

Interaction Mechanism at Farm House Hold level in Bundelkhand Region of Uttar Pradesh

S.B. Pal¹, A.K. Singh² and Lakhan Singh³

1. Asstt.Prof., Directorate of Ext., CSAUA&T, Kanpur, 2. Zonal Project Director,

3. Sr. Scientist (Agril Ext.), Zone IV (ICAR), Kanpur-208002

Corresponding author e-mail : lakhanextn@gmail.com

ABSTRACT

The extension is now becoming more diversified more technology intensive and more demand driven. This requires the extension worker at the cutting edge level to be master of so many trades. It requires empowering farmers to share and utilize the latest technological information among villagers for quick transfer of technologies. Bundelkhand region has very limited resources and communication facilities with rainfed situation. The study was conducted to understand and explore the mechanism of interaction among farmers at farm household level in Bundelkhand region of Uttar Pradesh in 2002. The study showed no organized way of interaction among farmers at farm household level. Agriculture and animal husbandry were found on second priority as compared to social, political and familiar issues. Organized meetings were utilized by very few numbers of farmers, which need to be improved. Personal contact and field visits were the major means of sharing information by the farmers. There is an urgent need to sensitize farmers to interact on the issues related to horticulture and animal husbandry more frequently

Key words: *Extension worker; Cutting edge level; Technological information ; Quick transfer of technologies*

The trend of agricultural extension system till 1980s had been to focus specifically on important crops of the concerned area. Agricultural extension in the current context has been recognized as an essential mechanism for delivering information and advice as an input in to modern farming. The extension is now becoming more diversified more technology intensive and more demand driven. This requires the extension worker at the cutting edge level to be master of so many trades. The use of information technology can help the extension workers to be more effective in meeting farmers' information needs (Hai, 2003). The new approach enables the farmers and communication sources to develop an effective working partnership. Every one involved was more aware of what was required and the value of each other's contribution to the process. Empowering farmers to share and utilize the latest technological information among villagers will be helpful to speed-up adoption and diffusion rate (Singh, (1997).

Bundelkhand region has very limited resources and communication facilities in addition to difficult rainfed

situation. There is a challenge to help rural farming community to gain timely and affordable access to information on agriculture and animal husbandry that will help improve their lives. There is a culture of silence, which thwarts the level of interaction among the farmers in such areas. If level of interaction may be one to one or within the group, information on improved technology will pass to others and across the blocks of the village people. The present study was conducted with the specific objective to understand and explore the mechanism of interaction among farmers at farm household level in Bundelkhand region of Uttar Pradesh in 2002.

METHODOLOGY

The study was conducted in Bundelkhand region of Uttar Pradesh. The region suffers from lack of rainfall, low soil fertility, low literacy, traditional cropping pattern, poor communication facilities, etc. There are two administrative divisions viz Jhansi and Chitrakoot Dham. Jalaun from Jhansi division and Hamirpur district from Chitrakoot Dham division were purposively

selected for the study. Block Jalaun from district Jalaun and Kurara from district Hamirpur were randomly selected for drawing the sample. A set of four villages from each block were randomly selected. Thus, 50 respondents from each village were identified, which constitute total sample of 400 respondents. The criteria for selecting the farmers as respondent was their economic resource situation i.e. lands less, poor and rich. A group of 50 rural families were selected from each village. Different communication sources followed by farm households in Bundelkhand region were included under study. Exploratory research design was used for the investigation. The data were collected with structured interview schedule followed by group discussion. The data were analyzed using simple statistical techniques. The mechanism of interaction among farmers at farm household was included the following aspects: Content (social, political, agricultural and familiar); Place (home, field and panchayat bhawan); Time (morning, noon, evening and night).

RESULTS AND DISCUSSION

The farmer's interaction mechanism on different subjects and method of information sharing among farmers are given as under:

Mechanism of interaction among farmers: The data (Table 1) indicate that interaction mostly take place at home; field and at panchayat bhavan especially on pulses production and protection technologies. Most of the farmers (10-60) per cent preferred interaction during noon whereas 20-50 per cent of the farmers interacted on various subject matters during evening. The interaction during night mostly took place at home and mostly discussion concentrated on social & familiar issues. Very few farmers were found involved in discussion during morning hours.

Subject of discussion among farmers: The farmers interact on various issues pertaining to social, agricultural, political and familiar, etc. The discussion among farmers depends upon timeliness of the subject and also their preference for passing time or driving certain conclusions for existing problems.

The findings indicate that social and family related issues were discussed by all the farmers. The second priority subject for discussion was revealed to be agriculture (75%) followed by animal husbandry (65.5%), marketing (55.25%). The farmers were also

concerned for the subjects like loaning (35.5%) and political (35.75%). The farmers found involved in discussion on subjects like horticulture & small scale industries, were very small in percentage. In agriculture, quality seed, insect and disease management of pulses were included as subject. This may be because of traditional agriculture based on rainfed farming being practiced in Bundelkhand zone.

It is clear from data (Table 2) that social and family related subjects were discussed by all the farmers and the agriculture and animal husbandry were on the next priority subjects for discussion among farmers. There is an urgent need to sensitize farmers to interact on the issues related to horticulture and animal husbandry more frequently than what it is being done now.

Table 1: Mechanism of interaction among farmers

Place	Place wise subject ning	Time of interaction			
		Mor- noon	After- ning	Eve- ning	Night
Home	Social	—	62.50	37.50	50.00
	Political	—	70.00	30.00	20.00
	Agril.	12.50	60.25	27.25	10.00
	Familiar	—	40.25	45.25	60.00
Field	Social	9.75	55.50	34.75	—
	Political	—	60.50	39.50	—
	Agril.	14.50	65.00	20.50	—
	Familiar	23.00	52.50	24.50	—
Panchayat Bhavan	Social	—	20.00	30.00	—
	Political	—	30.00	50.00	—
	Agril.	—	50.00	40.00	—
	Familiar	—	10.00	30.00	—

Table 2: Subject of discussion among farmers

S. No.	Subject	%age
1.	Agriculture	75.00
2.	Animal husbandry	65.50
3.	Horticulture	15.50
4.	Small scale industries	5.75
5.	Marketing	55.25
6.	Loaning	35.50
7.	Social	100.00
8.	Political	35.75
9.	Familiar	100.00

Method of information sharing among farmers: The farmers adopt different methods for sharing information related pulses production technologies among each other (Table 3).

The data revealed that farmers mostly make personal contact with each other for seeking certain information possessed by other farmers. Large number of farmers (55.50%) believes in making field visits of the fellow farmers for having clear cut information on certain technologies. Unscheduled discussion also play major role in obtaining information from each other. A very low number of respondents (12.50%) opted for organizing farmers' meetings for sharing information. The data indicate that personal contact and field visits were the major means of sharing information by the farmers. Organized meetings were utilized by very few numbers of farmers, which need to be improved.

Table 3: Method of information sharing among farmers

S. No.	Particular	%age
1.	Field visit	55.50
2.	Discussion	35.50
3.	Meeting	12.50
4.	Contact	65.25

Level of technological gaps related to Pigeon pea crop: Pigeon pea grown during *kharif* in Bundelkhand region, possessed number of technological gaps, significant being full gap in case of use of seed treatment, pest disease, weed management and basal application of fertilizers. The technological gaps were quite high towards most of the operations. Sowing time recommended by scientists was followed by all the farmers.

Therefore, the significant areas on which interventions are required included varieties, seed treatment, basal application of fertilizers and integrated management.

Level of technological gaps related to Lentil crop: Lentil is an important crop of Bundelkhand region grown in 19902 ha area in two districts on restricted irrigation available, 15% and 70% farmers indicated partial and full gaps respectively in case of using recommended varieties. All the farmers showed full gap in case of using seed treatment, organic manure, control of disease, pests and weed management in case of lentil cultivation.

The findings indicated the partial gap in case of basal application of fertilizers. It was quite significant keeping in view the importance of phosphatic fertilizer for pulses. Therefore, the extension effort is mostly required towards use of recommended varieties, use of basal application of fertilizer and integrated pest management in the case of lentil crop. Recommended

Indian Res. J. Ext. Edu. 10 (1), January, 2010
seed rate, sowing time and method of sowing were used by farmers.

Table 4: Level of technological gaps related to Pigeon pea crop

S.No.	Items of packages	Level of technological gap		
		Full	Partial	None
1.	Varieties	68.00	21.50	10.50
2.	Seed rate	-	73.00	27.00
3.	i Sowing time	-	-	100.00
	ii Method of sowing	95.50	-	4.50
4.	Seed treatment	100.00	-	-
5.	Organic manure	100.00	-	-
6.	Fertilizer application NPK (Kg/ha)			
	i Basal	94.50	5.50	-
	ii Top dressing	-	-	-
7.	Pest management	75.00	17.50	7.50
8.	Disease management	96.50	-	3.50
9.	Weed management	100.00	-	-
10.	Yield (q/ha)	-	100.00	-

Table 5: Level of technological gaps related to lentil crop

S.No.	Items of packages	Level of technological gap		
		Full	Partial	None
1.	Varieties	70.00	15.00	15.00
2.	Seed rate	-	25.50	74.50
3.	i Sowing time	-	-	100.00
	ii Method of sowing	-	-	100.00
4.	Seed treatment	100.00		
5.	Organic manure	100.00		
6.	Fertilizer application NPK (Kg/ha)			
	i Basal	-	100.00	-
	ii Top dressing	-	100.00	-
7.	Pest management	76.00	19.50	4.50
8.	Disease management	96.50	-	3.50
9.	Weed management	100.00	-	-
10.	Yield (q/ha)	-	100.00	-

Level of technological gaps related to chickpea crop: Chickpea is very important crop grown in 172009 ha area in two districts. Still, there were 51% farmers who did not use recommended varieties. Seed treatment (95.50%), organic manure (85%), number of irrigations (60%) basal application of fertilizer (28%), pest management (77%), disease management (79%) and weed management (100%) exhibited full gaps. 37% in

case of seed rate, 40% in case of irrigation, 67% in case NPK use. Only one operation i.e. method of sowing exhibited no gap. Therefore, use of varieties, seed rate, seed treatment, basal application of fertilizers, pest, diseases and weed management were the major areas where technological gaps existed.

Table 6: Level of technological gaps related to Chickpea crop

S.No.	Items of packages	Level of technological gap		
		Full	Partial	None
1.	Varieties	51.00	37.00	12.00
2.	Seed rate	-	45.00	55.00
3.	i Sowing time	-	55.00	45.00
	ii Method of sowing	-	-	100.00
4.	Seed treatment	95.50	-	4.50
5.	Organic manure	85.00	15.0	-
6.	No. of irrigation	60.00	40.00	-
7.	Fertilizer application NPK (Kg/ha)			
	i Basal			
	ii Top dressing	28.00	67.00	5.00
8.	Pest management	77.00	23.00	-
9.	Disease management	79.00	21.00	-
10.	Weed management	100.00	-	-
11.	Yield (q/ha)	-	100.00	-

Level of technological gaps related to fieldpea crop:

In case of field pea, full gap was observed towards use of recommended varieties, seed treatment, use of organic manure, irrigation, pest, disease and weed management to the tune of 23, 82, 100, 60, 94.50, 94.50 and 100 per cent, respectively. Similarly, partial gap existed towards number of operations.

Over all indications showed that use of varieties,

Table 7: Level of technological gaps related to Field pea crop

S.No.	Items of packages	Level of technological gap		
		Full	Partial	None
1.	Varieties	23.00	55.00	22.00
2.	Seed rate	-	100.00	-
3.	i Sowing time	-	-	100.00
	ii Method of sowing	-	-	100.00
4.	Seed treatment	82.00	18.00	-
5.	Organic manure	100.00	-	-
6.	No. of irrigation	60.00	29.00	11.00
7.	Fertilizer application NPK (Kg/ha)			
	i Basal	-	100.00	-
	ii Top dressing	-	12.00	88.00
8.	Pest management	94.50	-	5.50
9.	Disease management	94.50	-	5.50
10.	Weed management	100.00	-	-
11.	Yield (q/ha)	-	100.00	-

seed rate, seed treatment, basal application of fertilizer, control of pests, diseases and weed management in case of field pea required more attention because of higher gaps towards these operations.

CONCLUSION

The study revealed that no organized way of interaction among farmers existed at farm household level. Agriculture and animal husbandry were found on second priority as compared to social, political and familiar issues. Organized meetings were utilized by very few number of farmers, which need to be improved. Personal contact and field visits were the major means of sharing information by the farmers. There is an urgent need to sensitize farmers to interact on the issues related to horticulture and animal husbandry more frequently.

REFERENCES

1. Singh, B.B. and Singh, K. (1997). Development communication and agricultural extension: Interface "Frontier of Extension Education for 21st Century of ISEE: 84.
2. Hai, Abdul, Srivastava, R.M. and Singh, R.P. (2003). Livestock farmers' preferences of communication media and their use by extension workers in tribal, Bihar. *Indian J. Ext. Edu.*, **XXXIX** (122):31-34.