

International Journal of Agriculture Extension and Social Development

Volume 8; Issue 1; January 2025; Page No. 356-357

Received: 13-10-2024
Accepted: 17-11-2024

Indexed Journal
Peer Reviewed Journal

Constraints faced by Indian bean growers in adoption of improved Indian bean cultivation

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DOI: <https://doi.org/10.33545/26180723.2025.v8.i1f.1553>

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Abstract

Bharuch district in Gujarat is one of the important areas for vegetables cultivation, Indian bean is one of the most popular perennial vegetable Crops in India. Basically, Indian bean is a multi-purpose crop which is being primarily grown for its green pod. This crop normally grown by the farmer in rainy season with mix cropping and inter cropping in tribal area of Bharuch district. However, it is consumed as vegetable, pulse and forage. In India, most of the rural people grow this vegetable at home. It was observed that there is a wide gap in adoption of improved cultivation practices. Looking to the importance of the problem, a study was conducted on constraints faced by Indian bean growers in adoption of improved Indian bean production technology. This study concluded the it may be concluded that most important constraints faced by the Indian bean growers were high cost of improved variety seeds, fertilizers, and agro-chemicals, Fluctuations in prices, High incidence of pests and diseases, Lack of knowledge to diagnose the pests and diseases in the crop. Major suggestion given by farmers for the overcome the constraints is Quality of seeds, fertilizers, agro-chemicals and inputs timely available with low cost, Input should be supplied at subsidized rate, Rate of produce should be regulated, Timely technical guidance should be provided to the farmers and Need to increase small farm mechanization.

Keywords: Constraint & suggestions, Indian bean cultivation

Introduction

Indian bean is the most cultivated vegetable crops in Tribal area of Bharuch district most of in Netrang, Valia, Jhagadia and Ankleshwer taluka of Bharuch district. most of the farmers are generally adopting old Cropping system and cultivation practices like without definite inter space, local variety, inadequate nutrient management & and no use of scientific package of practices so which is gave low yield. It showed improvement in Indian bean production is needed through management and Diversification of agriculture practices to enhance adoption level of improved Indian bean production technology so to increase the productivity in Indian bean growing region. In Bharuch district Indian bean growing regions is one of the major challenges and concern which need to study Constraints Faced by Indian bean Growers in Adoption of Improved Indian Bean Production Technology,

Objective

1. To study constraints faced by Indian bean growers in adoption of improved Indian bean production technology.
2. To seek the suggestions from the Indian bean growers

Methodology

An explorative research method use for study was made to find out the constraints faced by the respondents in adoption of improved Indian bean production technology. The study was conducted in two Taluka of Bharuch district were districts viz. Netrang & Jhagadia. Six villages from Netrang and six villages from Jhagadia taluka were selected purposively. Ten respondents were selected from each village by simple random sampling method. Thus total 120 respondents were selected. The data collect from the personal interview method then tabulated, analyzed and interpreted in the light of the objectives. The statistical measures like percentage and rank were used. The constraints were kept open before the respondents to offer their difficulties. The practice wise constraints were collected from the respondents and percentage was worked out for each constraint. To trace the relative importance of constraints, overall ranks were assigned based on percentage. To overcome the practice wise problems, the suggestions were kept open before the respondents. The suggestions were collected from the respondents and percentage was worked out. To trace the relative importance of the suggestion, the overall ranks were assigned based on percentage.

Result and Discussion

Table 1: Constraints experienced by the respondents in adoption of improved Indian bean production technology. n: 120

S. N	Constraints	Frequency	Percent	Rank
1	High cost of improved variety seeds, fertilizers, and agro-chemicals	99	82.05	I
2	Fluctuations in prices	97	80.83	II
3	High incidence of pests and diseases	95	79.16	III
4	Lack of knowledge to diagnose the pests and diseases in the crop	91	75.83	IV
5	Irregular supply of electricity	73	60.83	V
6	High wages of labour	62	51.66	VI
7	High Cost of Transportation	49	40.83	VII
8	Lack of irrigation water	45	37.05	VIII
9	Farmers get less price of their products in local market	43	35.83	IX
10	Shortage of labour	40	33.33	X

Data presented in table 1 revealed that high cost of inputs were major constraints faced by the farmers were; High cost of improved variety seeds, fertilizers, and agro-chemicals majority (82.05 per cent) got rank 1st, Fluctuations in prices (80.83 Per cent) rank 2nd, High incidence of pests and diseases (79.16 Percent) rank 3rd. Lack of knowledge to diagnose the pests and diseases in the crop (75.83 percent) rank 4th, Irregular supply of electricity (60.83 per cent) 5th

rank, High wages of labour (51.66 per cent) rank 6th rank, High Cost of Transportation(40.83 per cent) 7th rank, Lack of irrigation water (37.5 per cent) rank 8th, Farmers get less price of their products in local market (35.83 per cent) rank 9th, Shortage of labour (33.33 per cent) rank 10th rank. This finding agrees with that of S.R. Kumbhani (2020) ^[1], D.Y.Patel (2020) ^[4] and Maheriya (2013) ^[3].

Table 2: Suggestions offered by Indian bean growers to overcome constraints faced by them. n: 120

	Suggestion	Frequency	Percent	Rank
1	Quality of seeds, fertilizers, agro-chemicals and inputs timely available with low cost	110	91.66	I
2	Input should be supplied at subsidized rate	107	89.16	II
3	Rate of produce should be regulated	99	82.05	III
4	Timely technical guidance should be provided to the farmers	94	78.33	IV
5	Need to increase small farm mechanization	89	74.16	V
6	Disease and pest resistance varieties should be developed	81	67.05	VI
7	Provision of sufficient and timely credit facilities	75	62.05	VII

The data related to suggestions given by the respondents are presented in the table 2 concluded that Quality of seeds, fertilizers, agro-chemicals and inputs timely available with low cost (91.66 per cent) was major suggestion and got rank 1st, Input should be supplied at subsidized rate (89.16 per cent) 2nd rank, Rate of produce should be regulated (82.05 per cent), Timely technical guidance should be provided to the farmers (78.33 per cent) 4th rank, Need to increase small farm mechanization (74.16 per cent) 5th rank, disease and pest resistance varieties should be developed (67.05 per cent) 6th, Provision of sufficient and timely credit facilities (62.05 per cent)7th rank. This finding agrees with that of S.R. Kumbhani (2020) ^[1], D.Y. Patel (2020) ^[4] and Maheriya (2013) ^[3].

Conclusion

Based on the findings of the study, it may be concluded that most important constraints faced by the Indian bean growers were high cost of improved variety seeds, fertilizers, and agro-chemicals, Fluctuations in prices, High incidence of pests and diseases, Lack of knowledge to diagnose the pests and diseases in the crop. Major suggestion given by farmers for the overcome the constraints is Quality of seeds, fertilizers, agro-chemicals and inputs timely available with low cost, Input should be supplied at subsidized rate, Rate of produce should be regulated, Timely technical guidance should be provided to the farmers and Need to increase small farm mechanization.

References

1. Kumbhani SR, Bhuvra RM, Tavethiya BH, Chandravadia KU. Constraints faced by Indian bean growers in adoption of improved Indian bean production technology. Trends Biosci. 2020;13(8):00-00. Print: ISSN 0974-8431.
2. Gurjar RS, Gour CL, Dwivedi D, Badodiya SK. Entrepreneurial behavior of potato growers and constraints faced by farmers in production and marketing of potato and their suggestion. Plant Arch. 2017;17(1):427-432.
3. Maheriya HN. Technology utilization behavior of paddy growers in Anand district of Gujarat state. M.Sc. (Agri.) Thesis (Unpublished), AAU, Anand; c2013.
4. Patel BM, Patel JK, Badhe DK. Constraints faced by potato growers in adoption of recommended potato production technology. Int J Agric Sci. 2012;8(2):502-4.