

## EVALUATION OF FRONT LINE DEMONSTRATION ON GROUNDNUT

A. J. Patel<sup>1</sup> and M. A. Tunvar<sup>2</sup>

### INTRODUCTION

India has been self sufficient in food grains, but production of oil seed crops remain static during last 30 to 40 years. There is an urgent need to increase the production of oil seeds. To accelerate the production of oil seeds, ICAR has started front line demonstration (FLD) programme through Krushi Vigyan Kendras (KVKs). FLD on groundnut has been started by KVK, GAU, Deesa since 1995. Latest recommended package of practices of groundnut crop was demonstrated on the farmers' fields. This research study was under taken with a view to evaluate the FLD on groundnut with the following specific objectives:

1. To evaluate the FLD in terms of adoption of recommended groundnut production technology.
2. To study the productivity and economics of groundnut on farmers field before and after FLD.

### METHODOLOGY

Three talukas namely Deesa, Dantiwada and Vadgam of Banaskantha district were purposively selected for the present study as the FLDs on groundnut were conducted in three the talukas. Godh village of Dantiwada taluka; Rampura, Khardosan, Vadaval villages of Deesa taluka and Kabirpura village of Vadgam taluka were selected purposively as the FLDs were conducted in these villages during the years 1994-95 to 2000-2001. List of farmers on whose farms FLDs on groundnut were

organized were prepared from the records of the KVK. Ten farmers from the each village were randomly selected from the list. Thus, a total of fifty farmers were selected for the present study. The records collected before conducting the FLDs by the KVK on the eighteen production technologies of groundnut crop were used. These were compared with the the prevailing production technologies of groundnut crop in these villages. The yield data were also collected.

In both the cases before and after FLD the respondents were remained same for the present study. During the year 2003, data were collected in light of the objectives of the present study, tabulated, analyzed and interpreted.

### RESULTS AND DISCUSSION

#### Adoption of production technologies:

The records of production technologies of groundnut before conducting FLD on the 18 production technologies were compared with the present level of adoption of these technologies. The response is depicted in Table 1.

The data in the Table 1 indicated that highest adoption of time of sowing, inter culturing and seed treatment, to the tune of almost 60 per cent before FLD. The impact of FLD is visualized from the fact that for method of fertilizer application at basal doze, weeding, inter culturing and seed treatment were adopted by hundred per cent of the farmers. More than 92 farmers have adopted the technologies of dose of insecticides and time of sowing.

<sup>1</sup> Training Organizer, KVK, GAU, Deesa

<sup>2</sup> Training Assistant KVK, GAU, Deesa

**Table 1. Extent of adoption of recommended package of practices of groundnut crop before and after FLD**

Sr. No.	Practices	Adoption of recommended practices			
		Before FLD		After FLD	
		No.	Percent	No.	Percent
1	Type of groundnut	22	44	34	68
2	Improved varieties	23	46	35	70
3	Seed rate	17	34	30	60
4	Seed treatment D. M. - 45	06	12	20	40
5	Time of sowing	31	62	48	96
6	Sowing distance	20	40	35	70
7	FYM	09	18	16	32
8	Fertilizers	20	40	36	72
9	Method of fertilizers application (Basal )	25	50	50	100
10	Top dressing fertilizers (Urea)	18	36	39	78
11	Use of Sulphur	14	28	33	66
12	Weeding	32	34	50	100
13	Inter culturing	30	60	50	100
14	Irrigation	19	38	32	64
15	Seed treatment (for white grub)	30	60	50	100
16	Dose of insecticides	17	34	46	92
17	Diseases	11	22	24	48
18	Pests	26	52	42	84

N=50

**Yield of groundnut:**

The yields of groundnut obtained by the respondents before and after FLD were also compared.

Stage	Yield of groundnut
Before FLD	1850 kg/h
After FLD	2295 kg/h
Per cent increase	24.05 per cent

The data in the Table 3 revealed that the yield of groundnut per hectare was increased 24.05 per cent after FLD. The calculated 't' was also indicated significant difference between two groups.

**Profitability of FLD groundnut:**

The cost of inputs was calculated for before and after FLD groundnut. The yield data of groundnut was also recorded before

conducting FLD and after conducting FLD. As per the market price the income was calculated for before and after FLD and profitability per hectare was calculated.

The data in the Table 4 revealed that before FLD the yield of groundnut was 18.50 q/h, while after FLD the yield of groundnut was 22.95 q/h. The prevailing market price was Rs. 1,700.00 per q and on that basis the profitability was calculated which showed that net profit from groundnut crop before FLD was Rs. 25,889 per h, while the net profit from groundnut crop after FLD was Rs. 32,024 per ha. This means FLD has added an additional net profit to groundnut farming to the tune of Rs. 6,135.00 per h.

**Table 4 : Profitability of FLD on groundnut**

Sr. No.	Items	Before FLD	After FLD
1	Cost of inputs	5561=00	6991=00
2	Yield of groundnut per ha.	18.50	22.95
3	Market price ( Rs. /Qt )	1700	1700
4	Gross income ( Rs. / ha. )	31450=00	39015=00
5	Net profit (Rs. / ha. )	25889=00	32024=00

**CONCLUSION**

In light of the finding following conclusion may be drawn:

On the set of technologies of groundnut crop, before FLD the adoption of the crop were not known by respondents but after conducting the FLD programme on the farmers' field, most of the respondents

became aware about the production technologies of groundnut. Majority of the respondents were adopted most of the production technologies of groundnut after FLD. The yield of groundnut was increase 24.05 percent after FLD as compared to before FLD. It shows position impact of FLD on the adoption.