

COMMUNICATION PATTERN OF EXTENSION PERSONNEL WITH RESPECT TO TRANSFER OF TECHNOLOGY IN RATNAGIRI DISTRICT

ADEDAPO, A.O, SAWANT, P.A, KADAM, J.R., KOBBA, F.

Abstract: The purpose of this study is to assess the communication pattern of the extension personnel with respect to transfer of technical information in Ratnagiri district, Maharashtra State. Multistage sampling technique was used to elicit information from 130 respondents from nine Taluka Agricultural Departments in the district. Descriptive statistics, Likert scale, simple regression analysis were used to analyze the data collected. The study shows the respondents mean age of 37 years, and three-fifth of the respondents were below 40 years of age, 91.54 per cent were male, 75.38 per cent were married, more than half of them had less than 10 years of working experience, three-fifth of them had rural family background, and almost half of them perceived that the organisational climate was fair. It is evident that most of the extension personnel used spoken method during group discussion, meetings, farmers rally, field days, training programmes and agricultural exhibition for transfer of technical information. Less than half of them used visual method during result demonstration, farmers rally and meetings while more than half used audiovisual method during workshops, agricultural exhibition and training programmes. However, very few of them used written form in different extension activities. Eight variables significantly affect the transfer of technical information and they are ranked according to the level of effect. Inadequate funds (2.61), inadequate staff (2.61), over burdening of duties (2.52), poor response from farmers (2.52), inadequate transportation facilities (2.43), ineffective internet facilities (2.39), inadequate media facilities (2.38), and inefficient time schedule (2.22). Age, family background, training received and years of working experience are the variables which had significant relationship with the communication pattern in transfer of technical information. Thus it is recommended that audio-visual aids, effective internet facilities, sufficient funds, transportation facilities, favourable working conditions should be made available, and also avoid over burden of duties.

Keywords: Communication pattern, Inhibiting factors, Personal profile.

Introduction: Diffusion of scientific innovations to millions of farmers is a prerequisite for sustainable agricultural development in Asia [7]. This is typical for developing nations like India, where there is a huge information gap. [7] stated that more than 35 per cent of information is lost in its transit and even distorted and inaccurate information is giving to the farmers.

The need to carry out research on "Communication patterns of research and extension personnel have been put forward by many communication specialists as a future line of action and strongly supported the need to analyzed agricultural communication from the source of innovation to their last stage of adoption [3]. Communication is a process in which participants create and share information with one another in order to reach a common frame of reference [5].

In recent times, farmer has changed from being production oriented to market oriented and there has been a paradigm shift from production-led-extension to market-led-extension [9]. For effectiveness of this change, it is imperative for extension personnel to communicate to the farmers adequately and also give the required information as and when due in the most appropriate way. Extension staff is the most important source in transmitting technology to beneficiaries [8]. In view of this, the communication

pattern of the extension personnel and the way and manner in which technology is delivered to beneficiaries to a greater extent influences the rate of acceptance and adoption of such innovations. The efficacy of the technologies by itself does not bring the anticipated transformation in the rural areas, but largely depends on the capability of the extension workers to properly disseminate them to the local people [6]. Consequently the role of agricultural extension personnel has in recent years taken a greater importance in the transfer of technologies and their adoption by the farmers. For agricultural research to make impact there should be a two way communication flow of appropriate technology and useful information from the user to the researcher as well as from researcher to users. The goal of the research is achieved only when the information reaches the real user for which it is intended. So the main role of diffusion or flow of information is left with the extension system and many a time the system fails to cope with the situation due to the communication behaviour of extension personnel. The communication pattern of the extension personnel is the outcome of different dimensions such as the acquisition of information (input), information refinement (processing), diffusion of information (output) and response [10]. This comprises of all the activities performed by extension

personnel with respect to communication behavioural dimensions.

Materials and Methods:

Study area: This study was conducted in Ratnagiri District, Maharashtra State.

Sampling technique: Multistage sampling technique was used to select and interviewed respondent for this study. All the nine taluka Agricultural Department were purposively selected. Taluka Agricultural Officers, Circle Agricultural Officers and Supervisors were purposively selected while Agricultural Assistant respondents were randomly selected from each taluka, thus a total of 130 respondents were used for the study. Well structured schedule was used to elicit information from the respondents and the secondary data used were journals, magazines and internet.

Methods of data analysis: Data were analyzed with the use of descriptive statistics to determine the personal profile of the respondents like frequency, percentage as well as simple regression analysis to achieve the objectives of the study.

Result And Discussions:

Socio-economic characteristics: Table 1 reveals the personal profile of the respondents. The age ranged from 20 to 56 years with a mean age of 37 years whereas 33.85 per cent of the respondents were within the age range of 21–30 years, 26.15 per cent were within 31–40 years and 23.08 per cent were within the age range of 41–50 years while 13.08 per cent were above 50 years and also 3.85 per cent were below 20 years of age. This shows that most of the respondents have the ability to supply the labour require for extension activities. There are more male (91.50 per cent) than the female (8.50 per cent) and 75.40 per cent of them were married, while 24.60 per cent were unmarried. Most of them are part-time poultry farmers (62.50%) while 37.50% were full time poultry farmers. This implies that poultry production is also used as additional source of income. More than half (56.92 per cent) of the respondents had between 1–10 years working experience, 23.85 per cent had between 11–20 years experience, 15.38 per cent had between 21–30 years working experience while few of them (3.85 per cent) had above 30 years of working of experience. Almost three-third (58.17 per cent) of the extension personnel had rural family background while 26.15 per cent had semi-urban and 15.38 per cent. Almost half (48.47 per cent) of the extension personnel had diploma qualification, 36.15 per cent had B.Sc while 15.38 per cent had Masters degree which indicates that they have the needed educational qualification for extension work. The annual mean income of the respondents is Rs. 313,977. Half (51.54 per cent) of the respondents earned between Rs. 2–4 Lakh per annum, 16.93 per cent earned above Rs. 6 Lakh per annum, and 16.15

per cent earned less than Rs. 2 Lakh while 15.38 per cent earned between Rs. 4–6 Lakh per annum. More than two-fifth (46.92 per cent) of the extension personnel had fair organisational climate while two-fifth (42.31 per cent) had poor organisational climate and one-tenth (10.77 per cent) have good organisational climate.

Communication Pattern Used in Transfer of Technology:

It is evident in figure 1 that most (69.23 per cent) of the extension personnel used 'spoken' method in group discussion followed by meetings (67.69 per cent), farmers rally (63.84 per cent), field days (50.00 per cent), training programmes (44.62 per cent) and agricultural exhibition (34.64 per cent) for transfer of technical information. Less than half (44.62 per cent) of them used 'visual' method in result demonstration, followed by method demonstration (43.85 per cent), farmers rally (23.08 per cent) and meetings (14.62 per cent) while almost three-fifth (57.69 per cent) used 'audiovisual method' during workshops, followed by agricultural exhibition (50.00 per cent) and training programmes (41.53 per cent). However, very few extension personnel were found to used 'written' form in different extension activities. More than one-fifth (22.30 per cent) used 'written' method in field days followed by group discussion (16.92 per cent), method demonstration (11.54 per cent) and workshops (10.77 per cent) for transfer of technical information.

Factors Affecting Transfer of Technical Information:

Thirteen variables were subjected to 3 Likert scale points of Agree (A), Uncertain (U), Disagree (D) with 3, 2 and 1 points respectively. The variables greater than mean 2.15 were considered to have significant effect on transfer of technical information while those ones less than mean 2.15 does not have effect on transfer of technical information. However, eight variables affect the transfer of technical information significantly and they are ranked according to the level of effect. Inadequate funds (2.61), inadequate staff (2.61), over burdening of duties (2.52), poor response from farmers (2.52), inadequate transportation facilities (2.43), ineffective internet facilities (2.39), inadequate media facilities (2.38), and inefficient time schedule (2.22). The following factors do not have effect on the transfer of technical information in the study areas, such as non availability of relevant information from reliable sources, Lack of knowledge and skill in using audio visual aids, little or no encouragement and cooperation from colleagues and supervisors, as well as in-conducive working environment.

Conclusion: It is evident from the findings that most of the extension personnel were below 40 years with mean age of 37 years. Majority of them were male, married and had less than 10 years of working experience with rural family background. Almost half

of them perceived that the organisational climate was fair. They used spoken method during group discussion, meetings, farmers rally, field days, training programmes and agricultural exhibition for transfer of technical information. Less than half of them used visual method during result demonstration, farmers rally and meetings while more than half used audiovisual method during workshops, agricultural exhibition and training programmes. Inadequate funds, inadequate staff, over burdening of duties, poor response from farmers,

inadequate transportation facilities, ineffective internet facilities, inadequate media facilities, and inefficient time schedule are the inhibiting factors in transfer of technical information. Thus it is recommended that government and concern authorities should made available audio-visual aids, effective internet facilities, sufficient funds, transportation facilities, favourable organizational climate, maintaining personnel who are experts in TOT and also avoid over burden of duties.

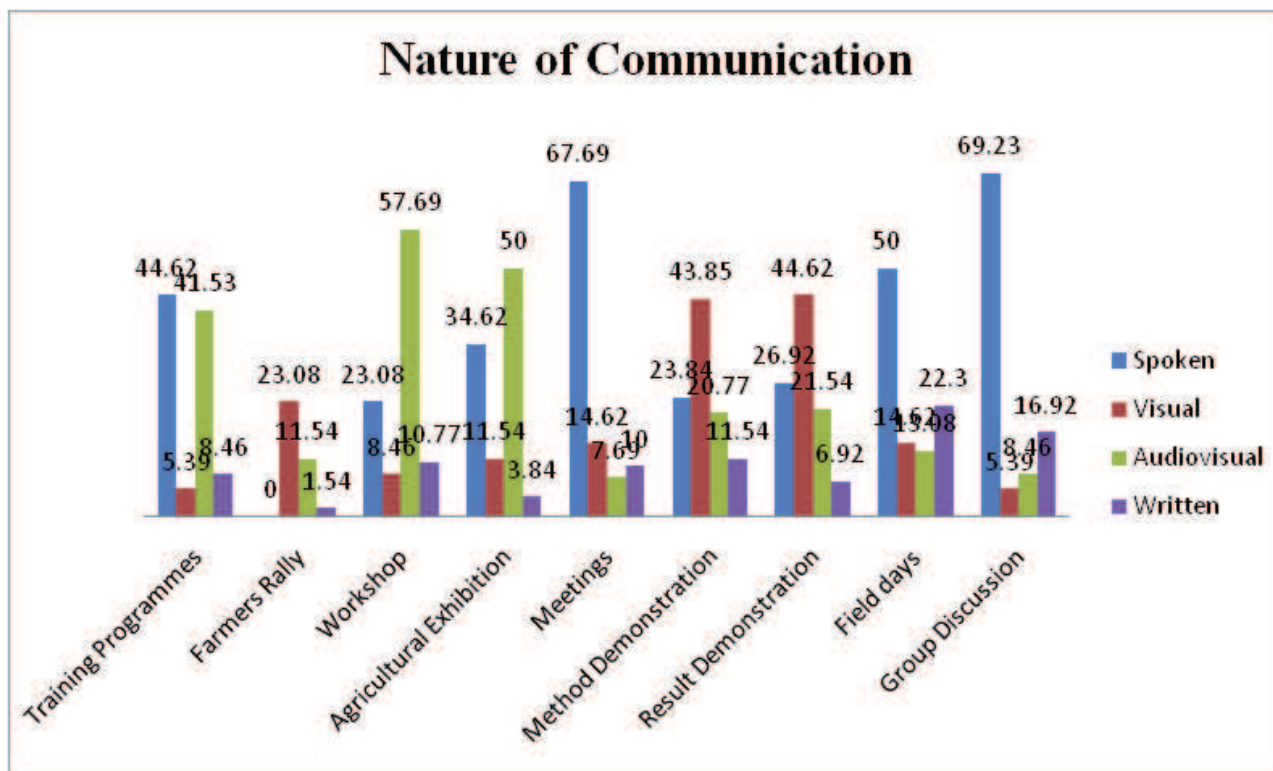


Figure 1. Nature of Communication Used for Transfer of Technical Information

Variables	Frequency	Percentage	Mean
Age			
Below 21	5	3.85	
21 – 30	44	33.84	37
31 – 40	34	26.15	
41 – 50	30	23.08	
Above 50	17	13.08	
Gender			
Male	119	91.54	
Female	11	8.46	
Marital Status			
Unmarried	32	24.62	
Married	98	75.38	
Family Background			
Rural	76	58.47	
Semi-urban	34	26.15	
Urban	20	15.38	

Educational Qualification			
Diploma	63	48.47	
B.Sc	47	36.15	
M.Sc	20	15.38	
Years of Working Experience			
1 – 10	74	56.92	
11 – 20	31	23.85	13
21 – 30	20	15.38	
Above 30	5	3.85	
Annual Income (Rupees)			
Less than 2 Lakh	21	16.15	
2 Lakh – 4 Lakh	67	51.54	313,977
4.01 Lakh – 6 Lakh	20	15.38	
Above 6 Lakh	22	16.93	
Training Received			
Less than 10	18	13.85	
10 – 20	29	22.31	
21 – 30	34	26.15	22
31 – 40	32	24.62	
Above 40	17	13.08	
Organisational Climate			
Poor	55	42.31	
Fair	61	46.92	
Good	14	10.77	

Source: Field Survey, 2015.

S/No	Constraints	A	U	D	Total	Mean	Effect	Rank
1	Over burdening of duties	285	14	28	327	2.52	Sig	3 rd
2	Poor response from farmers	273	30	24	327	2.52	Sig	4 th
3	Inadequate funds	294	26	19	339	2.61	Sig	1 st
4	Inadequate transportation facilities	261	24	31	316	2.43	Sig	5 th
5	Inadequate media facilities	255	18	36	309	2.38	Sig	7 th
6	Ineffective internet facilities	255	20	35	310	2.39	Sig	6 th
7	Inadequate staff	306	10	23	339	2.61	Sig	2 nd
8	Time schedule	207	42	40	289	2.22	Sig	8 th
9	In-conducive environment	111	54	66	231	1.78	NS	
10	No encouragement from superior	87	22	90	199	1.53	NS	
11	No encouragement and cooperation from colleagues	36	32	10 2	170	1.31	NS	
12	Non availability of relevant information from reliable source	195	10	60	265	2.04	NS	
13	Lack of knowledge and skill in using audio visual aids	72	50	81	203	1.56	NS	

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Department of Extension Education/ College of Agriculture/ D.B.S.K.K.V/ Dapoli (M.S).