¹¹⁵ of seeds during 2018-2024.

The Company in its reply (October 2024), which was endorsed (November 2024) by Government, stated that inadequate irrigation facilities and non-suitable land type prevent utilization of its farmland in an even manner. However, the Company had planned for production of seed considering the farm's topography, land suitability and available resources.

The reply is not acceptable as despite its persistent dismal performance in utilisation of cultivable land, the Company did not take any effective steps to overcome the constraints faced to ensure optimum utilisation of cultivable land.

2.8.2.2 Seed farms with low yield

Higher crop yield and quality of crops depend largely on efficient supply of nutrients and other factors such as availability of a proper irrigation system, topography/ location of the area (*e.g.* flood or drought prone), suitability of timing for sowing of seeds, *etc.* The Company's average yield of paddy seeds during 2018-2024 was 2.38 MT per ha as against the State average yield of 3.49 MT per ha. During 2018-2024, the yield per ha of 12 individual seed farms of the Company ranged between 0.30 MT (Tingtingia seed farm in 2018-19) and 3.44 MT (Dhekiajuli seed farm in 2019-20). Further, the individual average yield of paddy of eight¹¹⁶ out of twelve seed farms of the Company was below the average yield of the Company (2.38 MT per ha) during 2018-2024 as discussed under **paragraph 2.8.1** *supra*. The broad reasons for low yield of the above seed farms were:

- There was no provision for irrigation facilities in the above mentioned eight farms and all of these farms were purely 'rain fed'.
- There were no proper arrangements in these farms against pest infestation. Further, in absence of a protection boundary wall/farm fencing, seven¹¹⁷ out of eight farms had been facing problems of uncontrolled cattle grazing in the harvested area.
- The cultivable land of one seed farm (Dimoru) was under 'rain shadow area'¹¹⁸ having low water holding capacity of soil, making it unsuitable for cultivation.

Further, it was also observed that:

- Despite knowing the challenges like low-water retention, pest issues, lack of irrigation *etc.*, the Company continued production in these low-yield farms without introducing effective remedial measures (such as creation of irrigation

¹¹⁴ Aggregate of year-wise unutilised land (during 2018-2024) of two farms (279.30 ha) after netting off the encroached land (20.28 ha)

¹¹⁵ 259.02 ha x 3 MT (as per standard production norms) = 777.06 MT.

¹¹⁶ Dimoru, Fallangani, Monierkhal, Moran, Cherelipathar, Golakganj, Senchowa and Tingtingia seed farms.

¹¹⁷ Except one seed farm *i.e.* Dimoru seed farm, which had the boundary wall protection.

¹¹⁸ An area on the slope shielded by hills where rainfall is less.

infrastructure, proper drainage system and other farm equipment) to overcome these issues.

- Though it was desirable to conduct ‘soil testing’ to ascertain the status of various nutrients, soil fertility level, pH¹¹⁹ and other physical properties of soil for maximum production, the Company did not conduct any soil testing during the previous six years covered under audit (2018-2024).

Thus, due to inability of the Company in taking timely remedial action to address the issues highlighted, eight farms remained ‘low-yield farms’ and incurred operational losses aggregating to ₹ 1.43 crore¹²⁰ during 2018-2024 (**Appendix 6**). Further, the investment made by the Company in these farms in the form of time, labour, and money also remained unfruitful due to unsuitability of these farms for high yield production.

Photographs of the two of these seed farms having inadequate infrastructural facilities are depicted in **Picture 2.1**.

Picture: 2.1

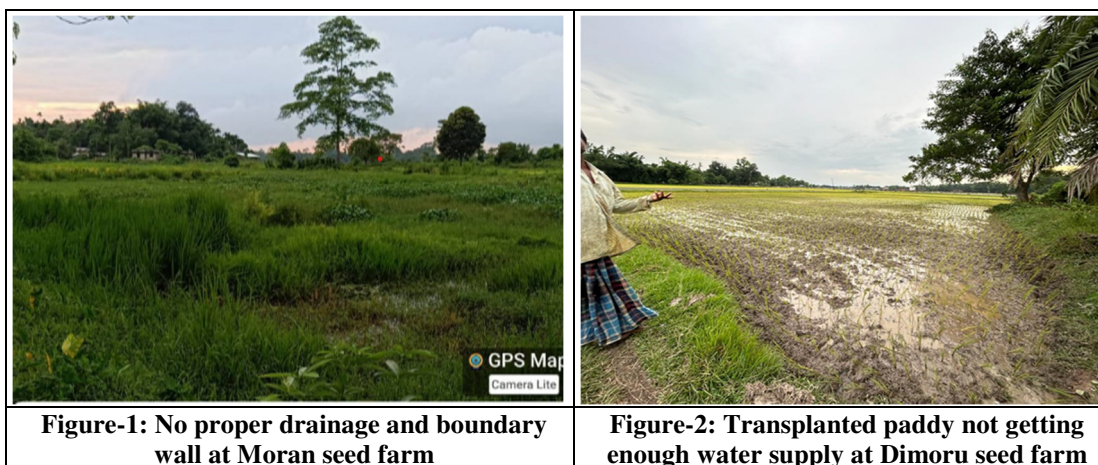


Figure-1: No proper drainage and boundary wall at Moran seed farm

Figure-2: Transplanted paddy not getting enough water supply at Dimoru seed farm

The Company in its reply (October 2024), which was endorsed (November 2024) by the Government, stated that it has now taken steps for selection of crop specific site through the technical manpower to address the issue of low yield. It was further stated that initiatives had been taken by strengthening basic infrastructure facilities like construction of godowns, installation of seed processing plants, creation of adequate irrigation facilities with installation of 30 new STWs in nine farms.

Audit appreciates the effort of the Company to strengthen its infrastructure facilities. However, considering the fact that the issue of low yield was persisting during the period of past six years covered under audit (2018-24), the Company should have taken the necessary corrective steps at an early stage instead of refunding the amount

¹¹⁹ Soil pH (Potential of Hydrogen) is a measure of the acidity or basicity (alkalinity) of a soil. Soil pH is a key characteristic that can be used to make informative analysis both qualitative and quantitatively regarding soil characteristics.

¹²⁰ Dimoru (₹ 0.29 crore), Fallangani (₹ 0.11 crore), Moran (₹ 0.26 crore), Cherelipathar (₹ 0.11 crore), Golakganj (₹ 0.25 crore), Senchowra (₹ 0.02 crore), Monierkhal (₹ 0.03 crore) and Tingtingia (₹ 0.36 crore) seed farms (**Appendix 6**).

received under GoI scheme for creation of additional infrastructure, as discussed in *paragraph 2.11.7*.

2.9 Operational performance of nurseries

As on 31 March 2024, the Company had six nurseries, with actual land available for production of plants and grafts measuring 5.03 ha (excluding 13 ha¹²¹ of cultivable land not in Company's possession). Audit observed that out of six nurseries, two nurseries (Khanapara and Ulubari) having available land of 0.43 ha were in operation and the activities in remaining four nurseries (total area: 17.60 ha) remained unviable for operations due to manpower shortage and hence these four nurseries had been abandoned (April 2021). As mentioned above, out of 17.60 ha, 13 ha¹²² was not in physical possession of the Company. The remaining land measuring 4.60 ha under the said four nurseries though available for production, was not utilised by the Company.

Audit analysed the operational performance of the nurseries during the period of last six years (2018-2024) and following observations are made:

- During 2018-2024, one nursery (Ulubari) was able to earn a continuous profit aggregating to ₹ 0.52 crore due to consistent sales performance (₹ 0.49 crore to ₹ 0.63 crore) achieved during each year. On the contrary, the aggregate turnover achieved by remaining five nurseries during the corresponding period was ₹ 0.49 crore against expenditure of ₹ 1.35 crore incurred towards materials, wages and maintenance expenditure, leading to overall operational loss of ₹ 0.86 crore during 2018-2024 (*Appendix 7*).
- GoA released (2014-15) ₹ 0.50 crore for infrastructure development under two nurseries¹²³. The Company could, however, utilize ₹ 0.16 crore towards construction of boundary wall (₹ 0.05 crore), green-house (₹ 0.05 crore), overhead tank with drip irrigation (₹ 0.04 crore) and vermicomposting unit (₹ 0.02 crore) during 2017-18 and 2018-19. The balance unutilised amount (₹ 0.34 crore) remained parked in bank account since 2014-15, defeating the objective of GoA funding (July 2024).
- GoA again released (August 2018) ₹ 0.58 crore under Rashtriya Krishi Vikas Yojana (RKVY), 2015-16, for infrastructure development under three nurseries¹²⁴ and two seed farms. The Company, however, spent ₹ 0.27 crore (nurseries: ₹ 0.10 crore and seed farms: ₹ 0.17 crore) during 2018-19 to 2020-21 and the balance amount (₹ 0.31 crore) remained unutilised and parked in bank account since August 2018 till date (July 2024).

¹²¹ Bamunigaon Big Nursery (12 ha) and Demow Nursery (1 ha)

¹²² 13 ha of land was occupied by Directorate of Horticulture and Food Processing, GoA (10 ha), locals for playground (2 ha) and Assam State Transport Corporation (1 ha).

¹²³ Demow and Ketekibari

¹²⁴ Khanapara, Bamunigaon and Ghungoor Nursery.

As can be seen from the above, the Company could not utilise GoA funding provided to make the nurseries operational, thereby, defeating the purpose of the funding schemes of GoA.

Audit further observed that despite spending a significant amount aggregating ₹ 0.22 crore¹²⁵ on infrastructure development (facilities, equipment and land preparation), the Company abandoned (2020-21) operational activities in four out of five nurseries, thereby, proving the said investment to be wasteful. Further, the abandonment of the four nurseries had also reduced the Company's overall capacity to supply high quality seedlings and adversely affected production of plant and grafts in the State.

The Company in its reply (October 2024), which was endorsed (November 2024) by the Government, stated that production in all the six nurseries was commercially not feasible and land type was not suitable for nursery production. It was further stated that one nursery had already been developed, while two other nurseries were in the process of development under Horticulture Mission for North East and Himalayan States (HMNEH) scheme. The remaining three nurseries located at remote areas were proposed for setting up of Mother Block¹²⁶ production units for plants and grafts. Further, the Company made plan for utilization of all funds received for development of nurseries.

The reply may be viewed in light of the fact that the Company did not take action for timely utilisation of Government fund to reap the benefits and improvement of performance of nurseries.

2.10 Procurement process

With a view to streamline the procurement procedure, the DoA, GoA, constituted from time to time a Departmental Bid Committee (DBC) to oversee and supervise the entire procedure involving tendering, bid evaluation and finalization of rates for items to be procured by different directorates during the calendar year.

As per the prevalent practice, the Company on behalf of the DBC invited bids in e-tendering system from the eligible bidders under two bids system (technical and financial bids). The Evaluation Committee (EC) formed by the Company in consultation with DoA, evaluated both, technical and financial bids. Based on the evaluation by EC, the DBC fixed the procurement price of seeds based on the lowest quoted rate of the relevant tender year. Thereafter, DoA placed indents on the Company for supply of seeds at the approved price after adding a fixed margin¹²⁷ (agency charges of the Company) as decided by DoA. Observation made in this regard is given in the following paragraph.

¹²⁵ ₹ 0.16 crore + ₹ 0.10 crore *minus* ₹ 0.04 crore (Expenditure relating to one operational nursery, viz. Khanapara Nursery).

¹²⁶ Mother Blocks are established to grow the mother plants for the purpose of taking cuttings or offsets in order to grow more quantity of the same plant.

¹²⁷ 4 per cent on procurement prices of all seed varieties as approved by DBC during 2018-2024.

2.10.1 Non-finalisation of yearly procurement rates

Regular tendering allows the Company to identify new suppliers who may offer better services at more competitive pricing without which the Company could not take advantage of any possible price reductions at better terms from suppliers. The details of finalisation of tenders during 2018-2024 are given in **Table 2.3**.

Table 2.3: Details of tendering for Kharif and Rabi crops

Applicable year (Extended year)	Date of publishing NIT	Date of finalisation of technical bid	Date of finalisation of financial bid
2017-18 (2018-19)	20-09-2017	01-11-2017	04-11-2017
2019-20	06-02-2019	02-05-2019	29-05-2019
2020-21 (2021-22)	14-10-2020	25-01-2021	25-01-2021
2022-23 (2023-24)	08-07-2022	30-09-2022	10-10-2022

Source: Information furnished by the Company.

Audit observed that GoA, while issuing order related to constitution of DBC, directed that the procurement rates finalised should have a validity of one year from the date of publication. Thus, the Company was required to fix procurement rates on yearly basis. However, as can be seen from **Table 2.3**, during 2018-2024, the Company did not float yearly tender for procurement during the years 2018-19, 2021-22 and 2023-24. As a result, the Company had to extend the validity of the rates finalised during the previous year for the purpose of procurement during these years.

The Company in its reply (October 2024), which was endorsed (November 2024) by the Government, stated that though the GoA, directed that the procurement rates finalised should have a validity of one year, the tender rates got extended to help the vendors to make production plan, ensuring timely supply of required quantities of seeds without being worried of the market price. The Company further stated that GoI also suggested to fix procurement rates for three years.

The reply is not acceptable as extension of rates finalised for a particular year to subsequent years was in violation of the directive of GoA and GoI's suggestion to fix the procurement rates for three years was issued in March 2024 and hence, the same was not applicable to the Company during the period covered under audit.

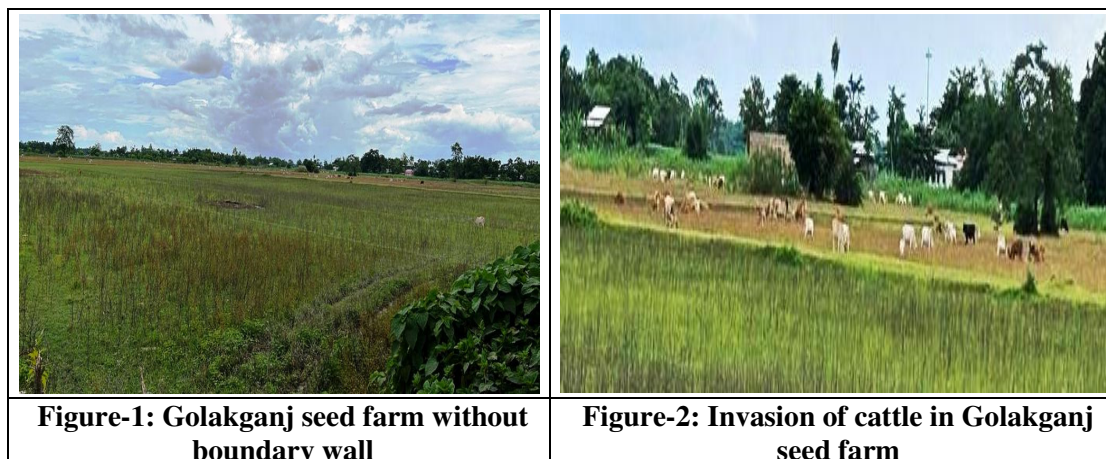
2.11 Infrastructure for production and distribution of seeds

For effective operation of a seed farm, it should have proper facilities like farm fencing, adequate farm implements/equipment, *etc.* Besides, the seed farms should also have proper irrigation and drainage systems for balanced distribution of water in the fields. Similarly, other infrastructure like seed processing plant, storage godowns, *etc.*, are required at different stages of cultivation and processing. Audit observed the following deficiencies in the infrastructure facilities:

2.11.1 Absence of boundary wall/farm fencing

In nine¹²⁸ out of 12 individual seeds farms of the Company, there were no boundary walls, which led to unauthorised trespassing and grazing of cattle inside the cultivated area at every stage from sowing to harvesting. The Company also did not explore the possibility of introducing biological fencing¹²⁹ in these seed farms. **Picture 2.2** depicts photographs showing seed farm at Golakganj without boundary walls and invasion of cattle.

Picture 2.2



The Company in its reply (October 2024), which was endorsed (November 2024) by the Government, stated that it had initiated the process for submission of a project to GoA for construction of concrete boundary wall as well as bio-fencing to combat the issue of cattle menace and ensure protection of its farmland. As subsequently confirmed by the Company, the said proposal was submitted to the Government in December 2024.

The Audit appreciates that the Company submitted the proposal for construction of boundary wall after being pointed out by Audit.

2.11.2 Procurement of power tillers

A power tiller is a versatile piece of machinery used primarily for soil preparation apart from carrying out other important activities like weed control, seedbed preparation, fertilizer mixing, puddling, ploughing and harrowing, transportation, *etc.* As of April 2018, the Company did not have any power tiller or tractor for modern and scientific cultivation. The cultivation was carried out manually or by hiring tractors.

The Company procured (June 2018) 18 power tillers at ₹ 0.35 crore (including cost of six trailers) for the purpose of cultivation. The Company deployed 17 power tillers¹³⁰ in 12 seed farms and one power tiller in one nursery (Ghungoor). However, it was

¹²⁸ Excluding Dimaru, Dhekiajuli and Fallangani seed farms.

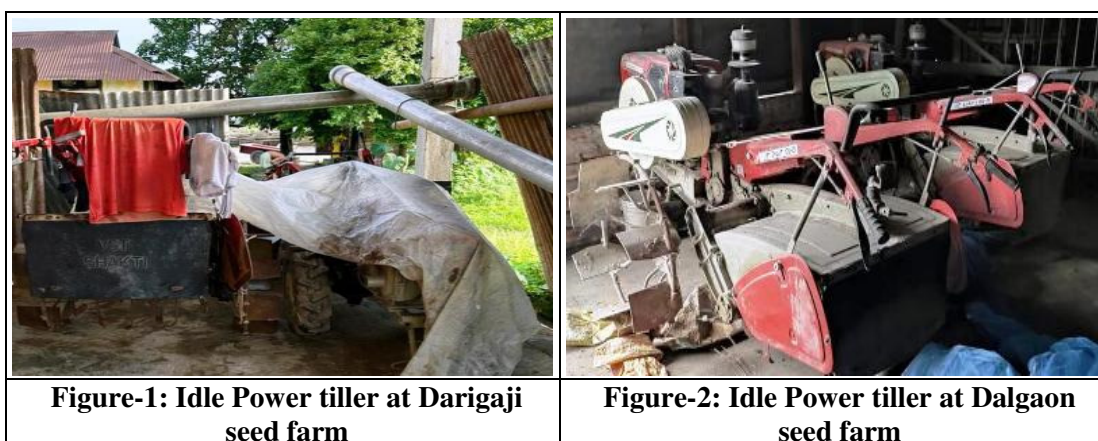
¹²⁹ An economical and sustainable practice of planting trees or shrubs along the boundaries of farms/ fields.

¹³⁰ Dalgaon: three, Dimoru, Darigaji and Golakganj two each, remaining eight seed farms one each.

seen that power tillers procured were labour intensive and time consuming for ploughing a large area of land. During physical verification (7 August 2023 to 2 September 2023) of five seed farms, Audit found that all the 10 power tillers¹³¹ deployed in these farms were kept idle as these were uneconomical for utilisation. Further, one power tiller deployed in one nursery was also lying idle during 2018-2024 as the nursery was non-functional.

Records further revealed that despite incurring ₹ 0.35 crore on procurement of equipment/machinery for cultivation, the Company had hired tractors for preparation of seed beds, puddling, ploughing, *etc.* at a cost of ₹ 0.95 crore during 2018-2024. Thus, procurement of power tillers without assessing the feasibility of utilisation in its seed farms, resulted in unfruitful expenditure of ₹ 0.35 crore. Photographs of power tillers lying idle is depicted under **Picture 2.3**.

Picture 2.3



The Company in its reply (October 2024), which was endorsed (November 2024) by Government, stated that power tillers were basically used for land preparation in smaller area and for tillage operation of larger area, tractors were more effective. As such, the Company planned to distribute the power tillers to the small and marginal farmers of the State with low land holding and who were devoid of any farm machinery and implements for tillage operation of their field.

The reply that the Company planned to distribute the power tillers to the small and marginal farmers with low land holding substantiates the Audit's observation that the procurement was undertaken without evaluating the suitability or usability of the equipment for the Company's own seed farms and nurseries.

2.11.3 Inadequate irrigation facility

Irrigation plays a significant role in increasing potential yield from the agricultural land. The main sources of irrigation included rainwater, canal, well, bore well and pond. Therefore, keeping in view the geographical location of farms, appropriate irrigation facilities should be made available for achieving the expected yield in farmland.

¹³¹ Darigaji: 02, Dalgaon: 03, Golakganj: 02, Dimoru: 02 and Dhekiajuli: 01.

Audit observed that two¹³² out of 12 seed farms had 13 Shallow Tube Wells (STWs) for its cultivable land of 148 ha and the remaining 10 seed farms with 102.5 ha of cultivable land had to depend on monsoon rain for irrigation and cultivation. Further, none of the 12 seed farms had any drainage system for distribution as well as removal of excess water in the cultivated land.

The Company in its reply (October 2024), which was endorsed (November 2024) by the Government, stated that strengthening of irrigation system had been taken up for improving yield potential and a total number of 30 STWs were being installed in nine seed farms under RKVY Scheme and from Company's own financial resources. The Company was also considering submission of proposals to GoA and also to Ministry of Development of North Eastern Region (DONER) for enhancing irrigation facilities of farms.

Audit appreciates the effort of the Company to strengthen its irrigation system. However, considering the fact that there was consistent shortfall in achievement of production targets for past several years due to inadequate irrigation facilities, Company should have taken the timely and advance corrective action to avoid the production loss due to inadequate irrigation and drainage facilities.

2.11.4 Seed Processing Plant

Harvested seed needs to be properly processed before storage and sale to ensure the necessary physical purity. Seed processing after harvesting is a vital part of the entire exercise involved to make the high-quality seed available for distribution. Seed processing comprised all the operations like drying, cleaning, separating or upgrading, weighting, packaging, *etc.* In response to an audit query on the efficiency of mechanical processing, the Company informed (October 2024) that the processing of seed in mechanical mode through seed processing plant was three times efficient and faster than the processing in the manual mode.

As on 31 March 2024, out of 12 seed farms, Darigaji seed farm had a seed processing plant installed during 1997, with a capacity of 400 kg per hour. The plant, which was more than 27 years old, was repaired during 2017-18. Post repairs, the output of the plant, however, reduced to less than 30 kg per hour (7.50 *per cent*) as against the in-built per hour capacity of 400 kg, making the processing plant to be unviable for operation. Due to non-availability of seed processing plant in farms, seed had to be processed manually, which was labour intensive and time consuming.

Further, it was also seen that the Company received (November 2017) ₹ 1.97 crore from GoI for installation of six processing plants. The Company, however, had to refund the money to GoI due to delay in execution process, as discussed in *paragraph 2.11.7*.

The Company in its reply (October 2024), which was endorsed (November 2024) by the Government, stated that it had empanelled two Private Seed Processing Service

¹³² Dalgaon (90 ha) and Darigazi (58 ha)

Providers for mechanical processing of its produced seeds and had also initiated the process of setting up of one full line Seed Processing Plant and two Mobile Grader type seed processing units at its three different seed farms under the RKVY scheme.

The reply is not acceptable due to the fact that seed processing being one of the key activities for producing quality seeds was neglected by the Company throughout the period of audit. Further, the inability of the Company to utilise GoI funding received during 2017-18 for establishment of processing plant (refer **paragraph 2.11.7 infra**) negates its reply.

2.11.5 Seed Storage Godown

The National Seed Policy 2002 promotes for scientific storage of seed through use of scientific storage structures and techniques. Some of the important characteristics of a scientific godown include provisions for: (i) free circulation of air, adequate sunlight and elevated storage in nature; (ii) installation of the Ventilators at the bottom for free air circulation and avoid reaching the ground moisture to the floor; (iii) making necessary arrangements (such as installation of ‘wire mesh’, *etc.*) to make the godown completely ‘rat proof’.

As on 31 March 2024, the Company had 24 godowns with a storage capacity of 8,400 MT. However, during joint inspection¹³³ of seven¹³⁴ godowns having a capacity of 2,800 MT (33.33 *per cent*), audit observed the following:

- None of the seven godowns inspected had scientific storage facilities available, such as, proper ventilation, adequate wooden ballets for stacking seed bags *etc.* for controlling temperature of the godowns and preventing seeds from moisture.
- There was no provision of ‘wire mesh’ in any of the seven godowns. As a result, the godowns were infested with insects, rodents, *etc.*
- One godown (*Darigaji*) out of the seven godowns, having a storage capacity of 300 MT was found in damp condition due to damaged roofs. The seed bags were covered with cloths and rainwater was visible on the floor. Photographs of dilapidated condition of godowns are depicted in **Picture 2.4**.

¹³³ The joint inspection was conducted (7 August to 2 September 2023) by Audit along with the representatives of the Company (Assistant Accounts Officer (Audit) and Branch-In-charge) and the State Government (District Agriculture Officer concerned).

¹³⁴ Morigaon Branch, Hojai Branch, Abhayapuri Branch, Mangaldoi Branch, Darigaji seed farm, Dalgaon seed farm and Golakganj seed farm.

Picture 2.4



As per General Seed Certification Standards of GoI, a seed lot shall not have visible evidence of damage by insects for both Foundation and Certified seed, in excess of 0.50 *per cent* of the seed lot. Contrary to these Standards, 1.88 *per cent* (22.47 MT) of seed stock (1,193.59 MT) stored in Company's 24 godowns was damaged during 2018-2024 due to poor storage conditions, as illustrated. Further, the Company did not have any system in place for compiling the data on spoilage of stock in all its godowns for analysis and taking appropriate remedial action.

The Company in its reply (October 2024), which was endorsed (November 2024) by the Government, stated that godowns were constructed long back and lacked scientific requirement. It was further added that the construction of 15 new godowns with a capacity of 9,500 MT under GoI/GoA sponsored schemes had already been taken up (July 2022/June 2024) and the Company had further planned to renovate all the old godowns to ensure proper storage facility while one godown (Darigaji) had already been renovated.

The reply is not acceptable due to the fact the Company had to refund the money received from GoI for construction of godowns due to its inability to timely utilise the GoI fund, as discussed under *paragraph 2.11.7*.

2.11.6 Provision of Seed Bank

A Seed Bank provides facility for scientific storage of seeds so as to maintain genetically pure variety of seeds stored for utilisation/re-sowing in future in the event of natural calamities and unforeseen conditions (*i.e.* drought, cyclone and flood, *etc.*). The Company, however, did not maintain any Seed Bank on its own. In absence of any such facility of its own, the Company had to depend on private growers to meet the physical targets for storage of seeds allotted by GoI under National Seed Reserve (NSR), which is one of the components of GoI's scheme '*Sub-Mission on Seeds and*

*Planting Materials*¹³⁵. The NSR *inter-alia* has the provisions for (i) financing the procurement cost of seeds to be stored through Revolving Fund (one-time), (ii) Financial assistance for infrastructural development, (iii) Reimbursement of the cost of maintenance of the seed stock, and (iv) Assistance for purchase of machinery, plant, *etc.*

As per scheme guidelines, the scheme shall be implemented by the National Seeds Corporation, State Farms Corporation of India and State Seeds Corporations. The Company being the State-owned Seed Corporation in Assam, implemented the scheme during 2018-2024. The Company had received allotment of physical targets from GoI year after year. Audit however, observed that the Company could not avail the benefits fully, provided under the scheme as detailed below.

- The Company was allotted 22,460 MT of seeds by GoI for storage under NSR during 2018-2024. It was seen that due to insufficient storage facilities and limited varieties of seeds from own production, the Company could maintain 950 MT of seeds (during 2018-2024) from its own production. For maintaining the balance quantity of seed stock (21,510 MT), the Company had to depend on private seed dealers/growers for procurement and storage of seeds during 2018-2024. The Company, however, did not avail any benefit of the Revolving Fund provided by GoI for procurement and storage of seeds required under the scheme for no reasons on record.
- The Company did not create any additional storage capacity for seed storage under the Scheme. As such, the financial assistance provided for the purpose could not be availed. The Company also could not procure any machinery/equipment, plant, *etc.* under the Scheme to avail the financial benefit provided for the purpose.

Thus, from the above it could be concluded that despite having the scope of enhancing its seeds handling capacity by creation of required infrastructure and storage capacity, the Company did not avail the opportunity under the GoI Scheme.

The Company in its reply (October 2024), which was endorsed (November 2024) by the Government, stated that it would make plans to avail maximum benefits under the NSR Scheme.

The reply is not acceptable considering the fact that despite experiencing shortage of fund and also having inadequate storage facilities, the Company was not proactive and there was lack of initiative to reap the benefits of the scheme fund.

2.11.7 Utilisation of infrastructure development fund

GoI sanctioned (2017-18) ₹ 491.60 lakh for establishment of seven godowns (140 square meter each with total capacity of 1,400 MT) of 200 MT capacity at ₹ 9.80 lakh

¹³⁵ A Government of India Scheme for welfare of the farmers aiming to enhance production and productivity in the country through production and supply of quality seeds to farmers.

each and six seed processing plants having annual capacity of 1,000 MT each at ₹ 70.50 lakh each. GoI released (November 2017) ₹ 265.25 lakh¹³⁶ as first instalment.

Audit observed that though the Company received the fund in November 2017, it invited (December 2018) tender after a lapse of 11 months and issued (February to December 2019) five separate work orders for five godowns (117 square meter each), after further lapse of 2 to 13 months from the date of inviting (December 2018) tender at a contract value of ₹ 23 lakh each with scheduled completion period of 90 days (May 2019 to March 2020) for each godown. The construction of five godowns were completed (June 2020 to February 2021) with a delay ranging between 214 and 449 days. Due to the time overrun in completion of construction work, the construction cost of five godowns increased to ₹ 104.85 lakh against sanctioned amount of ₹ 49 lakh. The Company could not utilise the balance amount of ₹ 160.40 lakh (*viz.* ₹ 265.25 lakh *minus* ₹ 104.85 lakh) due to non-availability of land.

Since the five godowns constructed by the Company covered lesser area (117 square meter each) than sanctioned (140 square meter each), GoI finally approved the construction cost of these godowns at ₹ 40.95 lakh against expenditure of ₹ 104.85 lakh actually incurred by the Company. Accordingly, the Company had to refund (November 2022) the balance amount of ₹ 224.30 lakh to GoI as per GoI's instructions (July 2022).

Thus, due to construction of godowns covering lesser area (117 square meter each) than sanctioned (140 square meter each), coupled with delay in utilisation of GoI funding and inability of the Company to utilise GoI funding for balance works (two godowns and six seed processing plants), it had to refund ₹ 224.30 lakh to GoI. This indicated lack of Company's initiative to improve the existing infrastructure for augmentation of seed production and storage facilities.

The Company in its reply (October 2024), which was endorsed (November 2024) by the Government, stated that lack of technical manpower was the main issue for the delay in implementation of the scheme. To address the above issue GoA had attached technical persons of other departments with the Company.

The reply is not acceptable in view of the fact that the Company had already constructed five godowns with available manpower. Further, the Company could have explored the option to avail services of external consultants to utilise Government funding available for improvement of its much-needed infrastructure facilities.

2.12 Absence of effective marketing mechanism for seeds

A successful marketing strategy in the Seed Sector depends on understanding the current as well as long term demand of seeds and location of strong customer base. Besides, building strong collaboration with partners operating in agribusiness also helps providing logistic services and quality seeds to farmers at affordable price.

¹³⁶ ₹ 68.60 lakh for seven godowns (₹ 9.80 lakh for each godown) and balance ₹ 196.65 lakh for six processing plants.

Some of the deficiencies noticed with regard to the marketing operations of the Company have been discussed in the succeeding paragraphs.

2.12.1 Insufficient market information

The Company had no system for collection and analysis of vital market information relating to the seed sector like, data on demand and supply of seeds in the State, availability of seed stock, prices in local markets, *etc.* to help developing a productive marketing strategy. As a result, the Company had no database of the yearly requirement of seeds for the State. Further, National Seeds Corporation Limited, a Central PSE, had been supplying seeds to the neighbouring North-

National Seeds Corporation Limited organizes Marketing campaign such as jeep campaign, demonstration of new products, field days, farmers/dealers' meetings, Krishi Mela and exhibitions were being organized from time to time. Farmer Producer Organisations (FPOs) are also being engaged as dealers to increase the Sale.

eastern States and would be impacting the operations of the Company in Assam. However, the Company neither had any marketing information of its neighbouring States nor formulated a strategy to discover yearly requirements of seeds, pricing policies adopted by other suppliers including the qualities and varieties of seeds *etc.* The Company also did not have any brand name which would create a unique identity of its product to attract the potential customer.

Audit observed that the Board of Directors (BoD) of the Company directed (November 2018) entrustment of responsibility for liaising and expanding Company's supply market among North-eastern states to three officials of the Company. However, even after a lapse of more than six years of the BoD's directions, no official was entrusted with the responsibility of expanding its market share (June 2024).

The Company in its reply (October 2024), which was endorsed (November 2024) by the Government, stated that it had formulated a robust long-term seed production plan in line with the State's seed requirement and had also implemented a streamlined seed distribution channel which included its retail marketing initiative as well as Government seed supply system. Further, it had developed its own brand "*Axom Beej*" for better marketing. The Company further stated that the district wise private seed dealers and distributors had also been engaged for assessing the market price as well as district wise seed demand. It was also mentioned that plans were being formulated to expand its supply market among the NE States.

The Audit appreciates the efforts made by the Company to formulate seed production plan in line with the State's seed requirement and also to streamline the marketing initiatives after being pointed out by Audit.

2.12.2 Issuance of Principal certificates without ensuring lifting of seeds of the Company

‘Principal Certificate’ (PC) holder in seeds business serves as a bridge between the seed producers and consumers, ensuring the availability, quality and accessibility of seeds produced by the seed producers. During 2018-2024, the Company issued PCs to Individuals, Farmers, Farmer Producer Companies (FPCs), Seed Companies and Firms who were willing to trade with the produce of the Company and intended to apply for seed license for trading of seeds on the basis of PCs issued by the Company. During last six years (2018-2024), the Company issued 121 PCs with a validity of three years from the date of issue and charged ₹ 10,000 from each applicant as an application fee.

In this connection, following observations are made:

- As per the standard application format, the applicant was required to mention the estimated annual sales which the applicant would be able to achieve from Company’s products. The Company, however, did not enforce the PC holders for mandatory compliance of this undertaking given by them in the application form. As a result, none of the PC holders had lifted any seeds produced by the Company during 2018-2024 despite mentioning the estimated annual sale of Company’s products at the time of applying for the PC. Thus, issuance of PCs without enforcing the enabling condition for actual/committed drawal of seeds, led to Company’s marketing initiative ineffective.
- GoA issued Seed Licenses to those firms/individuals only who had submitted PC obtained from a Seed Producing Agency. For obtaining dealership license from any seed company within Assam, it was mandatory for the applicant to produce Seed License issued by GoA. As mentioned above, the Company, being a Seed Producing Agency issued 121 PCs to applicants during 2018-2024. The applicants, however, instead of lifting the seed produced from the Company as per declaration made in their application, became seed dealers of other Seed Producing Agencies by obtaining Seed License from DoA, GoA. Audit observed that as there was no mandatory provision of lifting of seeds by the PC holders, the Company could not scale up its marketing operations through this arrangement and the benefits of issuing PC was passed on to other Seed Producing Agencies.

The Company in its reply (October 2024), which was endorsed (November 2024) by the Government, stated that it had reassessed the matter and chalked out modalities for registering its PC holders. As per the new plan/strategy, the PC holders had to enter into an agreement with the Company and also confirm lifting of allotted quantity of seed of the Company, multiplication of the Company’s seeds in grower’s field, creation of market linkage for sale of seeds produced by the seed growers and work for promotion of the Company’s seeds among farmers and in the retail market.

The Audit appreciates the formulation of the new policy, requiring the PC holders to enter into an agreement with the Company and confirm lifting of allotted quantity of seed of the Company.

2.13 Implementation of Seed Village Scheme

To upgrade the quality of farmer-saved seed, Government of India (GoI) provided financial assistance for distribution of Foundation/Certified seeds at 50 *per cent* below cost under Seed Village Scheme (Scheme). The eligible beneficiaries as per the Scheme criteria were selected by District Agriculture Officer/Sub-District Agriculture Officer. The seeds under the Scheme were distributed to the selected beneficiaries in presence of the officials of both, the Company and the Department. Deficiencies noticed in implementation of the Scheme are discussed in the succeeding paragraphs.

2.13.1 Non-receipt of State Share

As per Scheme guidelines, GoI was to contribute 90 *per cent* of the total cost of the Scheme while balance 10 *per cent* was to be borne by the State Government. During 2018-19 to 2020-21¹³⁷, GoI released ₹ 45.42 crore (90 *per cent* share) for implementation of the scheme. Accordingly, the Company incurred ₹ 49.60 crore on distribution of 14,598.67 MT¹³⁸ of seeds (value: ₹ 44.28 crore) and training of beneficiaries (₹ 5.32 crore). After incurring the expenditure, the Company claimed ₹ 5.05 crore¹³⁹ (18 August 2020, 15 December 2020, 7 July 2023) from GoA being 10 *per cent* State's Share towards Scheme implementation cost. GoA, however, was yet to release its share to the Company (July 2024).

During exit conference (November 2024), the Department/Company accepted the audit observations and stated that it would take up the issue with the Directorate of Agriculture, GoA and would see that the Company would be benefited from implementation of the scheme.

Audit observed that due to non-receipt of state share, the scheme was discontinued in Assam by GoI. Further, no response of GoA had been received by the Company to its request so far.

2.13.2 Beneficiary survey outcomes

Audit conducted beneficiary survey in eight out of ten sampled branches located in eight different districts of Assam. The survey was conducted during August to September 2023 covering 250 beneficiaries of the Scheme implemented during 2020-21. The details of the response of beneficiaries on the questionnaires provided with regard to the benefits of Schemes relating to quantity and quality of seeds supplied, adequacy of training provided and distribution of storage bins are given in **Appendix 8**.

¹³⁷ The responsibility of implementation of the Scheme was transferred to DoA after 2020-21.

¹³⁸ This comprised the Seed procured from Company's Farms (464.83 MT) and Registered Growers (14,133.84 MT)

¹³⁹ (GoI share: ₹ 45.42 crore) ÷ 90 x 10

The outcome of the beneficiary survey has been discussed in the following paragraphs:

2.13.2.1 Quantity and quality of seeds distributed

In response to a question relating to the adequacy of the seed supplied under the scheme, 214 out of 250 beneficiaries (85.60 *per cent*) surveyed replied that the seed provided was not as per their requirement. Further, regarding the quality of the seed supplied under the scheme, more than 97 *per cent* of the beneficiaries surveyed (244 out of 250 beneficiaries) had given positive response stating that the seed supplied was of the specified quality.

2.13.2.2 Storage of seeds

As per the Scheme guidelines, the implementing agency was to ensure that beneficiaries had sufficient storage capacity for storing seeds. The guidelines further stipulated that the Scheme beneficiaries should also be kept informed about the availability of the subsidy under the Scheme for procurement of storage bins.

The results of the beneficiary survey revealed that 126 (50.40 *per cent*) out of 250 beneficiaries surveyed did not have proper storage facility. Regarding awareness of the subsidy available for procurement of storage bins under the Scheme, more than 65 *per cent* (164 beneficiaries) of the beneficiaries surveyed (250 beneficiaries) had responded positively stating that they were well aware of the Scheme provisions on availability of subsidy for procurement of storage bins. However, 24 *per cent* (60 beneficiaries) of the beneficiaries did not respond on the issue.

2.13.2.3 Adequacy of training provided

As per the Scheme guidelines, the implementing agency was to ensure that beneficiaries were imparted training of minimum three days at three stages, viz. sowing, flowering and harvesting activities.

Out of the 250 beneficiaries surveyed, 166 (66.40 *per cent*) beneficiaries stated that the training was imparted for full three days as per the scheme. While 41 beneficiaries (16.40 *per cent*) reported receiving only one day of training, the remaining 43 (17.20 *per cent*) beneficiaries indicated that no training was provided.

2.13.2.4 Suggestions by beneficiaries

On enquiry for suggestion, if any, for improvement of the scheme, 213 beneficiaries (85.20 *per cent*) out of 250 beneficiaries had given their suggestions. The important suggestions included:

- **Timely distribution of seeds:** Around 69 *per cent* of the beneficiaries surveyed (172 out of 250 beneficiaries) stated that seeds under the scheme should be distributed on time for better preparation of seed beds.

- **Buy back of seeds:** Further, around 7 *per cent* of the beneficiaries surveyed (18 out of 250 beneficiaries) had suggested that buying back of seeds produced from the seeds received under the Scheme may be arranged for upliftment of farmers' community.

In view of the above, the Company may ensure that the required quantity of quality seeds is distributed to beneficiaries and all benefits envisaged under the scheme (*viz.*, storage subsidy, beneficiary training, *etc.*), are extended to maximum number of beneficiaries. Further, the Company may consider making arrangement for buyback of seeds produced by beneficiaries.

While accepting the observation of audit, the Company in its reply (October 2024), which was endorsed (November 2024) by the Government, stated that the branch in-charges of the respective districts would ensure that all the selected beneficiaries were made aware of the scheme benefits that could be availed. Further, the seed produced by the beneficiaries are being proposed either to be sold in the retail market or to be supplied under Government schemes by the Company.

Conclusion

During 2018-2024, there was an overall shortfall of 34.02 *per cent* (1,223.04 MT) and 90.42 *per cent* (331.63 MT) in achievement of annual production targets of paddy and non-paddy seeds respectively. The year-wise shortfall ranged between 6.70 and 49.86 *per cent* (paddy seeds) and 18.71 and 100 *per cent* (non-paddy) during 2018-2024.

During 2018-2024, the Department of Agriculture (DoA), Government of Assam (GoA) prepared Seed Rolling Plan (SRP) containing crop wise and variety wise production plan for different seed producing agencies including the Company. Audit observed that the Company did not prepare any perspective or long-term plan during 2018-2024 for carrying out its production activities duly linking with the SRP prepared by DoA, GoA. GoA also did not insist the Company for implementation of the SRP.

Further, DoA, had been placing the indents on the Company for supply of seeds for distribution under various schemes on 'annual basis'. Despite Company's request to communicate their seed requirement at least three years in advance, DoA, continued to place indents on 'annual basis'. As a result, the Company had to plan its production targets on annual basis without linking with the SRP, thereby defeating the objectives of GoI's Seeds Policy.

The production of seed during 2018-2024, was lower than the seed multiplication norm resulting in shortfall of 1,166.52 MT (Paddy: 1,152.04 MT; Non-paddy: 14.48 MT) in production of seed. Besides, the Company also could not utilise 7.07 MT of Breeder seeds despite availability of cultivable land due to constraints like shortage of technical manpower, inadequate basic farm infrastructure (like irrigation and drainage facilities, farm fencing, *etc.*) and mechanical support.

During 2018-2024, the Company supplied 1.59 lakh MT seeds to DoA, out of which 0.28 *per cent* (437.54 MT) was supplied from its own production (2,407.08 MT) and the balance supplied through outside procurement. As such, the Company was predominantly dependent upon private seed producers/suppliers to meet the demand of GoA. The Company also did not expand its market potential by increasing its own production of seeds as well as through production of Registered Growers by entering into agreements for buyback of seeds produced by them.

Against cultivable land of 250.50 ha available during all the six years (2018-2024), the land ranging between 39 ha (15.57 *per cent*) and 124.50 ha (49.70 *per cent*) remained unutilised due to reasons like, unauthorised encroachment of land, non-availability of proper irrigation and drainage facilities, *etc.* Resultantly, the Company's average yield of paddy seeds during 2018-2024 was 2.38 MT *per* ha as against the State average yield of 3.49 MT *per* ha.

The Company had no system for collection and analysis of vital market information relating to the seed sector like, data on demand and supply of seeds in the State, availability of seed stock, prices in local markets, *etc.* Further, the Company neither had any marketing information of its neighbouring States nor formulated a strategy to discover yearly requirements of seeds, pricing policies adopted by other suppliers including the qualities and varieties of seeds *etc.*

The Company did not maintain any Seed Bank for scientific storage of genetically pure variety of seeds for utilisation in future in the event of natural calamities. In absence of any such facility, the Company had to depend on private growers to meet physical targets for storage of seeds allotted by GoI under National Seed Reserve. The Company also could not avail the benefits of GoI Scheme relating to one-time Revolving fund to meet the procurement cost of seeds to be stored, financial assistance for infrastructural development, purchase of plant and machinery *etc.*

Recommendations

The Company may:

- *ensure tentative seed requirement of the State at least three years in advance and draw up a production and procurement plan, in line with the Seed Rolling Plan prepared by the State Government;*
- *create and maintain proper infrastructure facilities (irrigation and drainage, godowns for seed storage, seed processing plants, fencing of farms, etc.) essential to fully utilise the cultivable land and maximise the production of the seed farms;*
- *increase production of seed by entering into agreement with the registered growers for seed multiplication and buying back their produce for supply to DoA and other prospective buyers;*
- *make all efforts to avail the full benefits of all the schemes of GoI/GoA for creation/modernisation of infrastructure;*

- *strengthen the marketing activities by creating a dealer network to supply quality seeds at reasonable price so as to become self-reliant and reduce dependency on GoA for company's economic viability.*