

Adoption Behaviour of Beneficiary and Non-Beneficiary (FLD) Farmers of Green Gram Cultivation Khargone District of Madhya Pradesh

Mr. Bhupendra Chouhan¹, Dr. Sandhya Choudhary², Dr. Abhay Wankhede³,
Dr. K. S. Kumar⁴

¹M.Sc. Agricultural Extension & Communication Final Year Student 2019

²Professor, Agricultural Extension & Communication, College of Agriculture, Indore

³Associate Professor, Agricultural Extension & Communication, College of Agriculture, Indore

⁴Professor, Agricultural Statistics, College of Agriculture, Indore

Abstract— India produces variety of pulses including chickpea 39.00 per cent, pigeon pea 21.00 per cent, green gram 11.00 per cent, black gram 10.00 per cent, lentil 7.00 per cent, field pea 5.00 per cent and other of around 14.00 million tonnes annually from an area of around 23.63 million hectares, with an average yield of around 650 kg per hectare, which is one of the largest producing country in the world. The major pulses producing states are Madhya Pradesh 23.00 per cent, Uttar Pradesh 18.00 per cent, Maharashtra 14.00 per cent, Rajasthan 11.00 per cent, Andhra Pradesh 9.00 per cent and Karnataka 6.00 per cent where pulses are predominantly grown as rainfed crops. The Front Line Demonstration (FLD) is to demonstrate newly released crop production and protection technologies and its management practices in the farmers' field under different agro-climatic regions and farming situation. the impact of Krishi Vigyan Kendra in terms of adoption of improved agriculture production practices, a sample of 60 non-beneficiary farmers was selected from control villages. Thus, a total of 120 farmers will be selected as respondent for the study purpose. Out of total beneficiaries, 45.00 per cent had medium adoption level, followed by 33.33 per cent had high and only 21.67 per cent had low adoption level of green gram production technology.

Keywords— Adoption Behavior, Beneficiary, Non-Beneficiary, Front line Demonstration (FLD), Farmers, Green Gram.

I. INTRODUCTION

Green gram is an important pulse crop in our country after chickpea and pigeon pea, cultivated in three different seasons viz., kharif, rabi and summer. India is the largest producer of green gram that accounts for 54% in the world production and covers 65% of the world acreage and it is grown on about 3.70 million hectares with annual production of 1.57 million tonnes. Green gram is grown in Khargone district (M.P.) that occupies 9905 hectares area and the total production was 3900 tones with average productivity of 3.70 quintal per hectare. For development of production and productivity of green gram in Khargone district, FLDs are being executed by personnel of KVK program from 2010.

Front line demonstrations (FLDs) have been proved the best means for creating awareness of new development in technology generation and to assess the various socio-

economic variables for affecting the adoption level of farmers as the regular feedback is a necessary component of these demonstrations. KVK in Khargone district has been organizing FLDs on green gram, therefore keeping in view the researchers keen interest to know adoption behaviour of beneficiaries' and non beneficiaries in cultivation of green gram, the study was conducted with the following objective

Objective

1. To compare the adoption behavior of green gram production technology among beneficiaries and non-beneficiaries (FLD) Farmers

II. REVIEW OF LITERATURE

Jatav (2010) reported that majority of FLD respondents (53.33%) had medium level of scientific

temperament, while 44.44 per cent had high and only 2.22 per cent had low level of scientific temperament.

Kangali (2012) revealed that in case of adopter of frontline demonstration of chickpea growers, majority of the farmers (50.00%) possessed partial adoption of total chickpea production technology considered in the study followed by (40.00%) farmers had full adoption and (10.00%) farmers had low adoption of chickpea production technology respectively.

Kumari (2015) reported that majority of the FLD beneficiaries (58.00%) were having high adoption of wheat production technology. Whereas majority of non-FLD beneficiaries (50.00%) were having medium adoption of wheat production technology.

Singh (2017) reported that adoption of an improved package of practices in wheat cultivation recorded higher B:C ratio (1.92) as compared to FP (1.63). Yield enhancement and higher net returns observed under FLDs of improved technologies in wheat. Thus, the productivity of wheat could be increased with the adoption of recommended improved package of practices.

III. METHODOLOGY

The present study was conducted in Khargone district M.P. For this study purposive sampling technique was adopted, where FLD was conducted by Krishi Vigyan Kendra Khargone (M.P.) during 2018-19. Khargone District constitutes of nine blocks namely Barwaha, Bhagwanpura, Bhikangaon, goganwa, Kasrawad, Khargone, Maheshwar, Segaon and Ziranya. Out of these blocks, two block Khargone and kasrawad had been taken by the KVK for green gram FLD. Therefore this block was selected purposively for the study. Khargone and Kasrawad block comprises of 92 villages Panchayat. Out of these six villages were taken by the KVK for green gram FLDs in two block. All the six villages were selected purposively for the study. Finally at last stage a comprehensive list of all the beneficiary farmers from each selected village was prepared with help of records of Krishi Vigyan Kendra. From each sample village, 60 beneficiary farmers will be selected through randomly sampling method as respondents for the study purpose. Apart from this, in order to assess the impact of Krishi Vigyan Kendra in terms of adoption of improved agriculture production practices, a sample of 60 non-beneficiary farmers was selected from control villages. Thus, total of 120 farmers will be selected as respondent for the study purpose.

IV. RESULT & DISCUSSION

Adoption behaviour of green gram production technology among beneficiaries and non-beneficiaries:

Table 1: Distribution of beneficiaries and non beneficiaries according to their adoption behavior of green gram production technology, n=120

S. No.	Categories	No. of beneficiaries		No. of non beneficiaries	
1.	Low	13	(21.67%)	31	(51.67%)
2.	Medium	27	(45.00%)	18	(30.00%)
3.	High	20	(33.33%)	11	(18.33%)
Total		60		60	

Table shows that out of total beneficiaries, 45.00 per cent had medium adoption level, followed by 33.33 per cent had high and only 21.67 per cent had low adoption level of green gram production technology.

The table also revealed that out of 60 non-beneficiaries farmers, higher percentage of the non beneficiaries i.e., 51.67 per cent belonged to medium adoption group of green gram growers

Table.2: Practice wise adoption level of green gram growers about green gram production technology

S.N.	Practices	Beneficiaries level of adoption						Total score	Mean score
		High		Medium		Low			
		F	%	F	%	F	%		
1	Selection of land	24	40.00	20	33.33	16	26.66	128	1.13
2	Improved varieties	35	58.33	20	33.33	05	8.33	145	2.41
3	Seed rate	30	50.00	18	30.0	12	20.00	138	2.30
4	Seed treatment	22	36.66	19	32.66	19	32.66	123	2.05
5	Bio fertilizer management	15	25.00	22	36.66	23	38.33	90	1.50
6	Manure & fertilizer management	27	45.00	20	33.33	13	21.66	154	2.56
7	Spacing	18	30.00	25	41.66	17	28.33	121	2.01

8	Weed management	25	41.66	17	28.33	18	30.00	127	2.11
9	Insect & pest management	20	33.33	18	30.00	22	36.66	118	1.96
10	Disease management	20	33.33	26	43.33	14	23.33	126	2.10

S.N.	Practices	Non beneficiaries level of adoption						Total score	Mean score
		High		Medium		Low			
		F	%	F	%	F	%		
1	Selection of land	10	16.66	22	36.66	28	46.66	102	1.7
2	Improved varieties	08	13.33	19	32.66	33	55.00	95	1.58
3	Seed rate	09	15.00	24	40.00	27	45.00	102	1.7
4	Seed treatment	14	23.33	21	35.00	25	41.66	109	1.81
5	Bio fertilizer management	11	18.33	18	30.00	31	51.66	100	1.66
6	Manure & fertilizer management	16	26.66	23	38.33	21	35.00	115	1.91
7	Spacing	12	20.00	16	26.66	32	53.33	116	1.93
8	Weed management	10	16.66	14	23.33	36	60.00	94	1.56
9	Insect & pest management	08	13.33	11	18.33	41	68.33	87	1.45
10	Disease management	12	20.00	17	33.33	31	51.66	101	1.68

REFERENCES

- [1] Jatav, H.R. (2010). Impact of Front Line Demonstration on Scientific Temperament of Wheat growers in Indore and Dewas districts (M.P.), M.Sc. (Ag.) Thesis, R.V.S.K.V.V., Gwalior.
- [2] Malambo, M., Mukanga, M., Nyirenda, J., Kabamba, B., & Salati, R. (2019). Knowledge and Practice of Pesticides use among Small Holder farmers in Zambia. *International Journal Of Horticulture, Agriculture And Food Science*, 3(4), 184-190. doi: 10.22161/ijhaf.3.4.5
- [3] Kangali, Sarita (2012). A study on adoption behaviour of pigeonpea technology among the farmers of Simour block of Rewa district of M.P., M.Sc. (Ag.) Thesis Submitted to the R.V.S.K.V.V. Gwalior..
- [4] Kumari K. (2015). A study on impact of front line demonstration on area and productivity of wheat growers in Jabalpur district (M.P.). Thesis J.N.K.V.V., Jabalpur
- [5] G. I., W., O. A., U., I., A., C., A., & F.B., U. (2016). Allocative Efficiency of Smallholder Cocoyam Farmers in South-South, Nigeria. *International Journal Of Environment, Agriculture And Biotechnology*, 1(4), 796-803. doi: 10.22161/ijeab/1.4.24
- [6] Siagh, R.K., R.B. Gaur, Vichiter Singh, Vijay Prakash and R.S. Verma (2005). Studies on technology transfer through front line demonstration on mungbean in semiarid region of Rajasthan. *Indian J. Pulses Res.* 18(1): 64-66.