

MARKETING OF POTATO IN SABARKANTHA DISTRICT OF GUJARAT

¹PATEL, AMIT; ²PATEL HIREN; ³VASAVADA MAURVI AND *⁴SODHI, HARPREET

V.M. PATEL INSTITUTE OF MANAGEMENT
GANPAT UNIVERSITY
MEHSANA – 384 012, GUJARAT, INDIA

**EMAIL: harpreet20dec@gmail.com*

¹Major Guide, V. M. Patel Institute of Management, Ganpat University, Mehsana, Gujarat

²Dean, Faculty of Management Studies, Ganpat University, Mehsana, Gujarat

³Associate Professor, Faculty of Management Studies, Ganpat University, Ahmedabad

⁴Ph.D Scholar, V. M. Patel Institute of Management, Ganpat University, Mehsana, Gujarat

ABSTRACT

The present study was focused on the marketing of fresh as well as stored potato in Sabarkantha district. From the district two talukas viz., Idar and Talod were purposely selected having the highest acreage and production. From each taluka three villages were selected. In all 100 farmers, 20 wholesalers, 25 semi wholesalers and 40 retailers were surveyed for the study. Major marketing channels identified in the study for fresh potato was Farmer (F)- Wholesaler (WS)- Retailer (R) –Consumer (C). For the stored potato, the channel identified was Farmer (F)- Cold storage (CS)- Wholesaler (WS)- Retailer (R) –Consumer (C). The results revealed that for fresh potato marketing, the major marketing cost included weight loss followed by transportation, spoilage, miscellaneous expenses and packing material. For stored potato marketing, the major marketing cost included cold storage charges, transportation, post cold storage expenses and packing material. The net price received by the farmer was more (865.52 Rs/ctl.) for fresh potato as compared to stored (667.64 Rs/ctl.) i.e 29.64 per cent more. The price paid by the consumer was lower for stored potato (1558.75 Rs/ctl.) as compared fresh potato (1624.35 Rs/ctl.). Comparing the total price spread for fresh and stored potato marketing, it was observed that the price spread of stored potato marketing channel was higher than the fresh potato marketing channel, this was due to higher marketing cost during potato storage. As far as producer's share in consumer rupee was concerned, the farmers were getting good prices of their produce during the peak season, while lower prices in the off season because of the bumper availability of potato from the cold storages. To tackle this situation, Government of Gujarat established Farmers' markets i.e Khedut Grahak Bazar' during 2016 in Gujarat with a view to improve the efficiency of marketing fruits and vegetables.

KEY WORDS: Consumer, farmer, marketing, potato retailer, wholesaler

INTRODUCTION

Agriculture plays an important role in Indian economy and this sector's better performance is crucial for inclusive growth. It provides employment to nearly 60 per cent of Indian employment to nearly 60 per

cent of Indian work force (Dev, 2007) India has tremendous potential for increasing production of fruits and vegetables. Manifold efforts have been made to increase their production. Besides, it is equally important to have efficient marketing system

so that the farmers get appropriate returns of their produce and consumer get it at reasonable rates.

Potato is one of the most important tuber crops in India. Poverty and large population are significant and persistent problems in India that's why food security is an important national priority. Potato is an important part of Indian diet (Nikam *et al.*, 2007). In high populated countries, potato is preferred because of its higher productivity and suitability to fit in different cropping system. Potato consumption in this region is increasing due to increasing industrialization and women participation in the job market that created demand for processed, ready to eat, convenience food, particularly in urban areas. Keeping in view, the potential of potato in the food security of developing nations, FAO has declared it as the "Food for Future" (Anonymous, 2012).

Potato in India is considered as vegetable item and not as staple food. The per capita consumption of potato in India is far below many of the developed nations. In 2012-13, the production level of the country hovered around 45 million tonnes. It produces around 12 per cent of the world's total produce (FAOSTAT). Potato contributes to 28 per cent share in production of major vegetable crops in India (NHB). The top five potato growing states of India are Uttar Pradesh followed by West Bengal, Bihar, Madhya Pradesh and Gujarat. Since Uttar Pradesh and West Bengal contribute around 54.9 per cent of total production, any minor deviation in these two states affects the total Indian production. The potato productivity of Indian states has become stable with exception seen in West Bengal during 2013-14. In productivity, Gujarat ranked first (30.8 MT/ha) followed by Punjab (25.1 MT/ha) and Uttar Pradesh (24.5 MT/ha) (Anonymous 2015).

Gujarat ranks 7th in area, while 5th in total production and 1st in productivity of

potato in the country. In Gujarat potato is cultivated in nine districts, which include Banaskantha, Gandhinagar, Jamnagar, Kutch, Kheda, Anand, Mehsana, Patan and Sabarkantha. The highest area under potato is in Banaskantha district (33500 ha) followed by Sabarkantha (16880 ha), Gandhinagar (8100 ha), Mehsana (6300 ha) and Kheda (3875 ha). The similar trend was exists for total production.. It was 10.72 lakh MT in Banaskantha district followed by Sabarkantha (5.52 Lakh MT), Gandhinagar (2.96 Lakh MT), Mehsana (1.52 lakh MT) and Anand (1.16 lakh MT). However, Gandhinagar ranks first in productivity (36.50 MT/ha) followed by Sabarkantha (32.70), Anand (32.19 MT/ha) and Banaskantha (32.00 MT/ha)

The objectives of the present study was to study the marketing practices and marketing channels of potato and to estimate the marketing cost and marketing margins and price spread for fresh as well as stored potato marketing channels in Sabarkantha district of Gujarat State.

METHODOLOGY

The present study was taken up in Sabarkantha district of Gujarat. Two *tehsils* viz., Idar and Talod were selected for the study. As indicated earlier, Sabarkantha district is the second largest potato producing district in the state. In the district, the area under potato is mainly concentrated in Idar and Talod *tehsils* and therefore, these two have been selected purposively. From these two *tehsils*, a cluster of three villages from each *tehsil* where potato is cultivated were selected for the study purpose. From Idar *tehsils*, Abdasan, Gorol and Bhanpur villages, while from Talod *tehsils* Nava, Moduka and Gundiya villages were selected for the study. For the selection of sample farmers, a list of potato farmers along with their operational holding for each of the selected villages was prepared. For each village, the potato farmers were categorized

into three pre- determined size classes such as small (below 2 hectare), medium (2-5 hectare) and big (5 hectares and above). The sample consisted of 100 farmers comprising 33 small, 46 medium and 21 big farmers for the study. The data were collected during the agricultural year 2015-2016. The present study basically depends upon the primary data obtained from the sample farmers. The detailed information on marketing cost, marketing margin and price spread for the year 2015-16 was obtained with help of structured schedule by survey method. Data on margins, price spread, prices, etc. were collected from 20 wholesalers, 25 semi wholesalers and 40 retailers by personal interview method. The collected data were compiled and analyzed by tabular method of data analysis.

Estimation of marketing cost, marketing margin and price spread:

Marketing cost varies from commodity to commodity and changes over-time and space. Marketing costs depend on the perishability of the commodity, need for cold storage facilities, need for processing before consumption, necessity of storage and transportation, distance for transportation and nature of packaging needed. The marketing costs are, therefore, generally high for fruits, vegetables, flowers, oilseeds, sugarcane and cotton as compared to food grains (Acharya and Aggrawal, 2011). Marketing costs are the actual expenses incurred for bringing potato from farm gate to the consumers. It includes handling charges at local points, assembling charges, transportation and storage costs, handling charges by wholesaler's and retailer to consumers, expenses on secondary services like financing, risk taking and market intelligence, profit margins taken out by different agencies. Marketing costs involves marketing fees, commission charges and market charges also. Margin of intermediaries refers to the difference

between the total receipt obtained and the total payments made by the producer during his transaction. The marketing margins of potato are the difference between the actual price paid by the consumer and the price received by farmer for an equivalent quantity and quality of potato. Price spread is the difference between the producer's price and the price paid by the consumer for a unit of the commodity. Price spread consists of marketing cost and margins of the intermediaries, which ultimately determines the overall efficiency of marketing system (Nikam *et al*, 2007).

RESULTS AND DISCUSSION

Marketing of potato

The marketing channels are linked with the chains of intermediaries involved at various levels of marketing for smooth distribution of the commodity. The major marketing channels identified in the present study for the fresh potato was: Farmer – Wholesaler – Semi wholesaler – Retailer-Consumer, and for the stored potato marketing major marketing channel was: Farmer – Cold storage – Wholesaler – Semi wholesaler – Retailer- Consumer.

Marketing costs

Cost of marketing affects the producer's net share in the consumer rupee. An attempt has been made to workout item wise cost of marketing by all the functionaries in potato marketing and is presented in Table 1. The marketing cost in the present study involved 15 items. Amongst these picking, grading, bag filling and bag stitching are borne exclusively by the farmer. The farmer packs the produce in jute bags and markets in the *Mandi*. The expenses towards this item are mainly incurred by the farmer and to the lower extent by the retailer. In Gujarat, the farmer as well as retailer is not incurring any expense towards market fee, as it is borne by the wholesalers and semi wholesalers. The loading expenses are borne by all the

functionaries, whereas unloading expenses generally are not borne by the farmers and retailers. Amongst these expenses, the cold storage charges and post cold storage expenses are important items in the stored potato marketing. The post storage expenses include unpacking, cleaning, grading, weight loss and spoilage during storage, bag refilling and stitching at cold store units. The results revealed that the overall marketing cost for fresh potato was Rs. 282.56 per qtl. The major marketing cost items included are weight loss (21.10%) followed by transportation (18.75%), spoilage (14.51%), miscellaneous expenses (12.81%) and packing material (10.21%). The miscellaneous expenses include the expenses towards tea, snacks, personal travelling, communication, electricity and shop rent. Being the perishable nature of fresh potato, the spoilage and weight loss are the important factors. To avoid these losses, systematic and scientific studies are required. The transportations cost is ought to be heavy because of the bulky nature of the produce. For cold stored potato, the overall marketing cost was Rs. 505.44 per qtl. The major marketing cost items included cold stored charges (42.76%), transportation (10.86%), post cold storage expenses (8.13%) and packing material (6.74%). The packing material expenses in terms of Rs/qtl were high in stored potato (33.99 Rs/qtl.) as compared to fresh potato marketing (28.29 Rs/qtl), since better quality jute bags were used for storing the potato during cold storage (Table 1).

As showed in Table 2, the expenses borne by the farmer for fresh potato marketing were Rs.99.38 per qtl., which were 6.12 per cent of the consumers' purchase price. The expenses borne by the farmer for stored potato marketing were Rs.352.81 per qtl., being 22.63 per cent of the consumers' purchase price. The expenses born by the wholesaler, semi

wholesaler and retailer for fresh potato marketing were Rs. 55.48, Rs. 61.38, and Rs. 66.32 per qtl., respectively, which were 3.42 per cent, 3.78 per cent and 4.08 per cent of the consumer price (Rs. 1624.35 per qtl.). The expenses born by the wholesaler, semi wholesaler and retailer for stored potato marketing were Rs. 48.30, Rs. 49.04, and Rs. 55.29/ qtl., respectively, which were 3.10 per cent, 3.15 per cent and 3.55 per cent of the consumer price (Rs. 1558.75 per qtl.).

Marketing margins and price spread

Price spread is a good indicator for determining the producer's share in consumer rupee. Price spread consists of marketing cost and margins of the intermediaries, which ultimately determines the overall efficiency of marketing system. The average per qtl price spread of potato in fresh and stored potato marketing is presented in Table 2. The results revealed that the producer's share in fresh potato was 53.28 per cent and in stored potato it was 42.83 per cent. The net price received by the farmer was more (865.52 Rs/qtl.) for fresh potato as compared to stored (667.64) i.e Rs 197.88/ qtl. being 29.64 per cent more. The margin for fresh potato marketing of the wholesaler was 5.98 per cent, whereas this figure was 10.73 per cent and 12.61 per cent in case of semi wholesaler and retailers, respectively. The margin for stored potato marketing of the wholesaler was 5.82 per cent, whereas this figure was 8.97 per cent and 9.95 per cent in case of semi wholesaler and retailers, respectively. The margin of the wholesaler and semi wholesaler was less on account of high volume of the business as compared to the retailer, who handles low volume of business. Total marketing margin was higher in fresh potato (29.32%) as compared to stored potato (22.63%). The total price spread for fresh potato marketing was observed 46.72 per cent of consumer's price, when produce was sold through

wholesaler, semi wholesalers and retailers. The consumer's paid higher prices for potatoes but 46.97 per cent advantage of higher prices (Rs. 1624.35 per qtl.) had gone in to the pocket of intermediaries while remaining of the 53.28 per cent advantage went to the farmers. For stored potato marketing, the total price spread was found to be 57.17 per cent of consumer's price, when produce was sold through wholesaler, semi wholesalers and retailers. The higher price was paid by the consumer for potato through 57.17 per cent advantage of these higher prices (Rs. 1558.75 per qtl.) had gone to the intermediaries and rest of the 42.83 per cent advantage was accrued to the farmers. The price paid by consumer was lower for stored potato (1558.75 Rs/qtl.) as compared fresh potato (1624.35 Rs/qtl.). The price paid by the consumer was 4.21 per cent lower for stored potato as compared to fresh potato. Comparing the total price spread for fresh and stored potato marketing, it was observed that the price spread of stored potato marketing channel was higher than the fresh potato marketing channel, because of the higher marketing cost during potato storage. As far as producer's share in consumer rupee is concerned, in the present study, farmers are getting good prices of their produce during the peak season, while lower prices in the off season because of the bumper availability of potato from the cold storages.

To tackle this situation Government of Gujarat established Farmers' markets i.e *Khedut Grahak Bazar* during 2016r in Gujarat with a view to improve the efficiency of marketing fruits and vegetables and to increase the farmers' share in consumers' expenditure on purchase of fruits and vegetables. Farmers' markets are the new institutional arrangements that eliminate the middlemen in fruits and vegetables marketing by bringing producers and consumers of these potatoes in direct

contact with each other. The elimination of intermediaries helps farmers in getting good price and consumers in getting fresh vegetables and fruits at a reasonable price.

CONCLUSION

Sabarkantha is the most important potato growing district of Gujarat state. Present study was conducted involving 100 farmers, 25 wholesalers, 20 semi wholesalers, 40 retailers. The marketing channels identified for marketing of potato were: Farmer – Wholesaler –Semi wholesaler – Retailers for fresh potato and Farmer – Cold storage- Wholesaler –Semi wholesaler – Retailers for stored potato. In the marketing of fresh potato, the major marketing cost was weight loss, transportation, spoilage, miscellaneous expenses and packing material, while for stored potato, these costs included cold storage charges followed by transportation, post scold stored expenses and packing material. The net price received by the farmers for their produce was 29.64 per cent higher in fresh potato as compared to stored potato. The price paid by the consumer was 4.21 per cent lower for stored potato as compared to fresh potato. The marketing margin for fresh as well as for stored potato was higher for retailers followed by semi wholesaler and wholesaler. Relatively lower margins for wholesalers and semi wholesalers were on account of high volume of business handled by these functionaries as compared to the retailers who handle low volume of business. The total price spread of stored potato marketing channel was higher than the channel of fresh potato marketing.

REFERENCES

- Acharya, S. S and Aggrawal, N. L. (2011). *Agricultural Marketing in India*. New Delhi: Oxford and IBH Publishing Co. Pvt. Ltd.
- Anonymous (2012). Basement Data for Potato and Onion, Market Intelligence System. Pp. 20.

Anonymous (2015). National Horticulture Board. Area and Production Status - Final Area & Production Estimates for Horticulture Crops for 2013-2014. Retrieved January 26, 2015, from National Horticulture Board: <http://nhb.gov.in/area%20production.html>.

Dev, S. Mahendra (2007). Market reforms in Indian agriculture, Indian Journal of Agricultural Marketing, 21(2): 1-29.

Nikam, A. V.; Shendage, P. N.; Jadhav, K. L. and Deokate, T. B. (2007). Marketing of *kharif* potato in Satara district of Maharashtra. *Indian J. Agril. Mktg*, 21(2): 188-207

Table 1: Total marketing cost for fresh and stored potato marketing in Sabarkantha district

Particulars	Fresh Potato Marketing		Stored Potato Marketing	
	Rs/qtl.	%	Rs/qtl.	%
Picking	6.56	2.33	6.60	1.31
Grading	6.47	2.29	6.51	1.29
Bag filling	3.64	1.29	3.64	0.72
Bag stitching	3.43	1.22	3.45	0.68
Packing material	28.29	10.01	33.99	6.74
Loading	13.28	4.70	13.50	2.67
Unloading	9.20	3.25	9.41	1.86
Transportation	53.00	18.75	54.90	10.86
Market fee	12.49	4.42	13.07	2.59
Weighing charges	9.40	3.32	9.75	1.93
Weight Loss	59.63	21.10	31.11	6.17
Spoilage	41.00	14.51	26.30	5.21
Miscellaneous	36.17	12.81	35.71	7.07
Cold storage charges	-	-	216.13	42.76
Post storage expenses	-	-	41.07	8.13
Sub total	282.56	100.00	504.14	100.00

Table 2: Average price spread in marketing of fresh and stored potato in Sabarkantha district

Particulars	Fresh Potato Marketing		Stored Potato Marketing	
	Rs/qtl	%	Rs/qtl	%
Net price received by farmer	865.52	53.28	667.64	42.83
Net margin of wholesaler	97.12	5.98	90.75	5.82
Net margin of semi wholesaler	174.24	10.73	139.86	8.97
Net margin of retailer	204.91	12.61	155.06	9.95
Total margin (A)	476.27	29.32	385.67	24.74
Marketing cost incurred by farmers	99.38	6.12	352.81	22.63
Marketing cost incurred by wholesalers	55.48	3.42	48.30	3.10
Marketing cost Incurred by semi wholesalers	61.38	3.78	49.04	3.15
Marketing cost incurred by retailers	66.32	4.08	55.29	3.55
Total marketing cost (B)	282.56	17.40	505.44	32.43
Total marketing cost and margin (A+B)	758.83	46.72	891.12	57.17
Price paid by consumer	1624.35	100.00	1558.75	100.00

[MS received : June 22, 2017]

[MS accepted : July 17, 2017]