

CHAPTER 5

POINT 4: BIGGER HARVESTS

5.1 The ever-growing India's population generates huge pressure on foodgrains and other crops from the demand side. Bigger harvests are necessary for remaining self-reliant in foodgrains. Indian agriculture is comparatively less productive vis-a-vis developed countries. Higher agricultural production is sought to be achieved through measures like supply of improved seeds, subsidised fertilisers, better irrigation facilities, superior post harvest technology, price support etc. Farmers are being encouraged to adopt modern scientific agriculture practices. Thanks to our hard working farmers and talented agricultural scientists, India has emerged as exporter of food grains earning Rs.6600 crore in foreign exchange during the year 2002-2003. India is the world second largest exporter of rice and fifth largest exporter of wheat. Under TPP-86, items monitored under the 'Bigger Harvests-are:-

(a) Quantitatively Monitored Items:

1. Rice
2. Oil seeds
3. Pulses
4. Horticulture
5. Livestock (milk, eggs, wool)
6. Fruits and Vegetables
7. Fish, and
8. Storage Facilities

(b) Qualitatively Monitored Items:

(i) Post Harvest Facilities

5.2 Quantitatively Monitored Items

5.2.1 Rice Production: During the year 2002-2003 productions of rice was estimated 72.7 million tonnes. While, the production and achievement of rice for the period 2003-04 was estimated about 86.4 million tones, with 19% growth as compared to previous year. 5.2.2 Oil Seeds Production: During the year 2002-03 the production of oil seeds was 15.1 million tonnes, which was less as compared to previous year. The production of oil seeds for the year 2003-04 was estimated about 25.0 million tones, with 66% growth as compared to previous year.

5.2.3 Pulses: During the year 2002-2003 the achievement of pulses production was 11.1 million tonnes, which was less as compared to previous year production. The production of pulses for the year 2003-04 was estimated 14.9 million tonnes with 34% of growth as compared to previous year.

5.2.4 Milk Production: In variose Five Year Plans several measures have been initiated by the Government to increase the productivity of livestock, which has resulted in significant increase in the milk production has increased from 53.9 million tonnes in 1990-91 to 88 million tonnes at the end of 2002-03. India has become the largest producer of milk in the World. All India milk production during the year 2003-04 is expected to increase to 91 million tonnes. The per capita availability of milk has increased to 228 grams per day during 2002-2003 as compared to 202 grams per day in 1996-97. 5.2.5 Wool Production: The target for wool production for the year 2002-2003 was 51 million kg of wool and the achievement was 51.63 million kg of wool during the year 2002-2003. Wool production during the year 2003-04 is anticipated to 52.57 million kgs against target of 53.5 million kg.

5.2.6 Egg Production: Poultry sector have grown steadily over the years in the country. All India egg production (provisional) during 2002-03 was 41.70 billion eggs as compared to only 11 billion eggs two decades ago. It is expected to increase to 43.09 billion eggs during 2003-04, against target 35.32 billion. India ranks fifth in egg production in the world.

5.2.7 Fish Production: There has been significant growth in fish production in the country in the recent years. India is now the fourth largest producer of fish in the world, and second largest producer of fresh water fish in the world. During the year 2002-03, the total fish production was 62.00 lakh tonnes comprising 29.90 lakh tonnes of marine fish and 32.10 lakh tonnes of inland fish. The fish seed production was 16,533 million fry during the same year. The fish production was estmiated during 2003-04 around 63.73 lakh tonnes against target of 61 lakh tonnes.

Fish Production (in lakh tonnes)

Year	Marine fish	Inland fish	Total
(1)	(2)	(3)	(4)
1999-2000	28.52	28.23	56.75
2000-01	28.11	28.45	56.56
2001-02	28.30	31.26	59.56
2002-03 (P)	29.90	32.10	62.00
2003-04 (A)	-	-	63.73

P- Provisional A- Anticipated

5.2.8 Storage Facilities: Three public sector agencies, viz., Food Corporation of india (FCI), Central Ware Housing Corporation (CWC) and State Ware Housing Corporations (SWCs) are engaged in building large-scale storage warehousing capacities. The objective for storage of food grains by the public sector warehouses is the stabilization of prices and all time availability of food grains. In India, the FCI, with its wide network of godowns and PDS outlets, a great deal of the distribution of food grain is being handled by it in the Public Sector. The role of the Private Sector in this regard was limited. In future, there is need to strengthen the role of private sectore in storage and distribution of food grains. Various conditions that continue to restrict private initiatives in this regard need to be removed. A careful participation of Private Sector, which has the potential to make huge investment in grain handling operations, may be a welcome preposition. The Annual Target and Achievement for FCI and CWC is given below:-

Construction of Storage Facilities for the year 2003-2004

(in lakh MT)

Sl.No	Items	Target	Achievement	% age
1	FCI	1.35	1.33	98.52
2	CWC	3.12	3.11	99.68

5.3 Qualitatively Monitored Items:

Post Harvest Facilities:

5.3.1 Minimising storage losses through improved post harvest activities is as important as enhancement of production. The targets and achievements upto March, 2004 of various post harvest facilities are given below.

(in nos.)

Sl. No.	Item	Annual Target	Annual Achievement April 2003toMarch 2004
(1)	(2)	(3)	(4)
1.	Save Grain Campaign (SGC)		
(a)	Training Programmes (No. of Courses)	1429	1592
(b)	Villages Covered (No. of Village)	1009	1226
2.	Quality Control Cell		
(a)	Inspection of Food Storage Depots	690	706
(b)	Inspection of Procurement Centes	250	375
(c)	Inspection of Rail Heads	180	204
(d)	Inspection of Fair Price Shops	720	811
(e)	Inspection of Rice Mills (at the time of delivery of rice	360	377
3.	Indian Grain Storage Management and Research Institute (IGMRI)		
(a)	Training (LTTC/STTC)	32	32
(b)	Artisan Training	18	18
(c)	Quality Analysis of Foodgrains Samples	3240	3276
(d)	Analysis of Food Grain Samples For Mycotoxin Contamination	370	373
(e)	Analysis of Food Grain Samples For Pesticidal Residue	710	715

5.3.2 Training Programmes: Training programmes encourage farmers to adopt modern storage techniques. It is observed that gradually farmers are replacing traditional storage structures with modern storage structures. Trained farmers are found educating their fellow farmers in such practices. Trained women are playing more important role in spreading the message. The training is given on fabrication of modern storage structures and inputs such as, inlet and outlet of traditional storage structures to artisans.The role of trained village women have further been found to be more encouraging and they are playing an important role in brining out a systematic change in rural storage system. Stipendiary and non-stipendiary training courses for farmers on scientific methods of preservation of foodgrains are organized through a net work of 17 Save Grain Campaign (SGC) Offices in close collaboration with the State Govts, NGO's. These training create a high level of awareness for adoption of improved grain storage techniques such as use of scientific storage structure of metallic & non-metallic nature and control of stored grain insect/pests/rats etc.among the farming community and definite improvements were seen in the storage practices.

5.3.3 Long Term Training Course (LTTC): Long term training courses on scientific methods of storage, inspection and preservation of foodgrains are conducted at IGMRI Hapur and its field stations situated at Hyderabad, Ludhiana and Jorhat. Four such training courses at Hapur, 2 courses at Hyderabad, 2 courses at Ludhiana and 2 course at Jorhat are organized in a year. These training courses are organized mainly to cater the needs of in-service officials (from country and abroad) working in commercial grain handling organizations. Food and supplies Departments of State Governments and their agencies.

5.3.4 Short Term Training Course (STTC): Short duration training courses of one to two weeks' duration on various aspects of Post Harvest Technology of foodgrains are organized for in service officials of Government and private organizations engaged in grain trade and post control operations. These training courses have been designed for enhancing the skills and efficiency of the officers.

5.3.5 Artisan Training Course: The Artisan Training Courses are organized by IGMRI for the rural youths on fabrication of modern storage strctures and inputs such an inlet and outlet of traditional storage strctures. The course is of 10 days duration and 20 participants are enrolled in a Course.

5.3.6 Coverage of Villages: All the Save Grain Campaign activities are carried out in the villages including nucleus villages wherein at least 30% existing storage structures are improved upon and about 10% storage structures are scientific ones like metal-bin, pusa-bin, pucca kothi and RCC ring-bin. Under the scheme, an assistance for purchasing the metal-bins and other bins at a rate of Rs. 10,000/- per village is provided to the farmers. The programme has been found to be much useful for modernising the rural storage of foodgrains.

5.3.7 Quality Control Cells (QCC): Three Quality Control Cells had been set up in the Ministry of Consumer Affairs, Food & Public Distribution, situated at New Delhi, Kolkata and Hyderabad to create a mini set up independent of FCI to monitor the quality aspects of foodgrains during procurement, storage, distribution and processing etc.. Inspections are carried out on food storage depots, procurement centres, rail heads, fair price shops and rice mills to assess the quality of foodgrains at these points. Remedial measures are promptly taken in case any shortcoming is found. The procedure of joint sealed sampling from the stock under issue for displaying at the counter of fair price shops by the representatives of the State Govt. FCI and other handling agencies on behalf of FCI, is followed for the benefit of consumer. The teams are also attending complains and representations received from various State Government, VIPs and consumer etc. about the quality of foodgrains being issued through the Targeted Public Distribution System (TPDS). The teams are also suggesting appropriate remedial measures without diluting the responsibility of custodian agencies. To monitor proper enforcement of quality of foodgrains in storage, the officers of Quality Control Cells have inspected 706 Food Storage Depots of FCI, CWC, SWC and other state agencies during the period under review. On the basis of observation of Inspecting Officers, these agencies have been advised from time to time to take remedial measures. During the period under report, 375 Paddy and Rice Procurement Centres/Mandies have been inspected by the officers of these Cells. The officers of the Nodal Ministry have also inspected 811 Fair Price Shops (FPS) with a view to observe the quality of foodgrains at the time of distribution and 377 Rice Mills to see the quality of rice at the time of delivery of rice to the State Govts. Besides, 204 Rail Heads have been inspected to check that there is no pilferage in the quantity and quality of food grains.