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Constraints and suggestions perceived by the potato growers in use of cold storage facility

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Abstract

Potato cold storages are one of the important links between producers to consumers that create another choice of market and price discovery. Cold storage is very important to reduce post-harvest losses. The cold storage facilities for potato crop are available to the potato growers. The potato growers are utilizing the cold storage facilities. There are number of factors which affect the potato production, but post-harvest management is very important factor. Without proper storage facility farmers faces many problems. By using cold storage facility farmers may face some constraints and they do have suggestions to overcome the constraints face by them. Considering these facts, constraints and suggestions perceived by the potato growers in use of cold storage facility were studied. The potato growers were asked to express the constraints and suggestion. Frequency and percentage of each constraints and suggestion were the computed and ranked accordingly. Major constraints faced by the potato growers were, inadequate transportation (85.00%), keeping charges high (81.67%) and inadequate finance (74.67%). Whereas, Cold storage owner should provide transportation and insurance facility were the most important suggestions given by the potato growers.

Keywords: Potato growers, cold storage, constraints, suggestions

1. Introduction

Agriculture is the main occupation of the Indian. About 58.00 per cent of the Indian population depends on agriculture for their livelihood, contributing about 18.00 per cent to India's GDP. The Indian economy is greatly dependent upon total agricultural produce in the country and more so horticultural produce in the recent years. The Indian economy is greatly dependent upon total agricultural produce in the country and more so horticultural produce in the recent years. There is a constant shift in the area from field crops to horticultural crops over the period. Potato (*Solanum tuberosum* L.) is native of the High Andes in South America and it was first introduced in India at the end of the sixteenth or the beginning of the seventeenth century. Potato is a temperate crop grown under sub-tropical conditions in India. The potato is a crop which has always been the poor man's food. For view-point of farmer's economy, it is useful to grow potato as a cash crop, which provides remunerative amount of return. It is short duration crop with the life span of 110-120 days, it is fertilizer responsive crop and successfully grown to a wide variety of agro-climatic conditions. It has a good self-storage life, which can be extended over a long period by converting in to dry products viz., wafers, flakes, finger chips. Losses of horticultural produce are a major problem in the

post-harvest chain. They can be caused by a wide variety of factors, ranging from growing conditions to handling at retail level. During the process of distribution and marketing, substantial losses are incurred which range from a slight loss of quality to total spoilage. The cold storage facility solved the issue of post-harvest losses. Potato cold storages are link between producer and consumer. Considering these facts, constraints and suggestions perceived by the potato growers in use of cold storage facility.

2. Objectives

1. To identify the constraints faced by the potato growers in use of cold storage facility.
2. To seek the suggestions to overcome the constraints faced by the potato growers in use of cold storage facility.

3. Methodology

The study was conducted in three districts viz., Banaskantha, Gandhinagar and Arvalli districts of North Gujarat. Two talukas were selected from each district purposively based on their number of cold storage facility. A total of six talukas were selected for the study. Five cold storages were randomly selected from selected taluka. Hence, total thirty

cold storage were selected for study. From each selected cold storage, ten respondents who used the cold storage facility were selected randomly to form a sample of 300 respondents. Constraints faced by the potato growers were studied. The potato growers were asked to express the constraints faced by them in use of cold storage facility. Respondents were also asked to mention suggestions to overcome the constraints faced by them. Frequency and percentage of each constraints and suggestion were the computed and ranked accordingly.

4. Results and Discussion

1. Constraints faced by the potato growers in use of cold storage facility: The constraints faced by the potato growers in use of cold storage facility were;

inadequate transportation (85.00%), cold storage owner keeping charges high (81.67%), inadequate finance (74.67%), weight loss (67.33%), high charges of transportation (63.00%), quality loss (54.33%), uncertainty in market price (51.33%), lack of availability of labour in timely and its time consuming (48.33%), low market price of potato at harvesting time (46.67%), fluctuation of price (43.67%), lack of credit facility (41.33%), large number of middle men (39.33%), lack of information regarding markets of potato (37.33%), farmers are unaware about information on stored potato (35.67%), lack of farmers cooperatives for marketing (33.33%) which ranked first to fifteen, respectively.

Table 1: Constraints faced by the potato growers in use of cold storage facility (n=300)

Sr. No.	Constraints	Frequency	Percent	Rank
1	Inadequate transportation	255	85.00	I
2	Keeping charges high	245	81.67	II
3	Inadequate finance	224	74.67	III
4	Weight loss of potato	202	67.33	IV
5	High charges of transportation	189	63.00	V
6	Quality loss	163	54.33	VI
7	Uncertainty in market price	154	51.33	VII
8	Lack of availability of labour in time and its time consuming	145	48.33	VIII
9	Low market price of potato at harvesting time	140	46.67	IX
10	Fluctuation of price of potato	131	43.67	X
11	Lack of credit facility	124	41.33	XI
12	Large number of middle men	118	39.33	XII
13	Lack of information regarding markets of potato	112	37.33	XIII
14	Farmers are unaware about information on stored potato	107	35.67	XIV
15	Lack of farmers cooperatives for marketing	100	33.33	XV

2. Suggestions of the potato growers to overcome the constraints faced by them in use of cold storage facility: Potato growers were asked to give valuable suggestions to overcome the constraints they faced in

use of cold storage facility. Frequency, per cent and ranks of suggestions offered by the potato growers were computed in accordance with the constraints expressed by them reported in Table 2.

Table 2: Suggestions of the potato growers to overcome the constraints faced by them in use of cold storage facility (n=300)

Sr. No.	Suggestions	Frequency	Percent	Rank
1	Cold storage owner should provide transportation facility	220	73.33	I
2	Cold storage owner should provide insurance facility	205	68.33	II
3	Step should be taken by the government for fix minimum support price	198	66.00	III
4	Timely information about market price of potato should be made available	185	61.67	IV
5	All cold storage contract should be on stamp paper	174	58.00	V
6	Inputs like fertilizer and others should made be available in time with low cost	160	53.33	VI

Table 2 indicates the suggestions given by the potato growers in descending order of the importance were; cold storage owner should provide transportation facility (73.33%), cold storage owner should provide insurance facility (68.33%), step should be taken by the government for fix minimum support price (66.00%), timely information about market price of potato should be made available (61.67%), all cold storage contract should be on stamp paper (58.00%), inputs like fertilizer and others should made be available in time with low cost (53.33%) which ranked first to six, respectively.

5. Conclusion

It is concluded that inadequate transportation, cold storage

owner keeping charges high, inadequate finance, weight loss, high charges of transportation, quality loss were the major constraints faced by the potato growers. Whereas, cold storage owner should provide transportation facility, cold storage owner should provide insurance facility were the major suggestions provided by potato growers to overcome constraints faced by them.

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