

Research Paper



Feb, 2010



Storage Practices of Potato

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A B S T R A C T

A research study was conducted on 90 farmers of Deesa taluka in Banaskantha District of Gujarat state with the objective of knowing the storage practices of potato. Purposive sampling technique was used to select the farmers. The requisite data was collected from them with the help of well-structured and pre-tested interview schedules by personally contacting the individual farmers. The average marketing cost for average potato growers after storing in cold storage was Rs.151.05 per quintal and without storing in cold storage was Rs.52.45 per quintal. The storage charges were paid Rs.98.60 per quintal by selected farmers for storing in cold storage. Average potato growers received Rs.13.49 per quintal more after storing in cold storage as compared to non-storing in cold storage in study area.

Introduction:

Potato is one of the most popular vegetables grown all over the world. Potato is a winter crop with very high yield potentiality as compared to other food crops. It is an efficient food producer and has the potential to become a supplementary staple food besides cereals in the country. It has been recognized as a wholesome food and the richest source of energy in most of the countries where it forms an important part of the human diet. Potatoes are grown in about 150 countries throughout the world and more than a billion people worldwide eat potato. Potato has contributed largely to national economy. Potato cultivation in the state of Gujarat is largely concentrated in North and middle Gujarat

comprising of Banaskantha, Mehsana, Kheda, Sabarkantha, Anand and Gandhinagar districts. Among these six districts, Banaskantha is having the first rank in terms of area and production. In Banaskantha district, potato was grown in 154000 hectares with production of 4606000 tonnes during 2005-2006. Thus, the present study was conducted with the objective of knowing the storage practices of potato in Banaskantha district of Gujarat state.

Methodology: In order to achieve the objectives of the present study, the purposive sampling technique was adopted for this purpose. Potato cultivation in the state of Gujarat is largely concentrated in Banaskantha, Mehsana, Kheda, Sabarkantha and other districts among which Banaskantha is having the first rank in terms of

Table 1 : Price received by producers with and without use of cold storage in Banaskantha district

Sr. No.	Items	Small farmers			Medium farmers			Large farmers			Average farmers		
		Sale without storing in cold storage	Sale after storing in cold storage	Overalls	Sale without storing in cold storage	Sale after storing in cold storage	Overalls	Sale without storing in cold storage	Sale after storing in cold storage	Overalls	Sale without storing in cold storage	Sale after storing in cold storage	Overalls
1.	Quantity sold in quintal	118.90	20.72	139.62	200.93	56.04	256.97	287.09	122.33	409.42	203.48	72.84	276.32
2.	Percentage to quantity sold	85.16	14.84	100.00	78.19	21.81	100.00	70.12	29.88	100.00	73.64	26.36	100.00
3.	Price received by producer (Rs./qt.)	310.15	417.90	350.01	315.45	430.92	350.00	334.13	447.18	350.01	319.91	432.00	350.01
4.	Marketing cost incurred by producer (Rs./qt.)	58.17	156.77	82.89	50.79	149.39	76.89	48.39	146.99	74.95	52.45	151.05	78.92
5.	Net price received by producer (Rs./qt.)	251.98	261.13	254.56	264.66	281.53	271.09	285.74	300.19	290.97	267.46	280.95	271.09

area and production. Hence, Banaskantha district was selected purposively for the study. From Banaskantha district, Deesa taluka was purposively selected for study due to more area under potato cultivation than any other taluka of the district. From the selected Deesa taluka, five villages, having larger area under potato cultivation, were purposively selected. From these selected five villages, 18 farmers were purposively selected from each village.

For that, a list of farmers from the selected villages was prepared and six farmers were selected purposively category wise into small (up to 2.0 ha), medium (2.01 to 4.0 ha) and large (above 4.0 ha) farmers. The final sample that emerged thus comprised of 90 farmers spread equally over the selected area. Personal interview technique was used for collection of data. Information on price received and price paid for storing in cold storage were collected from the selected farmers. These data were analyzed and a comparison was made between the prices received before storing and after storing potato in the cold storages.

Results and Discussion:

The table 1 showed the price received by farmers with and without use of cold storage. This table reveals that a large quantity i.e., 73.64 per cent of potato was sold soon after harvesting by average producers without storing in cold storage where as, 26.36 per cent of the average product was stored in cold storage in Banaskantha district.

It can be observed that the average producers, who sold their produce after storing in cold storage, received more prices (Rs.432.00 per quintal) instead of price received without storing in cold storage (Rs.319.91 per quintal). Due to the higher cold storage charges the average producer got only Rs.13.49 per quintal more reward as compared to the producers who did not store their produce in the cold storage. Looking to the size wise farmers, as the size of farm increases, the quantity stored in cold storage also increases. The farmers got more prices by storing potatoes in cold storage. The differences were Rs.9.15, Rs.16.87 and Rs.14.45 for small, medium and large farmers respectively.

Conclusion:

The average marketing cost for average potato growers after storing in cold storage was Rs.151.05 per quintal and without storing in cold storage was Rs.52.45 per quintal. The storage charges were paid Rs.98.60 per quintal by selected farmers for storing in cold storage. On an average, 73.64 per cent of potato was sold

without storing in cold storage and 26.36 per cent was sold after storing in cold storage. Average potato growers received Rs.13.49 per quintal more after storing in cold storage as compared to non-storing in cold storage in study area. The net price received by storing potatoes in cold storage varied from Rs. 9.15 to Rs. 16.87 from small to medium farmers.

R E F E R E N C E

▪ De (1989) examined the role of cold storage in marketing of potato in West Bengal. He found that the existing cold storage capacity has been created predominately in the private sector, which in 1987-88 owned 85 per cent of the cold storages. The interest of all connected stores has resulted in the formation of strong group of potato traders. The cold storage owners also play an important role as lenders to poor farmers with the guarantee of potato supply immediately after harvest on a fixed contract price. ▪ Singh Prem et al. (1995-1996) observed that two types of indigenous storage methods were in vogue (i) heap storage, (ii) ordinary room storage. It was observed that 37 per cent of the total sample farmers stored various quantities of potatoes (5 to 200 quintal) indigenously for a period upto 90 days. The gross returns worked out to be Rs.79 per tonne. ▪ Verma (1996) found that the average cost of storing potato in a cold storage came to Rs.50.00 per quintal by storing potato at the prevailing rate of Rs.200 per quintal in a cold storage during 1991-92. The production could earn a margin of about Rs.75.00 per quintal by selling it, as seed potato at the rate of Rs.325.00 per quintal during the months of September and October. It is therefore very essential to establish cold storage at village level for improving the marketing system for potato. ▪ Ilangantileke et al (1997) estimated that storage cost was computed to be Rs.1170 per tonne. This consists of storage charges (Rs.656 per tonne), loading and unloading charges (Rs.43 per tonne), cost of gunny bags (Rs.177 per tonne), transportation cost (Rs.101 per tonne) and losses during storage (Rs.102 per tonne). ▪ Department of Agricultural Economics, C. P. College of Agriculture, Sardarkrushinagar (2000-2001) studied that a large quantity i.e., 79.00 per cent and 82.08 per cent of potatoes were sold soon after harvest by producers without storing in cold storage in Banaskantha and Mehsana districts, respectively. Whereas, 21.00 per cent and 17.98 per cent of the total product were stored in cold storage in Banaskantha and Mehsana districts, respectively.