

Information processing and contribution of farm scientists

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ABSTRACT

The present study was an attempt to study the information input, processing and contribution of Farm Scientists. The large majority (95.00 per cent) of farm scientists evaluated agricultural information by 'discussion with fellow scientists and extension personnel', 'examine the validity of it' and 'consider the technical feasibility'. 'Analysis in the light of past experience' and 'judge against the socio-economic and agro-climatic condition of the area' were the most commonly used methods of evaluation by more than 90.00 per cent of the farm scientists. That large majority (90.00 per cent) of farm scientists stored agricultural information by 'writing in notebooks' closely followed by 'maintaining the specified notebook' 82.00 per cent. The majority (92.50 per cent) of APs stored information by 'making subject wise file' followed by 84.00 per cent JRA/SRAs and 74.00 per cent Asso. Prof./Profs. The majority (90.00 per cent) of JRA/SRAs stored information by method of 'memorizing' followed by 75.00 per cent APs and 70.00 per cent Asso. Prof./Profs. The large majority (94.00 per cent) of Asso. Prof./Profs. transformed information by radio talk followed by APs (91.00 per cent) and JRA/SRAs (72.00 per cent), 8 out of 9 variables had positive and significant relationship with contribution of farm scientists in transfer of technology (except workload received by them).

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INTRODUCTION

A great deal of farm information is being generated by the Agricultural Universities and Research Institutes for large scale adoption by the farmers. The success or failure of an extension programme is largely dependent on the speed with which the information is disseminated to the farmers in a form acceptable to them. In this context, the job of farm scientists is most challenging and does not end with dissemination of knowledge alone. They have to persuade, motivate and convince the farmers to accept his advice and act upon it. It is therefore imperative that the farm scientists should not only have a sound knowledge of the subject matter but also conversant with various communication methods and media to pass on the information to the farmers for adoption under different situations. Keeping the above information in view, a research based study was undertaken to find out the sources and channels of Farm Scientists use to get latest farm information, how do they process the information and finally what are the methods and media they employ to pass on the information to the farmers. The specific objectives of the study are : to study the information processing behaviour of the farm scientists and to study the relationship between contribution in transfer of technology

and characteristics of farm scientists.

METHODOLOGY

The farm scientists viz., Junior Research Assistants, Senior Research Assistants, Assistant Professors, Associate Professors and Professors working at the Central Campus of the University, Agricultural Colleges, N.A.R.P. headquarters and main research stations under the jurisdiction of the university was the universe of the investigation. At present, there are 754 farm scientists working under the jurisdiction of the University. With the help of the list so prepared, thirty per cent farm scientists were selected on a random basis from each of the selected College/Research station, thus, making the total number of respondents 226.

RESULTS AND DISCUSSION

The findings of the present study as well as relevant discussion have been summarized below:

Information processing:

Information evaluation method:

The methods of evaluation of agricultural information used by the farm scientists is presented in Table 1.

It is revealed from Table 1 that large

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Sr. No	Type of evaluation	JRA/SRA (n =92)	Assistant Professor (n=80)	Asso. Prof./Profs. (n=54)
1.	Analysis in the light of past experience	84 (91.30)	76 (95.00)	50 (92.59)
2.	Examine the validity	87 (94.56)	76 (95.00)	51 (94.44)
3.	Cross checking against past researchers	84 (91.30)	65 (81.25)	47 (87.03)
4.	Judging against the socio-economic and agroclimatic conditions of the area	83 (90.22)	76 (95.00)	47 (87.03)
5.	Considering technical feasibility	85 (92.39)	76 (95.00)	52 (96.30)
6.	Discussion with specialists	88 (95.65)	78 (97.50)	52 (96.30)
7.	Discussion with fellow scientists and extension personnel	84 (91.30)	78 (97.50)	52 (96.30)

majority (95.00 per cent) of farm scientists evaluated agricultural information by 'discussion with fellow scientists and extension personnel', 'examine the validity of it' and 'consider the technical feasibility' 'Analysis in the light of past experience' and judge against the socio-economic and agro-climatic condition of the area' were the most commonly used methods of evaluation by more than 90.00 per cent of the farm scientists. These findings are in line with Keshav and Kumar (1995). The large majority of farm scientists evaluated agricultural information by cross check against past researchers.

Information storage method:

The data of Table 2 indicate that large majority (90.00 per cent) of farm scientists stored agricultural information by 'writing in notebooks' closely followed by 'maintaining the specified notebook' (82.00 per cent). The majority (92.50 per cent) of APs stored information by 'making subject wise file' followed by (84.00 per cent) JRA/SRAs and (74.00 per cent) Asso. Prof./Profs. Making reference cards' got 75.00 per cent response by the farm scientists. The majority (90.00 per cent) of JRA/SRAs stored information by method of 'memorizing' followed by (75.00 per cent) APs and 70.00 per cent Asso. Prof./Profs.

Information transformation method:

The various information transformation procedures

Sr. No	Method of storage	JRA/SRA (n =92)	Assistant Professor (n=80)	Asso. Prof./Profs. (n=54)
1.	Maintaining the specified notebook	77 (83.69)	69 (86.25)	44 (81.48)
2.	Making reference card	71 (77.17)	61 (76.25)	35 (64.81)
3.	Writing in notebooks	83 (90.21)	71 (88.75)	50 (92.54)
4.	Making subject wise file	77 (83.69)	74 (92.50)	40 (74.07)
5.	Memorizing	83 (90.22)	60 (75.00)	38 (70.37)
6.	Never try to store any material	25 (27.17)	12 (15.00)	11 (20.37)

Sr. No.	Method of transformation	JRA/SRA (n =92)	Assistant Professor (n=80)	Asso. Prof./ Profs. (n=54)
1.	Preparation of research report	85 (92.39)	73 (91.25)	44 (81.48)
2.	Writing of research/ magazine articles	89 (96.74)	80 (100.00)	53 (98.15)
3.	Radio talk	68 (73.91)	73 (91.25)	51 (94.44)
4.	Folders/posters/ charts/ flash cards	77 (83.70)	66 (82.50)	45 (83.33)
5.	Slids/photographs	78 (84.78)	65 (81.25)	46 (85.18)

employed by the farm scientists are presented in Table 3.

It is seen from Table 3 that the cent per cent of APs transformed information by 'writing of research/extension article' closely followed by JRA/SRAs (97.00 per cent) and Asso. Prof./Profs (98%). Preparation of research report' method got 91 per cent response by JRA/SRAs, APs and 81 per cent response by Asso. Prof./Profs. The large majority (94.00 per cent) of Asso. Prof./Profs. transformed information by radio talk followed by APs (91.00 per cent) and JRA/SRAs (73.00 per cent). Similar results were observed by Veeraswamy *et al.*, 1992.

It is clear from Table 4 that 8 out of 9 variables had positive and significant relationship with contribution of farm scientists in transfer of technology (except workload received by them). The age of the farm scientists being positively correlated means that as age increases, the

Table 4: Relationship between the contribution of farm scientists in transfer of technology and selected characteristics of farm scientist

Sr. No.	Characteristics	Karl Pearson's correlation co-efficient
1.	Age	0.707*
2.	Education	0.843*
3.	Total experience	0.709*
4.	Inservice training	0.838*
5.	Organizational climate	0.839*
6.	Workload	-0.898*
7.	Facilities available	0.871*
8.	Job satisfaction	0.936*
9.	Achievement motivation	0.432*

*indicates significance of value at P=0.05

experience of them also increases. In case of education, it might be due to the fact that education helped the farm scientists to read the relevant literature to seek and use information, evaluate and disseminate the same in scientific manner. In case of total experience, farm scientists gain necessary abilities and take interest to know the ways and means of dissemination of technology. The inservice training of the farm scientists being positively related means, JRA/SRAs and APs could receive only few type of trainings while Asso. Prof./Profs received more trainings.

In case of organizational climate the scientists with good organizational climate were usually ahead in contribution in transfer of technology and had more exposure to the extension personnel. The workload was found non-significant. It means that with increase in workload, reduction was in contribution of farm scientists. The scientists with good facilities were usually ahead in transfer of technology and had more exposure to the various mass media. The higher job satisfaction creates interest to participate in different extension activities and enable them to contribute in transfer of technology.

Conclusion:

That large majority (95.00 per cent) of farm scientists evaluated agricultural information by ‘discussion with fellow scientists and extension personnel’, ‘examine the validity of it’ and ‘consider the technical feasibility’ ‘analysis in the light of past experience’ and judge against the socio-economic and agro-climatic condition of the area’. that the cent per cent of APs transformed information by ‘writing of research/extension article’ closely followed by JRA/SRAs (97.00 per cent). ‘Preparation of research report’ method got 91 per cent response by JRA/SRAs, APs and 81 per cent response by Asso. Prof./Profs. The 8 out of 9 variables had positive and significant relationship with contribution of farm scientists in transfer of technology (except workload received by them).

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