

IMPACT OF PARTICIPATORY PLANNING ON ADOPTION OF NEW TECHNOLOGY THROUGH FLD (OIL SEEDS)

Dr. P.K. Singh

Front Line Demonstration (FLD) is a new concept of field demonstration evolved by the Indian council of Agricultural Research with the inception of Technology Mission on oil seeds crops during mid eighties. The field demonstrations conducted under the close supervision of scientists of the National Agriculture Research System / Krishi Vigyan Kendra are called Front Line Demonstrations because the technologies are demonstrated for the first time by the scientists themselves before being fed into the main extension system of the State department of Agriculture. The main objective of Front Line Demonstration is to be demonstrate newly released crop production and protection technology and its management practice in the farmers field under different climatic regions and farming situations.

In Saharanpur (UP) district FLD on Oilseeds is carried out by Krishi Vigyan Kendra on three crops viz., Mustard, Sunflower and Groundnut. The present study focuses on Mustard. The area under mustard during last five years (from 1995 to 1999-2000) is around 6000 ha with average yield between 9-10 qt/ha. Under Front Line Demonstration, (FLD) component demonstration is followed rather than full package demonstration so that there is an impression that the farmer is not getting subsidy but technology for improving yield.

Selection of Technology to be demonstrated :-

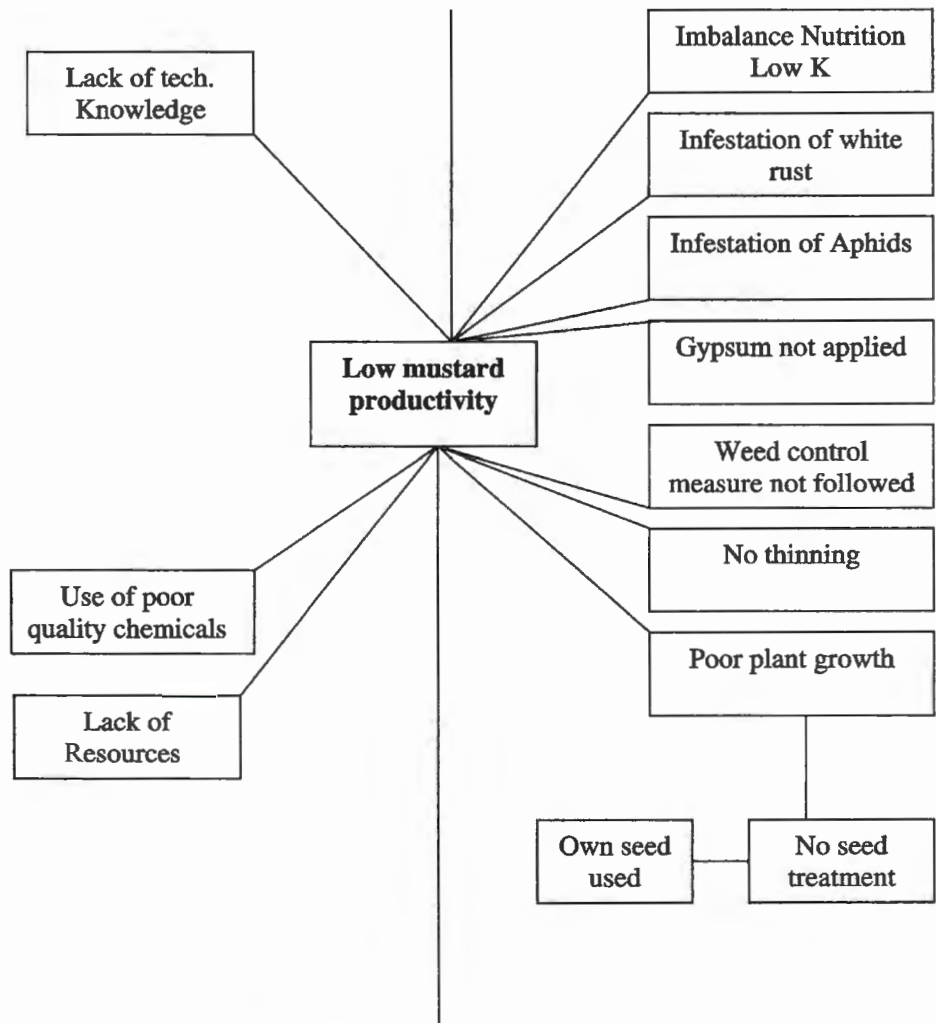
The most crucial point for transferring the message of demonstrations to the farmers is selection of superior technology over the technology already in use because many a times under the top down approach, recommended package of practices is considered as the ultimate basis for technical planning of demonstrations and it has been observed that in many cases yield under

* Assistant Professor (Agronomy) Krishi Vigyan Kendra, PO-Chander Nagar, Saharanpur district, UP - 247001

demonstration plot has not been found to be significantly higher than the yield of plots which are outside the demonstration plot. So, for planning of the critical inputs / technology various tool of PRA were used to decide the most critical inputs in order of prioritization having effect on yield of mustard for deciding technology / critical input semi structured interview (SSI), Problem – cause analysis and matrix ranking were done with mustard growing farmers.

PROBLEM - CAUSE ANALYSIS

CROP - MUSTARD



SOCIO-ECONOMIC CAUSES

BIO-PHYSICAL CAUSES

Gap in adoption as the basis for selection for critical inputs under demonstration:

The intervention points were identified on consultation with the farmers from problem cause three

The deciding factors for selecting critical inputs under demonstration were gap in adoption of a technology (full, partial) and percentage of farmers not following recommended practices.

Item	Recommended Practice	Existing Practice	Gap in Adoption	Percentage Farmers not Recommended Practice	Farmer Prioritization for critical inputs
Variety	Vardan	Local	Full	90%	IV
Seed rate	5 kg/ha	3-4 kg/ha	Partial	50%	IV
Seed treatment	2g thiram / kg seed	Nil	Full	100%	VI
Gypsum application	200 kg / ha	Nil	Full	100%	III
Fertilizer	N-120 kg/ha P-60 kg/ha K-40 kg/ha	N-80 kg/ha P-30 kg/ha K-Nil	Partial	100%	II
Weed control	Pendimethal in 3.3 lit/ha	Manual control	Partial	70%	V
Aphids**	Monocrotophos 750 ml/ha	Application of insecticide without knowing	Partial	90%	I
White rust	Dithan M-45 2 kg /ha	In correct dose	Partial	100%	II

Note : Farmers always fail to distinguish between infestation of disease and insect attack.

The following inputs were finalized by farmers and scientists under demonstration:

- I. Improved treated seed (Vardan variety)
- II. Gypsum @ 200 kg / ha
- III. Insecticide Monocrotophos @ 850 ml / ha control aphids
- IV. Fungicid Dithane M-45 @ kg / ha to control white rust

Results and discussion

The demonstration was conducted at the farmers field under the management of scientists and farmers on finalized package of practices. The results obtained during last the 5 years are given below.

Year	No. of farmers	Demonstration yield (q/ha)	Local yield (q/ha)
1995-96	13	17.10	12.00
1996-97	10	15.80	11.00
1997-98	11	14.00	9.00
1998-99	6	15.20	10.50
1999-2000	8	20.9	12

Conclusion:

The participatory approach in planning and conducting the demonstration help to motivate the farmers in adopting new technology. The approach in conducting the demonstration was positive from farmers side as they felt involved. The farmers paid substantial cost of demonstration rather than treating the demonstration critical inputs as subsidy.

The bottom-up approach planning and conducting the demonstration proved better as it created sense of “owning” the demonstration among farmers. The bottom-up approach of planning led to the selection of the right intervention and critical inputs for better transfer of technology.