

Constraints faced by potato growers in adoption of recommended potato production technology

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Abstract : The present study was conducted in 12 villages of Anand district having more area under potato cultivation. Total 120 respondents from these 12 villages were selected by using proporsnate random sampling technique and data were collected by means of personal interview. Finding of this study states that high cost of inputs and fluctuating price behaviour is the major constraints faced by the potato growers. Price of the inputs should be minimized and timely technical guidance should be made available were the major suggestions offered by the potato growers to boost adoption rate of potato production technology.

Key Words : Constraints, Potato, Potato growers, Suggestions, Adoption

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INTRODUCTION

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. 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, potato powder and papads.

Potato is an economical food and provides a source of low cost energy to human diet. It is as balanced vegetable food as any other cereal like wheat, rice and maize, with a high quality protein contents (2.7 per cent), vitamin B and vitamin C. It contains riboflavin, niacin with large quantity of lysine and amino acids, the constituents, which makes potato nutritionally superior to cereal proteins. It also contains important minerals like calcium, phosphorus, potassium, iron and magnesium.

The production of potato in India was 32,411 MT. In Gujarat production of potato was 1493.90 MT and the production of potato in Anand district was 1, 88,940 tones. So

far Gujarat is concerned it ranked fourth with 4.33 per cent contribution having with total (1,493.90 MT) production (Anonymous, 2007). Looking to the present increasing production scenario of the country, it can be foretold that potato will be the important vegetable crop to satisfy the vegetable requirement of the country in coming days. However, many of the potato growers could not adopt the recommended potato production technology in view of large number of constraints in doing so. This study tries to understand the constraints faced by the potato growers in adoption of recommended potato production technology and find out the ways to overcome such constraints with the following specific objectives: To identify the problems faced by the farmers in adoption of recommended production technology of potato and to seek the suggestions from the farmers to overcome the problems faced by them in adoption of recommended production technology of potato.

MATERIALS AND METHODS

Anand district was chosen by researcher for the study. Anand, Borsad, Ankav and Umreth talukas of Anand district

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were purposively selected because these talukas have more potato growing area as compared to other talukas of the district. Twelve potato growing villages were randomly selected from those four talukas. For this study 120 potato growers were selected with proportionate random sampling technique. The data were collected with the help of well structured, pre-tested, Gujarati version interview scheduled through personal contact and data were compiled, tabulated and analyzed to draw valid conclusion. A simple ranking technique was applied to measure the problems faced and suggestions given by potato growers. The statistical tools used were percentage and mean score.

RESULTS AND DISCUSSION

Problems in adoption of new technology never end. However, they can be minimized. The potato growers were requested to express the problems faced by them in adoption of recommended potato production technology. Frequency and percentage for each problem were calculated and on basis

of intensity. Then they were ranked and presented in Table 1.

It is observed from Table 1 that major problems faced by potato growers were high cost of inputs (100.00 per cent), fluctuation of prices of potato (95.00 per cent), unavailability of healthy planting materials (91.67 per cent), shortage of labours at time of planting (86.68 per cent), lack of timely technical guidance (80.00 per cent), high rate of labours (76.67 per cent), non-availability of credit in time (74.16 per cent), high cost of transportation (71.66 per cent), lack of market facilities (52.50 per cent), inadequate cold storage facility (48.33 per cent), irregular supply of irrigation (30.83 per cent), irregular supply of electricity (24.17 per cent).

Suggestions made by potato growers to overcome the problems faced by them:

An attempt was also made to ascertain suggestion from potato growers to overcome various problems faced by them in adoption of recommended technology of potato. The potato growers were requested to offer their valuable suggestions against difficulties faced by them in the adoption of

Table 1 : Problems faced by potato growers in adoption of recommended potato production technology

(n = 120)

Sr. No.	Problems	Number	Per cent	Rank
1.	Unavailability of healthy planting materials	110	91.67	III
2.	High cost of inputs	120	100.00	I
3.	High cost of transportation	86	71.66	VIII
4.	Shortage of labours at time of planting	104	86.68	IV
5.	High rate of labours	92	76.67	VI
6.	Non-availability of credit in time	89	74.16	VII
7.	Lack of timely technical guidance	96	80.00	V
8.	Irregular supply of irrigation	37	30.83	XI
9.	Irregular supply of electricity	29	24.17	XII
10.	Lack of market facility	63	52.50	IX
11.	Inadequate cold storage facility	58	48.33	X
12.	Fluctuations in prices of potato at selling	114	95.00	II

Table 2 : Suggestions given by potato growers to overcome the problems faced by them

(n = 120)

Sr. No.	Suggestions	Number	Per cent	Rank
1.	The price of inputs should be minimized	120	100	I
2.	Timely technical guidance should be available	108	90.00	II
3.	Good and healthy tubers should be provided	104	86.67	III
4.	Remunerative price of potato should be made available	92	76.66	IV
5.	Crop loan should be provided at proper time and at lower rate of interest.	87	72.50	V
6.	Proper marketing facilities should be established.	108	71.70	VI
7.	Training on new cultivation technology should be imparted.	63	52.50	VII
8.	Cold storage facilities should be established	59	49.16	VIII
9.	Regular and timely visit of the farm by agricultural officers.	38	31.66	IX
10.	Improved implement/ potato planting machine should be available at lower rate	31	25.83	X
11.	Sufficient electric power should be made available for long time.	31	25.83	XI
12.	Timely and regular supply of canal water should be provided	26	21.66	XII

recommended potato production technology. Frequency and percentage for each suggestion was calculated. Then they were ranked on the basis of percentage and presented in Table 2.

It can be concluded from the Table 2. that the potato growers suggested that the price of inputs should be minimized (100 per cent), timely technical guidance should be provided (90.00 per cent), good and healthy tubers should be provided (86.67 per cent), remunerative price of potato should be made available (76.66 per cent), crop loan should be provided at proper time and at lower rate of interest (72.50 per cent), proper marketing facilities should be established (71.70 per cent), training on new cultivation technology should be imparted (52.50 per cent), cold storage facilities should be established (49.16 per cent), improved implement/ potato planting machine should be available at lower rate (25.83 per cent), regular and timely visit of agricultural officers (31.66 per cent), sufficient electric power should be made available in time (25.83 per cent), timely and regular supply of canal water should be provided (21.66 per cent).

Conclusion:

Findings of this study state that major problems faced by potato growers were high cost of inputs, fluctuations in market rate, unavailability of healthy planting materials, shortage of labours at time of planting, high cost of transportation, lack of timely technical guidance, high rate of labours and non-availability of credit in time. Important suggestions given by potato growers are prices of inputs should be minimized, provide timely technical guidance, good and healthy tubers should be provided, remunerative price of potato should be made available, proper marketing facilities

should be established and cold storage facilities should be established.

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