

CONSTRAINTS FACED BY THE INDIAN BEAN FARMERS IN ADOPTION OF RECOMMENDED INDIAN BEAN PRODUCTION TECHNOLOGY

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ABSTRACT

The present investigation was carried out in Sabarkantha district. Among the eight talukas of Sabarkantha district Vadali and Idar were purposively selected on the basis of highest area and production of green pod vegetable Indian bean (Valol/Valor) in the district. Total 160 Indian bean farmers were selected for the study. The major constraints faced by the Indian bean farmers in adoption of Indian bean production technology were; fluctuations in market rate, high cost of improved variety seeds, fertilizers, FYM & agro-chemicals and higher infestation of disease and pest. The important suggestions endorsed by the Indian bean farmers in adoption of improved technology of Indian bean crop were; Quality of seeds, fertilizers, agro-chemicals & other inputs should be available in time with low cost, rate of produce should be regulated and proper & regular information should be provided on different aspects of recommended Indian bean production technology.

Keywords : constraints, suggestions, indian bean farmers, indian bean production technology

INTRODUCTION

Indian bean is grown commercially to meet out the domestic demand for its green pod and dry pulse in Gujarat. The major Indian bean growing districts are Sabarkantha, Banaskantha, Mehsana, Surat, Navsari, Vadodara, Panchmahal, etc. Among them Sabarkantha district is especially famous for green pod vegetable Indian bean cultivation. It's locally known as 'Valol'. In Sabarkantha district, vegetable Indian bean (Valol) is cultivated in Vadali, Idar, Khedbrahma and Vijaynagar talukas. In Vadali it's being grown in 210 ha with the production of 2572.50 tones, followed by Idar (Area: 74 ha., Production: 906.50 tones), Khedbrahma (Area: 10 ha., Production: 122.50 tones) and Vijaynagar (Area: 8 ha., Production: 98 tones) (Anonymous 2018). Whereas, potential yield of the crop was 15-20 tones/ha (Patel *et al.* 2012). Therefore, there was a wide gap observed between the average yield of common farmers and the potential yield of the crop. The yield difference might be due to fact that all the farmers might be not adopted all the improved practices of Indian bean cultivation because of farmers might be some constraints experienced by the Indian bean farmers in adoption of Indian bean production technology. Since, the primary objective of Indian bean cultivation has been to meet domestic requirement for food and fodder with limited market surplus of grain, there has been very little innovation in its improved cultivation practices on farmers' fields. The

increment in Indian bean production is only possible through improvement in knowledge and more adoption of improved Indian bean cultivation practices among farmers. The present investigation was a careful attempt to have a sharp focus on some constraints experienced by the Indian bean farmers in adoption of Indian bean production technology with the following objectives.

OBJECTIVES

- (1) To identify the constraints experienced by the Indian bean farmers in adoption of Indian bean production technology
- (2) To seek suggestions from the Indian bean farmers to overcome the constraints experienced by them in adoption of Indian bean production technology

METHODOLOGY

The study was conducted in Sabarkantha district of Gujarat state. Sabarkantha district is comprised of eight talukas. Out of these, two talukas namely Vadali and Idar had highest area and production of green pod vegetable Indian bean (Valol/Valor) in the district. Thus, Vadali and Idar talukas were selected purposively. Eight villages having higher area under Indian bean cultivation from each selected taluka were purposively selected for the study. Hence, the total sixteen villages were selected for the study. Ten Indian bean farmers

were selected randomly from the list of Indian bean farmers of each selected village. Thus, 160 Indian bean farmers were selected for the study.

The extent of adoption of the respondents about the Indian bean production technology, a battery of the objective questions concerning improved the Indian bean production technology was prepared by structure schedule. A well-structured interview schedule was prepared in light of the objective of the study as a tool for the data collection. For effective administration of the interview schedule of this research study, it was translated into vernacular language. Before finalizing the interview schedule, it was pre-tested with twenty non-sampled respondents to find out whether the questions were clear to the respondents or not. The data were collected through personal interview of the selected Indian bean farmers of 16 selected villages of Sabarkantha district. The collected data were classified, tabulated and analyzed in order to make the findings meaningful for interpretation and drawing inferences. A simple ranking technique was applied

to measure the constraints faced by the Indian bean farmers. The statistical tools frequency, percentage and rank order were used for present study.

RESULTS AND DISCUSSION

Constraints experienced by the Indian bean farmers in adoption of Indian bean production technology

Constraints refer to the circumstance or causes, which prohibit farmers in adopting the Indian bean production technology. As far as the problems confronting the Indian bean farmers in adoption of production technology. The Indian bean farmers were asked to express their constraints in adoption of the Indian bean production technology. The information regarding constraints experienced gathered through open ended questions. The opinion in regards were collected and classified. The frequency of each constraint was converted in to percentage and lastly ranked in ascending order. The data in context are presented in Table 1.

Table 1 : Distribution of the Indian bean farmers according to the constraints experienced by them in adoption of Indian bean production technology (n=160)

Sr. No.	Constraints	Frequency	Per cent	Rank
1	Fluctuations in market rate	149	93.13	I
2	High cost of improved variety seeds, fertilizers, FYM and agro-chemicals	144	90.00	II
3	Higher infestation of disease and pest	136	85.00	III
4	Non-availability of labour at a proper time	131	81.88	IV
5	High wages of labour	124	77.50	V
6	High cost of transportation	120	75.00	VI
7	Lack of irrigation water	114	71.25	VII
8	Inadequate sources of finance	97	60.63	VIII

As seen from the Table 1 that the major constraints faced by the Indian bean farmers were; fluctuations in market rate (93.13 per cent), high cost of improved variety seeds, fertilizers, FYM and agro-chemicals (90.00 per cent), higher infestation of disease and pest (85.00 per cent), non-availability of labour at a proper time (81.88 per cent), high wages of labour (77.50 per cent), high cost of transportation (75.00 per cent), lack of irrigation water (71.25 per cent) and inadequate sources of finance (60.63 per cent) had given the rank order of 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, and 8th respectively.

Suggestions from the Indian bean farmers to overcome the constraints experienced by them in adoption of Indian bean production technology

An attempt was also made to ascertain suggestions from the Indian bean farmers to overcome various constraints faced by them in adoption of improved technology of the Indian bean crop. The respondents were requested to offer their valuable suggestions to overcome against difficulties faced by them in the adoption of improved technology of the Indian bean crop. The data were collected and presented in Table 2.

Table 2 : Distribution of the Indian bean farmers according to their suggestions to overcome constraints experienced by them in adoption of Indian bean production technology (n=160)

Sr. No.	Suggestions	Frequency	Per cent	Rank
1	Quality of seeds, fertilizers, agro-chemicals and other inputs should be available in time with low cost	148	92.50	I
2	Rate of produce should be regulated	138	86.25	II
3	Proper and regular information should be provided on different aspects of recommended Indian bean production technology	129	80.63	III
4	Need to increase small farm mechanization	110	68.75	IV
5	Credit should be provided timely with low interest rate	100	62.50	V

It can be seen from the Table 2 that the major suggestions given by the Indian bean farmers were; quality of seeds, fertilizer, agro-chemicals and other inputs should be available in time with low cost (92.50 per cent), rate of produce should be regulated (86.25 per cent), proper and regular information should be provided on different aspects of recommended Indian bean production technology (80.63 per cent), need to increase small farm mechanization (68.75 per cent) and credit should be provided timely with low interest rate (62.50 per cent) had given the rank order of 1st, 2nd, 3rd, 4th, and 5th respectively.

It can be concluded that major suggestions given by the Indian bean farmers that good quality of seeds, fertilizers, chemicals and other inputs should be available in time with low cost, rate of produce should be regulated and proper and regular information should be provided on different aspects of recommended Indian bean production technology.

CONCLUSION

It can be concluded that major constraints experienced by the Indian bean farmers in adoption of Indian bean production technology were fluctuations in market rate, high cost of improved variety seeds, fertilizers, FYM and agro-chemicals, higher infestation of disease and pest, non-availability of labour at a proper time and high wages

of labour. Quality of seeds, fertilizers, agro-chemicals and other inputs should be available in time with low cost, rate of produce should be regulated, proper and regular information should be provided on different aspects of recommended Indian bean production technology, need to increase small farm mechanization and credit should be provided timely with low interest rate were important suggestions given by the Indian bean farmers to overcome various constraints experienced by them in adoption of improved technology of Indian bean crop.

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