

Research Article

# Constraint faced in adoption of recommended package practices of green gram

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**SUMMARY :** The present study was conducted in Parbhani district of Marathwada region of Maharashtra state. Parbhani, Jintur and Selu talukas of Parbhani district were purposively selected for study. 40 respondents were selected from each taluka on the basis of maximum area under green gram. Thus, a total of 120 respondents were selected as sample for this study. The respondents were interviewed with the help of well structured interview schedule. Majority of the green gram respondents were from medium farming experience, middle school level of education, joint family type extension contact, social participation, annual income, economic motivation, risk orientation, sources of information, market orientation with medium knowledge level of recommended package of practices of green gram.

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**KEY WORDS :**

Profile,  
Constraint

## BACKGROUND AND OBJECTIVES

Green gram (*Vigna radiata* L.) commonly known as 'Mung', mungbean', or golden gram is one of the most important short duration pulse crop of India and third important pulse crop after chickpea and pigeonpea (Reddy, 2009). In Maharashtra green gram occupy an area of 433 thousand hectares during 2011-12 and about 412 thousand hectares during 2012-2013 with a production of about 254 MT during 2011-12 and about 195 MT during 2011-2013. Green gram is protein rich staple food. It contains about 25 per cent protein which is almost three times that of cereals. Green gram also plays important role in sustaining soil fertility by improving soil physical properties and leaves nitrogen effect for succeeding crops. In Agriculture, the contribution made by Agricultural Universities not only helped to increase production and productivity of food crops but has also helped in achieving socio-economic upliftment of the Maharashtra state. State Agriculture Universities in Maharashtra have generated number of farm innovations. Some of

farmers having knowledge about new practices but they have not adopted at all because of some constraints in adoption so, present study was carried out with following objectives.

**Objectives :**

- To study the profile of respondents.
- Find out the constraints faced by green gram grower's in the use of recommended package of practices of green gram.

## RESOURCES AND METHODS

The present investigation was conducted in Marathwada region of Maharashtra state. For the study three talukas viz., Parbhani, Jintur and Selu were selected from Parbhani district. Four villages from each talukas were selected on the basis of maximum area under green gram. Thus, 12 villages from 3 talukas were selected for this study. From each village 10 green gram growers were selected randomly. Thus, a total of 120 respondents were selected as sample for this study.

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## OBSERVATIONS AND ANALYSIS

The experimental findings obtained from the present study have been discussed in following heads:

### The profile of green gram growers :

The data in Table 1 reveal that 49.16 per cent of them have middle school level of education while, equal percentage (35.83 %) of green gram growers were found in semi-medium land holding and small land holding category, 65 per cent of the green gram growers had experience of farming up to 9 to 32 years. Equal percentage of the respondent (67.50 %) had medium annual income and having joint family. Near about two third of the respondents (63.33 %) were having medium economic motivation, majority (67.50 %) of the green gram growers were in the medium risk orientation category. Risk and uncertainty has been ranked as second important technical constraints affecting the adoption of moongbean production technology uncertainty and risk are major obstacles for the adoption of new technologies. Farmers to a large extent are risk averse (Bar-shira *et al.*, 1997). More than half of the green gram growers (56.66%) had medium extension contact. Sixty per cent of the green gram growers had medium social participation, more than two third (70.00 %) of the green gram growers used medium sources of information and 70.00 per cent of the green gram growers had medium market orientation.

### The constraints faced by the respondents in the use of recommended package of practices of green gram :

The various constraints faced by the green gram growers are presented in Table 2. The data from the table delineate that maximum respondents 96.66 per cent were lacking of knowledge about IPM method of pest control. The data regarding the control of pest and disease the constraints like high cost of insecticides / fungicides and less information about sucking pest control 94.16 and 93.33 per cent of the respondents, respectively. For adoption of operation of sowing was 90 per cent not in time because of uncertainty of rainfall. In respect of adoption of recommended package of practices of green gram the constraints like non-availability of laborer was 89.16 per cent. Constraints faced by the respondents regarding the use of improved or recommended seed of green gram were non - availability of good quality required seed, more cost of seed (86.66 %) and 82.5 per cent of respondents were lacking information about recommended varieties.

As far as chemical fertilizers is concern the constraints like non - availability of chemical fertilizers in time was 80.00 per cent and high cost for deep ploughing has been attributed by 80 per cent of respondents. Lack of knowledge about compost making by scientific method was faced by 76.66 per cent respondents. 71.66 per cent of the respondents had constraints like cost of fungicides are high and non - availability of plant protection appliances (54.16%). The similar finding

**Table 1 : The profile of green gram growers (n=120)**

Sr.No.	Categories	Frequency	Per cent
<b>Education</b>			
1.	Illiterate	11	9.16
2.	Primary school level (1 <sup>st</sup> to 4 <sup>th</sup> std.)	15	12.50
3.	Middle school level (5 <sup>th</sup> to 7 <sup>th</sup> std.)	59	49.16
4.	High school level (5 to 10 <sup>th</sup> std.)	24	20.02
5.	College level (above 10 <sup>th</sup> std.)	11	9.16
<b>Land holding</b>			
1.	Marginal farmers (Up to 1.0)	09	7.50
2.	Small farmers (1.01 to 2.0)	43	35.83
3.	Semi-medium farmers (2.01 to 4.0)	43	35.83
4.	Medium farmers (4.01 to 10)	24	20.00
5.	Big farmers (10.01 and above)	01	0.84
<b>Farming experience</b>			
1.	Low (Up to 8 years)	18	15.00
2.	Medium (9 to 32 years)	78	65.00
3.	High (33 years and above)	24	20.00
<b>Annual income</b>			
1.	Low (Up to Rs. 75693)	20	16.66
2.	Medium (Rs.75694 to 250439)	81	67.50
3.	High (Above Rs. 250439)	19	15.84
<b>Family type</b>			
1.	Joint family	81	67.50
2.	Nuclear family	39	32.50
<b>Economic motivation</b>			
1.	Low	19	15.84
2.	Medium	76	63.33
3.	High	25	20.83
<b>Risk orientation</b>			
1.	Low	24	20.00
2.	Medium	81	67.50
3.	High	15	12.50
<b>Extension contact</b>			
1.	Low	26	21.67
2.	Medium	68	56.66
3.	High	26	21.67
<b>Social participation</b>			
1.	Low	31	25.83
2.	Medium	72	60.00
3.	High	17	14.17
<b>Sources of information</b>			
1.	Low	17	14.17
2.	Medium	84	70.00
3.	High	19	15.83
<b>Market orientation</b>			
1.	Low	13	10.83
2.	Medium	84	70.00
3.	High	23	19.17

**Table 2 : Constraints faced by the green gram growers in adoption of recommended package of practices of green gram**

Sr. No.	Constraints	Frequency	Percentage
1.	High cost ploughing	96	80
2.	Lack of knowledge about compost / FYM making by scientific method	92	76.66
3.	Sowing is not in time because of uncertainty of rainfall	108	90
4.	Lack of information about recommended varieties	99	82.5
5.	More seed cost	104	86.66
6.	Cost of fungicides are high	86	71.66
7.	Non-availability of fertilizers at proper time	96	80
8.	Less information about sucking pest control	112	93.33
9.	Non-availability of spraying and dusting appliances	65	54.16
10.	Cost of insecticides / fungicides are high	113	94.16
11.	Lack of knowledge about IPM method of pest control	116	96.66
12.	Unavailability of labourer	107	89.16

was also reported by Mane (2001), Kadam (2000), Deshmukh (2006) Lal *et al.* (1990) and Bedre (2009).

#### Conclusion :

It is concluded that majority of the green gram growers were from medium farming experience, middle school level of education, joint family type, medium extension contact, medium social participation, medium annual income, medium economic motivation, medium risk orientation, medium sources of information and medium market orientation of recommended package of practices of green gram. High cost ploughing (80%), lack of knowledge about compost / FYM making by scientific method (76.66%), sowing is not in time because of uncertainty of rainfall (90%), lack of information about recommended varieties (82.5%), more seed cost (86.66%), cost of fungicides are high (71.66%), non - availability of fertilizers at proper time (80%), less information about sucking pest control (93.33%), non - availability of spraying and dusting appliances (54.16%), cost of insecticides / fungicides are high (94.16%), lack of knowledge about IPM (96.66%) and unavailability of laborer (89.16%) were the main constraints.

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