

CONSTRAINTS FACED BY THE POTATO GROWERS IN ADOPTION OF RECOMMENDED POTATO TECHNOLOGY

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INTRODUCTION

A short duration crop like potato (*Solanum tuberosum*, Linnacus) which is nutritionally superior and capable of producing high amount of food per unit area and time has a great potential in Indian agriculture for meeting the increasing food requirements of the country. Potato is a wholesome article of diet of human beings. Besides, it serves as raw materials for several industrial products like starch, alcohol, dextrin and glucose. It is also one of the most important *rabi* vegetable crops of our country and caters to the chief vegetable need of the people.

This increasing trend in area, production and average yield of potato has also been observed in Gujarat state. The average yield of potato in Gujarat is 28 tonnes/ hectare (Patel, *et al.*, 1998). Looking to the present increasing production scenario of the country, it can be foretold that potato will be the important crop to satisfy the vegetable requirement of the country in the coming days. However, many of the potato growers could not adopt the recommended potato production technology in view of the large numbers of constraints in doing so. This study tried 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:

1. To study the constraints faced by the potato growers in adoption of recommended potato technology.
2. To seek suggestions of potato growers to overcome the constraints faced by them in adoption of recommended potato technology.

METHODOLOGY

The present study was conducted in the North Gujarat Agro-climatic Zone of the Gujarat State, which is an intensive potato farming area and accounts for 80 per cent of total production of potato of the state. Banaskantha and Gandhinagar districts having the largest area under potato cultivation were purposively selected. A total of six talukas and 18 villages were covered from both districts and the size of sample was kept as 270 based on variability in overall modernization in the universe. A field survey by personal contact, the basic method for raw data collection was used. A simple interview schedule was designed for collecting the data, covering the objectives of the study. The potato growers were asked open-ended questions to enlist the constraints faced by them in adoption of recommended potato production technology and to offer their suggestions to overcome the constraints faced for improving the potato farming.

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RESULTS AND DISCUSSION

Constraints faced by the potato growers:

The major constraints as reported by the respondents in their order of importance are presented in Table 1.

of practices are not suitable in their situation' and 'Economically poor condition' secured fourth and fifth rank, respectively. 'Fear of adverse effect of seed treatment on germination' and 'Fear of residue effect

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

(n=270)				
Sr. No.	Constraints	Frequency	Percentage	Rank
1.	Non-availability of improved pure seed in time	85	31.48	I
2.	High cost of seeds, fertilizers and chemicals	82	30.37	II
3.	Lack of information or non-availability of information or lack of technical guidance	49	18.15	III
4.	Recommended package of practices are not suitable in their situation	47	17.41	IV
5.	Farmers economically poor	22	8.15	V
6.	Fear of adverse effect of seed treatment on germination	14	5.19	VI
7.	Fear of residue effect of weedicide on next season crop germination	14	5.19	VII
8.	Farmers illiterate / low educated	12	4.44	VIII
9.	Irregular supply of electrical power	10	3.70	IX
10.	Not received remunerative prices for potato	7	2.59	X
11.	Non-availability of labour	5	1.85	XI
12.	Crisis of irrigation sources	2	0.74	XII

The perusal of the data presented in Table 1 reveal that 'Non-availability of improved pure and certified seed in time' was the main constraint of potato growers, followed by 'high cost of seeds, fertilizers and chemicals'; as reported by potato growers. 'Lack of information and technical guidance' obtained the third rank. While 'recommended package

of weedicide on next season crop germination' received sixth and seventh rank.

Suggestions offered by the potato growers to overcome the constraints:

The respondents were asked to suggest possible solutions to overcome the

Table 2: Suggestions offered by the potato growers to overcome the constraints faced by them

(n=270)				
Sr. No.	Suggestions	Frequency	Percentage	Rank
1.	Providing pure certified seeds and inputs at lower cost	93	34.44	I
2.	Providing of technical information in time	55	20.37	II
3.	Providing seed and production inputs at subsidized rate to the farmers	46	17.04	III
4.	Developing less expensive and suitable methods for potato farming	35	12.96	IV
5.	Developing the package of practices with consideration of farmers experiences	23	8.52	V
6.	Construction and maintenance of cold storage by the government	2	0.74	VI

constraints associated with adoption of recommended potato production technology. The suggestions are presented in Table 2.

It is obvious from Table 2, which the most important suggestion expressed by the respondents was 'to develop a facility for providing of pure, certified seeds and inputs at lower cost' followed by 'providing technical information in time'. From this result, it can be concluded that most of the farmers are purchasing potato seed from out side the state. The farmers generally plant the seed which is available from Punjab and Haryana states. Therefore, the potato growers had endorsed the important suggestion of providing pure and certified seeds at low cost. Second suggestion was providing of technical information at the right time. The probable reason might be that there are various agencies working for transfer of technology. However, there is a communication gap in providing technical information at the right time.

CONCLUSION

Based on the findings of the study it can be concluded that non-availability of improved certified pure seed in time; high cost of

seeds, fertilizers and chemicals; non-availability of information and technical guidance and recommended package of practices are not suitable in their situation were the major constraints faced by the potato growers of North Gujarat Agro-climatic Zone of Gujarat state in adoption of recommended potato technology. There were number of suggestions endorsed by the respondents for adoption of potato production technology that include providing pure certified seeds and inputs at lower cost, providing of technical information at the right time and developing less expensive and suitable methods for potato farming.

REFERENCE

- Patel, P. K., Chaudhary, S. M. and Parmar, L. D. 1998. Research and Development of potato in Gujarat. Krushi-Go-Vidhya (Potato sp. issue Gujarati), Published by Directorate of Extension Education, GAU, Ahmedabad-380004. 8 : 8.
- Shekhawat, G. S. 1999. "Golden Jubilee Souvenir" Central Potato Research Institute, Shimla-171001 (Himachal Pradesh), India: pp.47-50.