

## **RESEARCHERS' COMMUNICATION LINKAGES FOR GENERATION OF FARM TECHNOLOGY AND ITS ASSOCIATION WITH SELECTED INDEPENDENT VARIABLES**

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### **ABSTRACT**

The study was conducted in two agro climatic zones of Rajasthan i.e. IIA named Transitional plains of Inland Drainage and III A called Semi-Arid Eastern Plain. The study focuses on communication modes and sources used by researchers for generation of farm technology along with the influence of independent variables. For this purpose, a sample of forty researchers working at various research units in these zones. Among modes, self observation, ZREAC meeting, research material/journals, research seminars / workshops/ conferences and colleagues were most frequently used while district agricultural research and extension implementation committee followed by farmers' tours, VIPs and administrators, farm broadcast and farm telecasts were least used modes for generation of farm technology. The most frequently used sources were local research institutes, state level research institutes followed by national level whereas least used sources were private organizations, voluntary organizations and international research institutes for generation of farm technologies. There were only three variables namely trainings attended, job satisfaction and job commitment exhibited positive and significant association with communication linkage mechanism for generation of farm technology.

**Key words :** Communication, Linkage, Farm Technology, AKIS.

### **INTRODUCTION :**

India has well-developed public research system under SAUs and ICAR, Linkages are important tools of management and vehicles for coordination and communication. Research system has to start the process by conducting basic and applied research. The applied research is generally problem solving type. It is therefore, important that the researcher must identify a real problem and issue facing his clients, before he makes a research postulate. This requires a direct linkage of the research subsystem with both clients as well as the extension subsystem. It is now widely accepted that the Agricultural Knowledge and Information System (AKIS) must operate with synergy, having two ways flow between research, extension and clientele subsystem. Besides, there are certain independent variables, which have influence over researchers' for the generation of farm technology. Keeping this view in context, an effort has been made to know the communication linkage mechanisms used by researchers for generation of farm technology and its association with the selected independent variables.

### **METHODOLOGY :**

For the purpose of study, a sample of forty researcher respondents was drawn on the basis of probability proportional to the total number of researchers working at ARS Durgapura (Jaipur), SKN College of Agriculture,

Jobner (Jaipur) of zone III A and ARS Fatehpur-Shekhawati (Sikar) of zone II A of Rajasthan. The dependent variable of the study was communication linkage mechanism used by researchers for generation of farm technology. There were eight independent variables selected on basis of pilot study and review of literature. Data was collected with the help of well-structured questionnaire and statistical analysis using of frequency, total choice score, coefficient of correlation and multiple regression analysis were applied to draw meaningful conclusions.

### **RESULTS AND DISCUSSION :**

Communication Linkage Mechanisms for Generation of Farm Technology: Communication linkage mechanism of researcher for generation of farm technology in present study is operationalised as different communication modes and or sources used for gathering information, guidance, instruction or material necessary for generation of farm technology. The respondents were asked to indicate use frequency of these modes and sources for generation of technology on the three-point continuum.

The data in table 1. revealed that self observation, ZREAC meeting, research material/journals, research seminars/workshops/conferences and colleagues were the most frequently used modes of communication by researchers in rank order. It is further explained in table that the strength of total choice score of the other

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important linkage mechanisms like feedback of extension personnel, field surveys, monthly workshops and diagnostic team visits showed poor linkage for generation of farm technology. The least used modes were district agricultural research and extension implementation committee followed by farmers' tours, VIPs and administrators, farm broadcast and farm telecasts for the generation of farm technology.

**Table 1. Differential use of modes and sources**

S. No.	Modes and sources	Total choice score	Rank order
<b>A.</b>	<b>Modes</b>		
1.	Self observation	99	I
2.	Research material / Journals	86	III
3.	Professional meetings	70	IX
4.	ZREAC	87	II
5.	Monthly workshops	66	XI
6.	Diagnostic team visits	55	XV
7.	Farmers- scientists interaction	72	VIII
8.	District Agril. Research & Extension Implementation Committee	47	XIX
9.	Superior officers	68	X
10.	Colleagues	81	V
11.	Farmers	61	XII
12.	Extension personnel (feedback)	74	VII
13.	Farmers meetings	57	XIV
14.	Extension personnel meetings	59	XIII
15.	VIP's and administrators	51	XVII
16.	Field surveys	68	X
17.	Farmers tours	50	XVIII
18.	Demonstrations	75	VI
19.	Farm broadcasts	54	XVI
20.	Farm telecast	54	XVI
21.	Trainings	72	VIII
22.	Research seminars/workshops	84	IV
<b>B</b>	<b>Modes</b>		
1.	Research Institutes		
	(a) International level	53	VI
	(b) National level	75	III
	(c) Regional level	73	IV
	(d) State level	78	II
	(e) Local level	84	I
2.	Other state research institutes	57	V
3.	Voluntary organizations	45	VII
4.	Private organizations	43	VIII

The most frequently used sources for generation of farm technology were local research institutes, state level research institutes followed by national level research institutes whereas, the least used sources were private organizations, voluntary organizations and international research institutes. The results seemed quite natural due to the fact that emphasis was given by the research scientists to generate location specific technologies. The modes and sources used by the researchers were also location specific. The other existing communication modes and sources should be operated in practical way for the generation of effective and practical farm

technology. The findings of Ambastha and Singh (1977) and Subhashchandra and Channegowda (1985), supported the findings

Association of researchers' independent variables with communication linkage mechanism for generation of farm technology :The data in table 2 indicate that out of eight variables only three variables viz; trainings attended, job satisfaction and job commitment exhibited positive and significant association with communicating linkage mechanism for generation of farm technology. However, non-significant relationship of education, job experience, family background, and parental occupation and communication facilities was found with communication linkages. The non significant relationship of these variables might be due to the fact that almost all respondents possessed equal qualification, having limited exposure to communication with extension personnel and farmers, having not much interest in research endeavor and poor communication facilities. This might have also been because senior researchers devote much time and attention to administrative and managerial work than to technology generation. The significant relationship of said variables clearly pointed out that researchers' communication linkage mechanism for generation of farm technology will be more strengthened provided they are getting more exposure to trainings, satisfied with their job and committed to their job. The findings of the study are in agreement with the findings of Sanoria and Singh (1979), Ambastha and Singh (1980).

**Table 2. Correlation analysis of researchers independent variables with communication linkage mechanism for generation of farm technology**

S. No.	Independent variables	Correlation coefficient ('r' values)	Regression coefficient ('b' values)	Standard error	't' values
1.	Education	0.14224	57.66724	31.28988	1.843
2.	Job experience	0.05695	-0.48668	0.648907	0.750
3.	Family background	0.04965	13.02355	6.975656	1.867
4.	Parental occupation	0.07591	-10.91046	6.078251	1.795
5.	Trainings attended	0.37400*	5.08004	2.651378	1.916
6.	Job satisfaction	0.32504*	1.33782	3.866532	0.346
7.	Communication facilities	0.28503	1.22939	3.771135	0.326
8.	Job Commitment	0.38503*	3.14049	2.634639	1.192

R<sup>2</sup>=0.3892523 F=2.46970\*

\*Significant at 5% level of probability

Looking to regression coefficients in table 2, it was found that amount of variation in communication linkage mechanism of researchers for generation of farm technology was jointly contributed by eight variables to the extent of 33.89 percent. The calculated F-value of 2.46970 (8 and 31 degree of freedom) was found to be significant. However, regression coefficient of eight variables did not contribute significantly.

**CONCLUSIONS :**

The researchers made maximum use of modes and sources like self-observation, ZREAC meeting, research literature/meeting and local research institutes for the generation of farm technologies. These modes and sources were mostly used because these mechanisms were prevalent in present system and location specific. The other modes and sources were minimally utilized for generation of farm technologies. Besides, researchers were facing problems like proper documentation of problems by extension personnel, lack of coordination among various units etc. Hence, there should be a systematic assessment and feedback about the

technologies and the problems faced by farmers should be given to the researchers in ZREAC meetings, research material other forms. Researchers' communication linkage mechanism for generation for farm technology had significant and positive correlation with number of training courses attended, job satisfaction and job commitment. Multiple regression analysis revealed that 38.92 percent variation on linkage use of researchers was jointly explained by the antecedent variables. Personal and socio-psychological attributes of researchers contributing towards communication linkage mechanism for generation of farm technology should be further improved so that better linkage can be ascertained.

**REFERSENCES**

1. Ambastha, C.K. and Singh, K.N. (1977). Communication pattern of farm scientists: A system analysis. *IJEE*, 13 (1&2): 22-30.
2. Ambastha, C.K. and Singh, K.N. (1980). Communication pattern of farm scientists. *IJEE*, 16. 34-38.
3. Sanoria, Y.C. and Singh, K.N. (1979). Communication pattern of Agricultural Scientists. *IJEE*, No. 15 (3&4):9-14.
4. Subhashchandra, S.P. and Channegowda, M.B. (1985). Information input pattern of agricultural researchers at Dharwad, Karnataka State. *IJEE*, 21(1&2): 72-73.

