

## Adoption of Recommended Green Gram Cultivation Technology by Tribal FLD Farmers

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### ABSTRACT

The present study was conducted in Sabarkantha district. Total 100 tribal FLD green gram farmers were selected by proportionate random sampling method for present study. The majority of the respondents were illiterate, had big family, possessed membership in one organization, medium extension participation, medium annual income, doing farming as well as animal husbandry, medium herd size and had 10 to 20 years of farming experience. The respondents were having over all medium level of adoption regarding green gram cultivation technology. The positive and significant relationship was exhibited by education, social participation, land holding, annual income, occupation and herd size with adoption of green gram cultivation technology.

**Keywords:** Tribal FLD farmers, Green gram cultivation technology

### INTRODUCTION

Krishi Vigyan Kendra has been functioning in the Sabarkantha district since February 2005. The main aim of Krishi Vigyan Kendra is transfer of technology through on and off campus training programmes for farmers and extension functionaries, front line demonstrations, on farm trials and other extension activities. Front line demonstration on different crops grown in the district is the mandatory activity of Krishi Vigyan Kendra. Tribal farmers are growing pulse crops since couple of decades. Green gram is important pulse crop grown by tribal farmers. Thus, Krishi Vigyan Kendra had given front line demonstrations on green gram crop to tribal farmers. Thus, study on knowledge and adoption of recommended green gram cultivation technology by tribal FLD beneficiary farmers of Sabarkantha district was felt necessary. The study was conducted with following objectives.

### OBJECTIVES

- (i) To study selected personal and socio-economic attributes of respondents
- (ii) To study adoption level of respondents regarding recommended green gram cultivation technology
- (iii) To determine the association between selected personal and socio-economic attributes of respondents with their level of adoption

### METHODOLOGY

The present study was conducted in Sabarkantha district. The all the tribal villages in which green gram FLDs had been given by KVK, Khedbrahma were selected purposively from Khedbrahma, Bhiloda and Vijaynagar talukas. Total 200 FLDs on green gram were given by KVK, Khedbrahma. The sample was selected by proportionate random sampling method. The detail is as under.

Name of takuka	No. of green gram FLD beneficiaries	Random selection of farmers in proportion to 50 per cent
Khedbrahma	130	65
Vijaynagar	30	15
Bhiloda	40	20
Total	200	100

Thus, total 100 tribal farmers were selected for present study. The data were collected by personal interview. The interview schedule was developed through discussion with experts, scientist and extension officers working in the district. The percentage, arithmetic mean and standard deviation were used for classification of respondents into different categories. The coefficient of correlation test was used to find out association between dependent and independent variables.

**RESULTS AND DISCUSSION**

**Personal and socio-economic attributes of respondents**

**Table 1: Distribution of the respondents according to their profile**

n=100

Sr. No.	Attributes	Classification	Frequency	Percent
1	Age	Young (Up to 35 years )	30	30.00
		Middle (35 to 50 years)	34	34.00
		Old (above 50 years)	36	36.00
2	Education	Illiterate	38	38.00
		Primary education (1-7 Std.)	30	30.00
		Secondary education (8-10 Std.)	18	18.00
		Higher secondary education (11-12 Std.)	14	14.00
3	Family size	Small family (Up to 5 members )	24	24.00
		Big family (Above 5 members )	76	76.00
4	Land holding	Marginal (Up to 1.00 ha)	46	46.00
		Small (1.10 to 2.00 ha)	50	50.00
		Medium (2.10 to 4.00 ha)	04	04.00
5	Membership in organization	No membership	22	22.00
		Membership in one organization	46	46.00
		Membership in more than one organization	28	28.00
		Membership with holding position	04	04.00
6	Extension participation Mean=4.76 S. D.=2.40	Low	15	15.00
		Medium	69	69.00
		High	16	16.00
7	Annual Income Mean=0.60 S. D.=0.42	Low (below 0.18 lacs)	10	10.00
		Medium (0.18 – 1.02 lacs)	69	69.00
		High (above 1.02 lacs)	21	21.00
8	Occupation	Farming only	04	04.00
		Farming + labour	06	06.00
		Farming + Animal husbandry	86	86.00
		Farming + Service	04	04.00
9	Herd size Mean=5.65 S. D.=2.29	Low (Up to 3)	18	18.00
		Medium (4 to 7)	66	66.00
		High (Above 7)	16	16.00
10	Farming experience	Below 10 years	04	04.00
		10 – 20 years	42	42.00
		21 – 30 years	23	23.00
		More than 30 years	31	31.00

The data presented in Table 1 show that 36.00 per cent of respondents belonged to old age group and 34.00 per cent belonged to middle age group followed by young age group (30.00%). The results revealed that 38.00 per cent of respondents were illiterate, followed by primary education (30.00%), secondary education (18.00%) and higher secondary education (14.00%). The majority of respondents had big family (76.00%) while 24.00 per cent respondents had small family. The data shows that majority of respondents were small farmers (50.00 %), followed by marginal farmers (46.00%) and medium farmers (4.00%).

The 46.00 per cent of the respondents had membership in one organization followed by membership in more than one organization (28.00%) and no membership (22.00%). Only 4.00 per cent respondents were holding position in social organization. The data indicated that majority of the respondents fall under medium level of extension participation category (69.00 %) where as 16.00 per cent and 15.00 per cent of them possessed high and low level of extension participation categories, respectively. The majority (69.00%) of the respondents fall under medium group of annual income followed by 21.00 percent in high income

group and 10.00 per cent in low income group. The data in Table 1 indicated that majority (86.00%) of the respondents had occupation of farming + animal husbandry where as 6.00 percent of respondents had occupation of Farming + labour. An equal number of respondents (4.00%) had occupation of farming and Farming + Service. The majority (66.00%) of the respondents possessed medium herd size followed by small herd size (18.00%) and big herd size (16.00%). The 42.00 per cent of the respondents possessed 10 to 20 years of experience in farming followed by 31.00 percent and 23.00 per cent of them had more than 30 years and 21 to 30 years experience in farming, respectively. Only 4.00 per cent respondents had below 10 years farming experience.

**Level of adoption regarding green gram cultivation technology**

**Table 2 : Distribution of the respondents according to their level of adoption regarding green gram cultivation technology** n=100

Sr. No	Level of adoption	Frequency	Per cent
1	Low (Up to 7 score )	12	12.00
2	Medium (8 – 10 score)	71	71.00
3	High (above 10 score)	17	17.00

Mean=8.93

SD=1.50

The data in Table 2 revealed that majority (71.00%) of the respondents possessed medium level of adoption. Whereas 17.00 per cent and 12.00 per cent of them possessed high and low level of adoption regarding green gram cultivation technology, respectively.

**Association of selected attributes of respondents with their adoption of green gram cultivation technology**

The data in Table 3 shows the correlation coefficient of the adoption with the different attributes of respondents. It clearly indicates that the variables viz; education, social participation, annual income, occupation, land holding and heard size had shown positive and significant association with adoption of respondents regarding green gram cultivation technology. Family size of the respondents had sown negative and non significant association with adoption. Extension participation of the respondents had no association with level of adoption. Age and farming experience had established negative and significant association with level of adoption of respondents regarding green gram cultivation technology.

**Table : 3 Association of selected attributes of respondents with their adoption of green gram cultivation technology** n=100

Sr. No.	Attributes	Adoption
X <sub>1</sub>	Age	-0.401**
X <sub>2</sub>	Education	0.411**
X <sub>3</sub>	Family size	-0.085 <sup>NS</sup>
X <sub>4</sub>	Land holding	0.280**
X <sub>5</sub>	Social participation	0.338**
X <sub>6</sub>	Extension participation	0.158
X <sub>7</sub>	Annual income	0.282**
X <sub>8</sub>	Occupation	0.263**
X <sub>9</sub>	Herd size	0.339**
X <sub>10</sub>	Farming experience	-0.338**

\*\* Sginificant at one per and level of significant  
NS Non Significant

**CONCLUSION**

It can be concluded that majority of the respondents had big family, possessed membership in one organization, medium extension participation, medium annual income, doing farming as well as animal husbandry, medium herd size and had 10 to 20 years of farming experience. Nearly equal numbers of respondents were observed in young, middle and old aged group. Majority of the respondents were illiterate. The respondents were having over all medium level of adoption regarding green gram cultivation technology. Education, social participation, land holding, annual income, occupation and heard size exhibited positive and significant relationship with adoption of respondents regarding green gram cultivation technology.

**REFERENCES**

Thakarar D. M. and Kher A. O. (1999-2000). A scale to measure attitude of farmers towards well recharging. *Guj. J. Ext. Edu.* 10 & 11: 45-48.

Darandale A. D. (2010). A study on attitude of tribal farmers towards organic farming practices in maize crop. M. Sc. (Agri.) Unpublished thesis, AAU, Anand.