Gujarat State Seeds Corporation Limited

2.2 Production activities and trading performance

Highlights

The Company failed in its objective to provide quality seed at reasonable rates as the selling price of seed was high due to loading of interest on investment, which was not incurred at all. The excess charge from the farmers in respect of seeds of paddy, wheat, groundnut, pulses and castor sold during 2000-05 worked out to Rs.4.86 crore.

(*Paragraph* 2.2.15)

The Company failed to achieve its target of production of certified seed as there was shortfall of 35 per cent. Against the target of production of certified seeds of 5.42 lakh quintal, the actual production was 3.53 lakh quintal, which resulted in shortfall of 1.89 lakh quintal certified seeds valued at Rs.37.91 crore.

(*Paragraph* 2.2.11)

Against the target of foundation seed of 1.27 lakh quintal the actual certified seed quantity was 0.92 lakh quintal, which resulted in shortfall of 0.35 lakh quintal valued at Rs.5.24 crore.

(*Paragraph* 2.2.10)

Non achievement of seed multiplication ratio in respect of breeder and foundation seed resulted in shortfall of yield of 2.32 lakh quintal valued at Rs.65.33 crore during 2000-05.

(*Paragraph* 2.2.12)

The utilisation of seed processing plants was very low and ranged between 13.62 and 22.66 per cent of the installed capacity during 2000-05.

(*Paragraph* 2.2.13)

As against substantial increase in the sale of seed in the State the Company's sale contribution in the State declined from 37.33 to 24.80 per cent during 2000-05.

(*Paragraph* 2.2.16)

The Company suffered a loss of Rs.0.83 crore during 2000-05 due to failure on revalidation of certified seed.

(Paragraph 2.2.18)

Introduction

2.2.1 Gujarat State Seeds Corporation Limited (Company) was incorporated in April 1975 with the objective to develop seed production activities and to ensure that the quality seeds were made available to farmers at reasonable rates. In order to achieve this the Company organises seed production programme through farmers for more than 31 crops consisting of approximately 120 varieties of cereals, oilseeds, pulses, cash crops, spices *etc*.

The management of the Company is vested in a Board of Directors with the Secretary of the Agriculture Department as the Chairman of the Company. The Managing Director appointed from the agriculture department of the State is the chief executive. The organisation chart relating to production and trading activities of the Company is given below:



The performance of the Company was last reviewed in the Report of the Comptroller and Auditor General of India (Commercial) 1981-82. The recommendations of the Committee on Public Undertakings (COPU) were placed in the Legislature in August 1988. Action taken notes on the recommendations were examined by COPU in June 1993.

Scope of Audit

2.2.2 The present review conducted during November 2004 to March 2005 covered production performance and trading activities of the Company during 2000-05 in achieving the objective of making available quality seed to farmers at reasonable rates. The audit findings are based on the test check of records of eight[#] out of 12 branches^σ including all the 16 processing plants* in seven branches and the connected 14 out of 21 godowns^Ψ besides the Head Office of the Company selected on the basis of geographical representation and quantum of transactions.

Audit objectives

2.2.3 The audit objectives of the review were to assess as to what extent:

^{**} Nadiad, Mehsana, Godhara, Vyara, Rajkot, Junagarh, Amreli and Gandhinagar.

Himmatnagar, Mehsana, Palanpur, Vadodara, Nadiad, Godhara, Vyara, Rajkot, Junagarh, Amreli, Sihor and Surendernagar.

^{*} Gandhinagar (4), Godhara (2), Vyara (1), Rajkot (2), Junagarh (3), Amreli (3) and Mehsana (1).

Himmatnagar (1), Mehsana (2), Godhara (1), Vyara (3), Rajkot (4), Junagarh (2), Amreli (2), Gandhinagar (5) and Sihor (1).

- targets for production of seeds were fixed with reference to demand for sale and these were achieved effectively and efficiently;
- the standard norms fixed for seed multiplication ratio were achieved;
- seed processing plants were utilised to their optimum capacity;
- sale price for the certified seed of various crops were fixed correctly so as to be reasonable to farmers; and
- the Company made contribution in sale of seed in the State.

Audit criteria

- **2.2.4** The following audit criteria were adopted:
- fixation of target for production of seed and achievement thereagainst;
- seed multiplication ratio of breeder and foundation seed against standard norms; and
- utilisation of seed processing plants and the basis adopted for sale price fixation.

Audit methodology

- **2.2.5** Audit followed the following methodologies:
- review of agenda and minutes of meetings of Board of Directors and Branch Managers meetings. Analysis of details received from the Company regarding fixation of targets and production of seed, crop wise sale price fixation statements and crop wise availability and sale of seed each year; and
- review of data on actual quantity of seed processed in the seed processing plants called for from the branches and details of seed of crops subjected to revalidation and failed.

Audit findings

The audit findings were reported to the Government/ Company in April 2005 and discussed at a meeting of the Audit Review Committee for State Public Sector Enterprises (ARCPSE) held on 28 June 2005 with the officials of the State Government and the Company. Their views were considered while finalising the review.

The audit findings are discussed in the succeeding paragraphs:

Production performance

Seed development process

2.2.6 Breeder seed constitutes the basis of all further seed production and is used in production of foundation seed. Breeder seed was provided by the Government of India through Gujarat Agriculture University/ Indian Agricultural Research Institute, New Delhi was used in the production of foundation seed. The foundation seed was used for multiplication/ production of certified seed, which was sold to the farmers for raising crops on a large scale.

The seed development process is narrated below:

Procurement of breeder seed from the Government of India
I
Multiplication to foundation seed
I
Distribution of foundation seed to growers
I
Receipt of raw seed from growers
I
Processing of raw seed in seed processing plants
I
Certification of processed seed for sale to farmers

Selection of growers for multiplication

2.2.7 Farmers who have their own agriculture land/ farms and agree for multiplication of breeder/ foundation seed are registered with Gujarat State Seed Certifying Agency (GSSCA) through the Company, as seed growers. The Company enters into formal agreement with the growers for supply of the entire quantity of foundation/ certified seed produced by them from the breeder/ foundation seed supplied by the Company.

Fixation of targets

2.2.8 The Company prepared yearly production programmes of all types of seeds for each season (kharif, summer and rabi) after considering the varieties of crops, soil and climatic conditions and based on the sale demands for the next year for certified seed forecast by the marketing division. The crop wise targets for production of foundation and certified seed were fixed as detailed in *Annexures- 9* and **10**. The Seed Production Programmes (SPP) were approved by the Board of Directors each year and implemented through the branches. The technical staff at branches provides guidance to the registered growers.

Foundation seed is the seed produced from breeder seed and has genetic purity of 99 per cent and is used for producing certified seed.

Breeder is genetically pure seed used for producing foundation seed.

Area sown against target

2.2.9 The SPP is executed through the branch offices by fixing targets for the area of production of various crops taking into account geographical location and farmer's preference.

The table below indicates details of targeted area for production of foundation and certified seed *vis-à-vis* actual area sown during 2000-05:

Season	Year	Targeted	Sown	Shortfall	Percentage
Season	1 eai		Area in acro	e)	of shortfall
	2000-01	28,570.00	22,501.55	6,068.45	21.24
	2001-02	14,845.50	12,506.10	2,339.40	15.76
Kharif	2002-03	17,366.00	15,671.00	1,695.00	9.76
	2003-04	19,668.00	13,734.40	5,933.60	30.17
	2004-05	20,444.00	12,635.50	7,808.50	38.19
	2000-01	5,146.00	4,689.40	456.60	8.87
	2001-02	6,225.00	6,407.20		
Rabi	2002-03	6,424.00	5,760.40	663.60	10.33
	2003-04	5,823.00	5,598.00	225.00	3.86
	2004-05	6,468.00	6,318.50	149.50	2.31
	2000-01	2,224.00	1,431.40	792.60	35.64
Summer	2001-02	3,979.00	3,165.30	813.70	20.45
	2002-03	3,620.00	2,387.40	1,232.60	34.05
	2003-04	3,385.00	2,717.50	667.50	19.72
	2004-05	5,724.00	3,684.00	2,040.00	35.64

An analysis of the above table reveals that the Company had not been able to sow the targeted area in any of the seasons during 2000-05 except for rabi crops in 2001-02.

The management stated (May 2005) that seed production plan was drawn by quantity assuming an average level of yield so as to obtain the contemplated quantity of seed. In good years the average productivity of crops might remain high and the needed quantity met by sowing less area, in adverse conditions even larger areas may yield small quantities, and that as long as the required quantity was produced the purpose was achieved.

The reply is not tenable because the Company could not achieve the targeted production of quality seed in any of the five years under review as discussed in paragraphs 2.2.10 and 2.2.11.

Production of foundation seed

2.2.10 The year wise details regarding the crop wise target fixed for production of foundation seed, yield of raw seed and pass quantity is given in *Annexure-9*.

During 2000-05, as against the targeted production of foundation seed of 1.27 lakh quintal, the actual production of raw seed was 1.18 lakh quintal and the pass quantity was 0.92 lakh quintal. Thus, there was shortfall in production

There was shortfall in production of 27.5 per cent of quality foundation seeds valuing Rs. 5.24 crore.

of $0.35 \text{ lakh}^{\notin}$ (27.5 per cent) quintal of quality foundation seed valuing Rs.5.24 crore.

The management stated (May 2005) that the shortfall was due to many exogenous factors, which influence the crop fields during the time lag between flowering stage and actual harvest. The reply is not tenable. It was noticed that though the actual production of raw seed was more in some years, the quality of foundation seed produced during all the five years were below the target indicating ineffectiveness on the part of the Company in quality seed production, despite experience of 30 years in the field.

Production of certified seed

2.2.11 The requirement of foundation seed for SPP is assessed by the production division of the Company on the basis of the estimated production programme of certified seed for each season. The foundation seed of various crops are sold to the seed growers for production of certified seed at the sale price fixed by the Company.

There was a shortfall of 1.89 lakh quintal of certified seeds valuing Rs.37.91 crore. The details regarding the crop wise targeted production, actual production of raw seed and the pass quantity of certified seed is given in *Annexure-10*. During 2000-05 as against the targeted production of certified seed of 5.42 lakh quintal, the actual production of raw seed was 3.88 lakh quintal and the pass quantity of certified seed was 3.53 lakh quintal. Thus, there was shortfall of 1.89 lakh[®] (34.87 *per cent*) quintal of certified seed valuing Rs.37.91 crore.

The management stated (May 2005) that the shortfall was due to many exogenous factors, which influence the crop fields during the time lag between flowering stage and actual harvest. The reply is not tenable because the actual production of raw seed as well as seed passed by GSSCA on quality as certified seed was far below the target during all the five years under review.

Non achievement of Seed Multiplication Ratio (SMR)

2.2.12 Seed Multiplication Ratio (SMR) is the capacity of reproduction of the seed. The Government of India has prescribed standard norms for the seed multiplication ratio in respect of each crop.

The company failed to achieve the standard SMR in five major crops.

Test check of the production records indicated that the Company could not achieve the standard SMR in respect of breeder and foundation seed of crops of groundnut, soyabean, castor, gram and cotton. This resulted in shortfall in the yield of foundation and certified seed of these crops to the tune of 2.32 lakh quintal valuing Rs.65.33 crore during 2000-05 (*Annexure-11*).

The management stated (May 2005) that the SMR laid down by Government of India was for ideal conditions which were not available with the seed

⁴ 1.27 lakh quintal targeted foundation seeds *less* 0.92 lakh quintal pass quantity of actual production.

^{§ 5.42} lakh quintal targeted certified seeds *less* 3.53 lakh quintal pass quantity of actual production.

growers and the crops grown under rain fed conditions which were erratic led to less production per unit area and thus low SMR. The reply is not tenable as the norms for SMR were fixed only after taking into account all such factors.

Under utilisation of seed processing plants

The capacity utilisation ranged between 13.62 and 22.66 per cent during 2000-05.

2.2.13 Annual installed capacity of all the 16 processing plants during 2000-05 was 4.42 lakh quintal, which was utilised to the extent of 13.62 to 22.66 *per cent* during 2000-05 (as given in *Annexure-12*).

As against the low utilisation percentage of 6.04 to 17.2 in Amreli branch with installed capacity of 80,000 quintal per *annum* during 2000-05, it was maximum of 21 to 32 *per cent* in Gandhinagar branch with an installed capacity of 1,12,000 quintal per *annum*.

As the production of raw seed subjected for processing was only around one lakh quintal *per annum* during 2000-05 there was under utilisation of the installed capacity of the processing plants.

The management stated (May/October 2005) that the activity was seasonal and that crops were to be processed almost simultaneously to rush the seed to the market and since 75 *per cent* of the crops were produced during the kharif season the capacity utilisation remained at 30 *per cent* of the installed capacity. The reply is not acceptable since even on the basis of seasonal working the actual utilisation ranged between 35 and 56 *per cent* only.

Trading activities

Sale of certified and labelled seed

2.2.14 Seed of various crops is sold by the Company's retail outlets and dealers appointed by the Company. As on 31 March 2005 there were 835 dealers. Sales targets for the dealers were fixed in terms of money value only without reference to quantity. The sale performance of certified and labelled seed during 2000-05 compared to availability of seed for sale is given in *Annexure-13*. In none of the years could the sale of the available quantities be accomplished. The reasons for short sale were attributed to poor monsoon, change of preference by farmers and low demand.

Audit analysis revealed that as the sale was mainly done through dealers, non fixation of quantity targets and ineffective control on dealers' performance during sale season resulted in short sale and carry over of stock.

The management stated (May/October 2005) that with a view to evaluating the system of marketing through dealers and suggesting improvement in the mechanism, it was contemplating a study to some proven professionals and that this would help in improvement of the marketing system.

Incorrect fixation of sale price

2.2.15 One of the objectives of the Company was to make available certified seed to the farmers at reasonable price. While fixing the sale price the Company added various elements of cost viz. processing cost, packing cost, transportation charges, interest on investment, loss on procurement rate and return on investment.

While the expenditure on processing, storage, transportation *etc.* was on actual basis, it was noticed that the absorption of interest expenditure not incurred as an element of cost increased the sale price. Though the Company was not incurring any interest expenditure during 2000-05 yet it was adding 11.5 to 14 *per cent per annum* as interest on investment for the period ranging from three to eight months besides charging 18 to 20 *per cent* per *annum* return on investment while fixing the sale price.

Loading of element of interest in sales price led to excess recovery of Rs.4.86 crore from the farmers. It was noticed in audit that due to inclusion interest expenditure as an element for sales of paddy, wheat, groundnut and pulses (urid, moong and gram) there was over absorption of overheads to the extent of Rs.4.86 crore included in sales price realised from the farmers on the sale of 4.48 lakh quintal seed during 2000-05.

The management stated (May/October 2005) that on account of borrowings in the past the interest element was included traditionally while working out sale price. Endorsing the management's views, the Government stated (August 2005) that if the Company discontinued the practice of adding interest element then the profit accruing to the Company would reduce or loss would increase. Consequently, the Government would not get any return on the capital invested by it in the Company.

The reply is not tenable because the fixation of sales price by the Company included interest expenditure, which was not incurred at all. Besides, adding the interest element notionally defeated the Company's objective of providing certified seed to farmers at reasonable rate.

Contribution of the Company towards meeting the requirement of seeds in the State

2.2.16 The objective of the Company was to make available quality seed to farmers. The table below summarises the contribution of the Company toward distribution of seed in the State during 2000-05:

Year	Distribution of seed in the State (quintal)	Company's contribution in distribution of seed	
		Quintal	Percentage
2000-01	2,62,167	97,855	37.33
2001-02	3,17,146	1,18,553	37.38
2002-03	3,93,770	1,25,640	31.90
2003-04	3,95,800	1,02,698	25.94
2004-05	4,08,420	1,01,278	24.80

Company's sale contribution in the State declined from 37.33 to 24.80 per cent.

It would be observed from the above table that there was substantial (55.79 *per cent*) increase in sale of seed in the State from 2.62 lakh quintal to 4.08 lakh quintal during 2000-05. The Company's contribution, however, declined from 37.33 *per cent* to 24.80 *per cent* during the same period.

Audit scrutiny revealed that lack of demand from farmers for regular cotton and castor seed, non preference of certain varieties of cereals and pulses due to low commercial value for grain, absence of market strategy for selling the entire quantity during season as discussed in paragraph 2.2.14 and non production/ purchase of certain varieties of cereals contributed to the decline in Company's market share.

Crop wise analysis of seed showed that during 2000-05 the Company's contribution in State's sale declined in respect of wheat from 42.16 to 25.19 *per cent* in 2003-05, paddy from 32.39 to 28.47 *per cent* in 2004-05 and bajra from 10.80 to 3.95 *per cent*.

The management stated (May/October 2005) that the Company had remained a major player in catering to the needs of the farmers by sharing about 30 *per cent* of seed requirement in the State and with the opening of global economy and many seed companies operating in the field, the role of the Company would be more of market intervention so as to stabilize the fluctuating market. The reply is not tenable as the trend of decrease in sale of seed of even major crops despite increase in total State sale was only due to lack of an effective marketing strategy for selling against the demand forecast for production as well as shortfall in achievement of targeted production as discussed in paragraphs 2.2.10 and 2.2.11.

Storage of seeds

2.2.17 The undersized seed out of processing, seed failed on revalidation and seed remaining unsold by the end of season in respect of self pollinated crops like paddy, wheat and groundnut are transferred to mixture account and sold as grain.

The quantity details of seed transferred to mixture in respect of major crops

revealed that the actual percentage of quantity transferred to mixture during 2000-05 ranged between 3.45 and 19.7 *per cent* in respect of paddy as against the norms of three *per cent* fixed by the Company. In respect of wheat and mustard the percentage of seeds transferred ranged from 1.96 to 10.69 *per cent* and 8.37 to 39.26 *per cent*. The Company neither fixed the norms for these crops nor analysed the reasons for high percentage of transfer to the 'mixture account'.

The management stated (May 2005) that the crop-wise high percentage of transfer to 'mixture account' would be reviewed in future.

Carry over of stock and consequent failure on revalidation

2.2.18 In respect of the seeds of castor, bajra and cotton, which have more shelf life, the stock of seed remaining unsold during the current season were

The Company had not analysed the reasons for high percentage of transfer to 'mixture account'. carried over for sale during the next sowing season. As the certificate given by Gujarat State Seed Certifying Agency has a specific validity period, the carry over stock were required to be revalidated for their genetic purity and germination potential before sale. Seed which failed the revalidation test were to be transferred to 'mixture account' and sold as grain.

The Company suffered loss of Rs.82.71 lakh due to sale of seeds failed on revalidation.

The details received from branches in respect of stock of seeds of bajra, cotton and castor put to revalidation during 2000-05 revealed that 1,054 quintal of seed valuing Rs.97.98 lakh (at procurement price) failed on revalidation and had to be sold as grain incurring a loss of Rs.82.71 lakh as detailed below:

Production year	Crop	Stock put to revalidation	Stock failed in revalidation	Year of sale as	Loss suffered (Rupees in
		(quintal)		grain	lakh)
1998-99 to	Bajra	2,045	928	2000-01 to	29.29
2002-03				2003-04	
1996-97 to	Cotton	5,574	202	2000-01 to	21.90
2002-03				2003-04	
1996-97 to	Castor	9,451	684	2000-01 to	31.52
2003-04				2004-05	
Tota	ıl	17,070	1,814		82.71

The management stated (May/October 2005) that in the seed industry this type of loss was a routine matter. The reply is not tenable as failure in revalidation was due to longer storage of seeds and carry over without sale.

Conclusion

The Company was formed to develop seed production activities and to ensure that quality seeds available to the farmers at reasonable rates. The performance of the Company, however, in achieving this objective had been deficient as the production and trading activities had been static as compared to the increase of production and sale of seed in the State resulting in decrease in its share of sale in the State. Inability to achieve higher production also led to under utilisation of the seed processing plants. The selling price of the seeds fixed by the Company was higher which led to higher cost to be borne by the farmers defeating the primary objective of the Company.

Recommendations

- The Company needs to improve its marketing strategy to increase its market share in production and sale. This will also help in better utilisation of its seed processing plants.
- The incorrect fixation of sale price of seed due to absorption of interest expenditure not incurred needs to be corrected.
- The crop wise high percentage of transfer to the 'mixture account' needs to be reviewed to minimise the losses.

The matter was reported to the State Government in April 2005; their reply was awaited (November 2005).