Research Article

Constraints in production and marketing of soybean

■ **A.N. DESHMUKH AND S.J. DESHMUKH**

SUMMARY : The present study was undertaken in Morshi tahsil of Amravati district in vidhrabh region. The aim was to study constraints in production and marketing of soybean using primary data which was collected by personal interview method. Regarding the distribution of respondent according to independent personal characteristics the majority of respondent was found in medium category in age (54%), education(62%), land holding (66%) and annual income (67.33%). Regarding the distribution of respondents in case of socio-economic status the majority of respondents (64%)were found in medium category. With psychological characteristics, maximum number of respondents had shown medium category economic motivation (44.66%), scientific orientation (45.33%), risk preference (41.33%), respectively. According to constraint level 25.33 per cent showed high constraint level. In rank of situational constraints, first rank was given to non-available of labour in time. In case of knowledge and information constraints, first rank was given to lack of knowledge about seed treatment and in communication constraints lack of contact with extension agencies ranked first. In economic constraints, the first rank was given to high cost of manures and fertilizers and in production constraints first rank was given to severe insect and disease infestation. Among the marketing constraints the first rank was given to lack of processing plant in the local area. While studying association with independent characteristic, age and scientific orientation were found non-significantly associated but education, land holding, annual income, socio-economic status, economic motivation and risk preference were significantly associated with constraint level. Regarding suggestion 100 per cent of the respondents suggested a need of co-operative processing plant in the area and refresher training before season was suggested by 99.33 per cent of the respondents.

How to cite this article : Deshmukh, A.N. and Deshmukh, S.J. (2013). Constraints in production and marketing of soybean. *Agric. Update*, **8**(1&2): 64-66.

BACKGROUND AND OBJECTIVES

Soybean assumes the most important place in Indian agriculture. It is a triple beneficiary crops, as it contains 20 per cent oil and 38-42 per cent high quality proteins. It fixes atmospheric nitrogen in soil at the rate of 150-200 kg per hectare per season. Soybean is a highly nutritious food item. It is being used in preparation of vegetable oil, ghee and processed food products such as soya powder, soya milk curd, soyadal, and for manufacturing soaps and antibiotic products. It is also considered suitable for diabetic patients due to its low carbohydrates contents. Besides this, it is a rich source of phosphorus and vitamin. In India maximum area under soybean is in Madhya Pradesh and Maharashtra. In Maharashtra, climatic conditions are suitable for

cultivation of soybean crop. An important characteristics of soybean is its ability to grow in adverse ecological environments. Despite this, production per hectare is very low in the state.

Moreover, the findings of the study will certainly contribute in formulating certain extension education strategies for the constraints. Keeping this in view, the present study was planned and carried out with the following objectives to study the characteristics of soybean cultivators in selected area, to find out the constraints faced by cultivators in production and marketing of soybean, to study the association of personal, socio-economic and psychological characteristics, with the various constraints faced by them, to invite the suggestions of soybean growers to overcome the constraints faced.

Author for correspondence :

A.N. DESHMUKH
Department of Agricultural Extension Education, Shri Shivaji Agricultural College, AMRAVATI (M.S.) INDIA

See end of the article for authors' affiliations

RESOURCES AND METHODS

The study was conducted in the Morshi Panchyat Samiti in Amravati district of Maharashtra. This is an investigation related to the soybean growers and constraints faced by them during production and marketing. From 156 villages in Panchyat Samiti, 118 villages were pointed out where maximum farmers were taking soybean cultivation. Then out of these 118 villages, 15 villages were randomly selected by lottery method. For selection of respondents, a list of soybean cultivator was selected by random method in proportion to cover a sample of 150 cultivator. For collection of data, structured interview schedule was prepared with a view to corner the various aspect indicated in the objectives.

OBSERVATIONS AND ANALYSIS

The finding of the study have been discussed in detail as under:

Regarding the distribution of respondent to independent personal characteristics (Table 1), majority of the respondents were found in medium category in age (54 %), education 62%, landholding 66% and annual income 67.33%. In socio-economic status majority of respondent (64 %) were found in medium category, with psychological characteristics. Maximum number of respondents had shown medium category economic motivation (44.66 %) scientific orientation 45.33% and risk preference 41.33 per cent.

Table 1 : Distribution of respondents according to personal characteristics (n=150)

Sr. No.	Characteristics	Number	Per cent
1.	Age	81	54
2.	Education	93	62
3.	Landholding	99	66
4.	Annual income	101	67.33
5.	Socio-economic status	96	64
6.	Economic motivation	67	44.66
7.	Scientific orientation	68	45.33
8.	Risk preference	62	41.33

According to constraint level of respondents below 50 per cent of them showed medium constraints level (Table 2) while 25.33 per cent showed high constraint level rank was given first rank. In production constraints first rank was given to severe insect pest and disease infestation. Among the

Table 2 : Distribution of respondents according constraint level (n =150)

Sr. No.	Characteristics	Number	Per cent
1.	Low	45	38.00
2.	Medium	67	44.66
3.	High	37	25.33

Table 3 : Ranking of different constraints

Constraints	Rank
Situation constraints	
Non-available of labour in time	1
Erratic nature of rainfall	2
Non availability of rhizobium culture	3
Non-availability of recommended seed in time	4
Non-availability of plant protection appliances	5
Knowledge and information constraints	
Lack of knowledge about seed treatment	1
Lack of knowledge about bacterial treatment	2
Lack of knowledge about plant protection schedule	3
Lack of knowledge about chemical used for seed treatment	4
Lack of knowledge about use of chemical fertilizer	5
Lack of knowledge about seed rate	6
Lack of knowledge about spacing	7
Lack of knowledge about land preparation	8
Communication constraints	
Lack of contact with extension agencies	1
Non-availability of information about soybean production technology	2
Economic constraints	
High cost of manure and fertilizers	1
High cost of recommended varieties of seed	2
Costliness of plant protection chemicals	3
Lack of finance	4
Cost of plant protection appliances	5
Production constraints	
Severe insect pest and disease infection	1
Shortage of high yielding varieties	2
Non-feasibility to use recommended technology under rained condition	3
Higher risk in soybean production	4
Low fertility status of soil	5
Marketing constraints	
Lack of processing plant of soybean in local area	1
Not getting assured market price for soybean	2
Sample for sale are not proper given	3
No proper approach to purchase agency	4
NAFED condition not properly fulfilled	5
No provision for storage facilities	6
Lack of transport and communication facilities between farmer and market	7
	8
No provision for nearby market	9

marketing constraints the first rank was lack of procession plant in the local area.

Table 3 shows in ranking of situational constraints, the

Agric. Update, **8**(1&2) Feb. & May, 2013 : 64-66
Hind Agricultural Research and Training Institute

65

Table 4 : Relationship between dependent and independent variable

Sr. No.	Characteristics	Category	Frequency	Percentage
1	Age	Young age	32	21.33
		Middle age	81	54.00
		Old age	37	24.66
2	Education	Illiterate & Primary	21	14.00
		Middle high School	93	62.00
		College	36	24.00
3.	Land holding	Upto2	29	19.33
		2.1 to 6 ha	99	66.00
		6.1ha& above	22	14.66
4.	Annual Income	Low	26	17.33
		Middle	101	67.00
		High	23	15.33
5.	Economic Motivation	Low	31	20.66
		Middle	67	44.66
		High	52	34.66
6.	Social Participation	Low	21	14.00
		Middle	96	64.00
		High	33	22.00
7.	Scientific Orientation	Low	48	32.00
		Middle	68	45.33
		High	34	22.66
8.	Risk Preference	Low	31	20.66
		Middle	62	41.33
		High	57	38.00

first rank was given to non- availability of labour in time. In case of knowledge and information constraints, first rank was given to lack of knowledge about seed treatment and in communication constraints lack of contact with extension agencies ranked first. In economic constraint, the first rank was given to high cost of manures and fertilizers.

While studying association (Table 4) with independent characteristics, age and scientific orientation were found non-

Table 5 : Various suggestions given by different respondent

Sr. No.	Suggestion	No. of respondent	Per cent
1.	Co-operative proceessing plant of soybean be started in local area.	150	100.00
2.	Regular training on different technique be given.	87	58.00
3.	Large number of demonstration be organized.	128	85.33
4.	Insecticides and spray pumps may be made locally available on subsidy.	94	62.66
5.	Refresher training course be organized before crop season for a short duration.	149	99.33

significantly associated but education, land holding, annual income, socio-economic status, economic motivation and risk preference were significantly associated with constraint level.

Regarding suggestion, 100 per cent of respondents suggested a need of co-operative processing plant in the area and refresher course was suggested by 99.93 per cent.

Zade (1998), Bhale (2000) and Wane (2000) have made some important contribution on contraints in production and marketing of soybean in Maharashtra.

Authors' affiliations :

A.V. GAVHANE AND J.V. EKALE, Department of Extension Education, Marathwada Krishi Vidyapeeth, PARBHANI (M.S.) INDIA

REFERENCES

Bahale, S.M. (2000). Constraints in production and marketing of soybean. M.Sc. (Ag.) Thesis, Dr. Panjabrao Deahmukh Krishi Vidyapeeth, Akola, M.S. (INDIA).

Wane, R.B. (2000). Adoption behavior of Soybean growers. M.Sc.(Ag.) Thesis, Dr. Panjabrao Deahmukh Krishi Vidyapeeth, Akola, M.S. (INDIA).

Zade, P.N.(1998): " Constraints in adoption of soybean production technology by framers". M.Sc.(Ag.) Thesis, Dr. Panjabrao Deahmukh Krishi Vidyapeeth, Akola, M.S. (INDIA).

■