

Original Research Article

Assessment of Information Sources Used by Tribal Farmers of Agricultural Technology Management Agency (ATMA) in Madhya Pradesh, India

Ashutosh Sharma* and N.K. Khare

Department of Extension Education, College of Agriculture
Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur (M.P.) – 482004 (India)

**Corresponding author*

ABSTRACT

The present study was carried out during 2016-17 in the Mandla and Dindori districts of Madhya Pradesh state. This study was conducted in randomly selected 300 villages of four purposively selected blocks i.e. Mandla and Nainpur located in Mandla district similarly Dindori and Mehandwani located in Dindori district. The aim of this study to know the communicational sources used by the respondents. A total of 300 respondents including 150 from Mandla and 150 from Dindori farmers were selected randomly. The study revealed that reveals that the large of the respondents had medium level of exposure to various sources of information for getting the information and also found that majority 84.67 per cent and 65.34 per cent of the respondents had medium contact with extension personnel in Mandla and Dindori respectively.

Keywords

Information sources, extension contact, tribal farmers, ATMA, Madhya Pradesh

Introduction

Communication is anything that conveys meaning that carries a message from one person to another person. According to Brown, “communication is a process of transmitting ideas or thoughts from one person to another for the purpose of creating an understanding in the thinking of the person receiving communication. Information communication networking is widely used to promote exchange of information, knowledge and experience for development at the grass root level in developing countries like India having agriculture as the main source of livelihood. The most important role of information source in developed countries is fostering is knowledge intensive sustainable livelihood security system in rural areas.

The challenges posed by agricultural globalization revolution in information and communication technology rising population and the consequent demand for sustainability have prompted to have a re-look on the existing extension system in India and re-orient it with proper direction. In November 1998, Govt. of India initiated a project called National Agriculture Technology Project (NATP) with the financial assistance from World Bank. The concept of ATMA was introduced in 1999 as an autonomous organization under the National Agricultural Technology Project (NATP) by providing flexible working environment. The concept of ATMA envisages paradigm shift from “top down” to “bottom up” in planning and implementation of agriculture development programmes. ATMA is a decentralized and

demand driven extension mechanism operating on the comparative strength of different stakeholders. It is a registered society responsible for technology dissemination at the district level through SREP (Strategic Research & Extension Plan). It can receive fund directly from GOI/States, membership fees, beneficiaries' contribution etc.

Keeping in view of the above facts in to consideration, the present study was undertaken to find out the information sources of farmers friend in ATMA of tribal district of Madhya Pradesh.

Materials and Methods

This study was conducted in Mandla and Dindori districts of Madhya Pradesh, during the year 2016-17. Madhya Pradesh state has 51 districts out of which both districts were selected purposively because these districts have got highest fund for the ATMA programme. From the selected districts only two blocks from each district i.e., Mandla and Nainpur, Dindori and Mehandwani were selected purposively. From each selected block out of total villages, 150 villages in Mandla, 150 villages in Nainpur, 150 villages in Dindori and 150 villages in Mehandwani block have been selected by Government of Madhya Pradesh for carrying out the various activities under ATMA project. Thus total 600 villages were considered for the study. From selected block (1 block = 150 villages =75 farmer friend) 75 respondents were selected randomly from each selected villages. Thus, the total 300 farmer friends (2 villages = 1 farmer friend) were selected to determine the information sources used by the tribal farmers. Respondents were interviewed through personal interview. Prior to interview, respondents were taken in to confidence by revealing the actual purpose

of the study and full care was taken in to consideration to develop good rapport with them. For the data collection well designed and pre-tested interview scheduled were used. Collected data were analyzed by the help of various statistical tools i.e. frequency, percentage, mean and standard deviation, Z-test etc.

Results and Discussions

Communicational characteristics of respondents

Sources of information

The data regarding utilization of the information sources for seeking information about ATMA programme in Mandla and Dindori districts of tribal farmers are presented in the Table 1. The finding revealed that in study area of Mandla district, the almost cent percent of the respondents (98.00%) had found information regarding ATMA from Progressive farmer. The study also revealed that 94.00 per cent of the respondents had obtained the information from Friends, followed by 90.66 per cent of the respondents had obtained the information from Training, 90.00 per cent had obtained the information from co-operative society and 86.00 per cent of the respondents had obtained the information from Visit.

While, 84.66 per cent of the respondent had obtained the information regarding ATMA from news paper, 83.33 per cent of the respondents had obtained the information from relatives, followed by 77.33 per cent of the respondents used kisan divas/ kisan mela as a source of information, 74.66 per cent neighbours, 74.00 television, 72.00 per cent leaflet/ pamphlet/ village leaders, 65.33 per cent radio, 62.66 per cent telephone, 58.66 per cent agril. bulletin/ magazine and only

40.00 per cent of the respondents used farmer field school as a source of information.

In case of Dindori district, the finding revealed that the majority of the respondents (94.66%) had found information regarding ATMA from kisan divas/ kisan mela. The study also revealed that 93.33 per cent of the respondents had obtained the information from Training, followed by 90.66 per cent of the respondents had obtained the information from Progressive farmer, 88.66 per cent had obtained the information from co-operative society and 87.33 per cent of the respondents had obtained the information from Friends.

While, 86.66 per cent of the respondent had obtained the information regarding ATMA from Visit, 86.00 per cent of the respondents had obtained the information from Agril. Bulletins/ magazine, followed by 85.33 per cent of the respondents used leaflet/ pamphlet / village leaders as a source of information, 81.33 per cent News papers and Neighbours , 80.00 farmer field school, 78.66 per cent television, 78.00 per cent relatives, 59.33 per cent telephone, 58.33 per cent of the respondents used radio as a source of information.

Thus it may be concluded that in study area majority of respondents (94.33%) had found information regarding ATMA from Progressive farmer, followed by 92.00 per cent of the respondents had obtain information from Training.

The data regarding overall use of information sources has been presented in Table 2. The data reveals that the large of the respondents (74.67%) had medium level of exposure to various sources of information, followed by 20 per cent of the respondents were found to have high level

of exposure to various sources of information and 5.33 per cent of the respondents were found to have low level use of information sources category. Similarly, In case of Dindori maximum of the respondents (66.66%) had medium level of exposure to various sources of information for getting the information, followed by 24 per cent of the respondents were found to have high level of exposure to various sources of information and 9.34 per cent of the respondents were found to have low level use of information sources category. Thus it may be concluded that large of the respondents 70.67 per cent had medium use of information source category.

Table 3 reveals that the mean values for the sources of information of Mandla and Dindori districts of tribal farmers were found to be 16.34 and 17.30 with the standard deviation 2.00 and 2.19 respectively. A large sample Z-test was applied in order to see the significant difference of sources of information of both the districts. It was found that the calculated value of z was larger than its tabulated value giving a significant difference between sources of information of both the districts.

Distribution of the respondents according to their extent of contact with extension personnel

The data presented in Table 4 reveals that the contact of Mandla and Dindori districts respondents with the extension personnel. The table shows that the majority of the respondents (81.34%) had made contact with Rural Agricultural Extension Officer (RAEOs) always in month, followed by 10 per cent of the respondents had contacted with Rural Agricultural Extension Officer (RAEOs) 1 times in week. Followed by 8.66 per cent respondents contacted with Rural Agricultural Extension officer (RAEOs) 1

times in a month. Whereas, the maximum of the Dindori district respondents (58%) had made contact with Rural Agricultural Extension Officer (RAEOs) always, followed by 23.34 per cent respondents had contacted 1 times in month, 17.33 per cent of respondents had contacted 1 times in week and only 1.33 per cent of respondents had never contacted with Rural Agricultural Extension Officer (RAEOs).

With regards to Agricultural Development Officer (ADOs), the study shows that maximum (59.34%) of the respondents of Mandla district had contact with them 1 times in month followed by 25.33 per cent of the respondents had contacted always, followed by 15.33 per cent had contacted 1 times in week with Agricultural Development Officer (ADO). However, the maximum of the respondents (58%) had contacted always with Agricultural Development Officer (ADOs), followed by 23.34 per cent of the respondents who contacted Agricultural Development Officer (ADOs) 1 times in month. 17.33 per cent respondents had made contact 1 times in week and 1.33 per cent respondents had never contacted with Agricultural Development Officer (ADOs).

Regarding contact with Subject Matter Specialist (SMS), it was found that maximum (54%) of the respondents of Mandla district had contacted 1 times in month with Subject Matter Specialist (SMS), followed by 30 per cent of the respondents had never contact with Subject Matter Specialist (SMS), followed by 13.34 per cent of the respondents had contacted 1 times in week with Subject Matter Specialist (SMS) and only 2.66 per cent of the respondents made contact with Subject Matter Specialist (SMS) always. Whereas, the maximum (54.67%) of the respondents of Dindori had contacted 1 times in month

with Subject Matter Specialist (SMS), followed by 24.66 per cent of the respondents had never contacted with Subject Matter Specialist (SMS), followed by 13.34 per cent of the respondents made contact with Subject Matter Specialist (SMS) 1 time in a week and only 7.33 per cent of respondents had contacted always with Subject Matter Specialist (SMS).

With respect to contact with Agriculture Scientist, it was found that a majority (75.34%) of the respondents had not contacted with them, followed by 14.67 per cent had contacted 1 time in month with agriculture scientist, followed by 8.66 per cent of respondents made contact 1 time in week and only 1.33 per cent of respondents had contacted always with agriculture scientist, However, the majority of the respondents of Dindori (61.34%) had never contacted with agriculture scientist, followed by 30 per cent had made contact with agriculture scientist 1 times in month, followed by 6 per cent of respondents had made contact with agriculture scientist 1 time in week and only 2.66 per cent of respondents had made contact always with agriculture scientist.

It could be concluded that Rural Agricultural Extension Officer (RAEOs) and Agricultural Development Officer (ADOs) were the most frequently visiting in the village from which the respondents were obtained latest information. Majority of 75 per cent respondents of Mandla district and 61.34 per cent respondents of Dindori district had never contact with Agriculture scientist.

The result in Table 5 found that majority (84.67%) of the respondents had medium contact with extension personnel, followed by 10 per cent respondents who had high contact with extension personnel while only 5.33 per cent respondents had low contact

with extension personnel. The large (65.34%) of the Dindori respondents had medium contact with extension personnel, followed by 19.33 per cent respondents who had low contact with extension personnel

while only 15.33 per cent respondents had high contact with extension personnel. Thus it may be concluded that majority of respondents 75.00 per cent had medium contact with extension personnel.

Table.1 Distribution of the respondents according to their use of information sources

Source of information*	Mandla	Dindori	Pooled	Rank
	F	F	f	
Neighbours	112 (74.66)	122 (81.33)	234 (78.00)	X
Friends	141 (94.00)	131 (87.33)	272 (90.66)	III
Relatives	125 (83.33)	117 (78.00)	242 (80.66)	VIII
Progressive farmer	147 (98.00)	136 (90.66)	283 (94.33)	I
Leaflet / Pamphlet / Village leaders	108 (72.00)	128 (85.33)	236 (78.66)	IX
Radio	98 (65.33)	87 (58.00)	185 (61.66)	XIII
Television	111 (74.00)	118 (78.66)	229 (76.33)	XI
News paper	127 (84.66)	122 (81.33)	249 (83.00)	VII
Agril. Bulletin/magazine	88 (58.66)	129 (86.00)	217 (72.33)	XII
Telephone	94 (62.66)	89 (59.33)	183 (61.00)	XIV
Co-operative society	135 (90.00)	133 (88.66)	268 (89.33)	IV
Kisan divas/kisan mela	116 (77.33)	142 (94.66)	258 (86.00)	VI
Training	136 (90.66)	140 (93.33)	276 (92.00)	II
Visit	129 (86.00)	130 (86.66)	259 (86.33)	V
Farmer field school	60 (40.00)	120 (80.00)	180 (60.00)	XV

Figure in parenthesis indicate percentage.

Data based on multiple responses

Table.2 Distribution of the respondents according to their overall use of information sources

Category	Mandla		Dindori	
	F	%	F	%
Low (0-10)	8	5.33	14	9.34
Medium (11-20)	112	74.67	100	66.66
High (21-30)	30	20.00	36	24.00
Total	150	100	150	100

Table.3 Difference between Mandla and Dindori respondents with respect to their information sources used

Particular	Mandla	Dindori
Mean	16.34	17.30
S.D	2.00	2.19
Z value	7.90**	

** Significant at 0.01 level of probability

Table.4 Distribution of the respondents according to their extent of contact with extension personnel

Extension personnel	Mandla (n=150)				Dindori (n=150)			
	Always	1 times in Month	1 times in week	Never	Always	1 times in Month	1 times in week	Never
	F	F	F	F	f	F	f	F
RAEO	122 (81.34)	13 (8.66)	15 (10.00)	0 (0.00)	87 (58.00)	35 (23.34)	26 (17.33)	2 (1.33)
ADO	38 (25.33)	89 (59.34)	23 (15.33)	0 (0.00)	23 (15.33)	100 (66.67)	12 (8.00)	15 (10.00)
SMS	4 (2.66)	81 (54.00)	20 (13.34)	45 (30.00)	11 (7.33)	82 (54.67)	20 (13.34)	37 (24.66)
Agricultural Scientists	2 (1.33)	22 (14.67)	13 (8.66)	113 (75.34)	4 (2.66)	45 (30.00)	9 (6.00)	92 (61.34)

Figure in parenthesis indicate percentage

Table.5 Distribution of the respondents according to their overall extent of contact with extension personnel

Extent of contact with extension personnel	Mandla		Dindori	
	F	%	F	%
Low (<4)	8	5.33	29	19.33
Medium (4.1-8)	127	84.67	98	65.34
High (8.1-12)	15	10.00	23	15.33
Total	150	100	150	100

Table.6 Difference between Mandla and Dindori respondents with respect to their Contact with extension personnel

Particular	Mandla	Dindori
Mean	6.54	6.43
S.D	1.30	1.47
Z value	0.02NS	

The mean values for the contact with extension personnel of Mandla and Dindori districts were computed (Table 6). The data pointed about the variation in two means 6.54 and 6.43 with standard deviation 1.30 and 1.47 respectively. A large sample Z-test was applied to these data and found that the calculated value of Z-test was less than its tabulated value hence the hypothesis of no difference is accepted which resulted in there was no significant difference in the contact with extension personnel of Mandla and Dindori districts of the tribal farmers.

From the above research works it can be concluded that the communicational sources like training/ progressive farmers/ friends/ neighbour/ relatives were the important sources for obtaining the information and medium extent found to be contacting various sources of information about receiving the agricultural information. The study revealed that farmers are also using the mass media channels such newspapers

(83.00%) followed by, as leaflet/pamphlet, T.V., radio, agricultural bulletin/magazine and for accessing agricultural information. Majority of the respondents had contact with Rural Agricultural Extension Officer (RAEOs) and Agriculture Development Officer (ADO's) and medium extent of contact with extension personnel.

References

1. Anonyms (2016). Annual report, Department of Agriculture and Cooperation, Ministry of Agriculture, Govt. of India. March, pp 3. Website: www.agricoop.nic.in
2. Choudhary V. (2010). Study on impact of Watershed Development programme on productivity of major crops grown by the beneficiaries of Katangi block of Balaghat District (M.P.) M.Sc. (Ag.) Thesis, JNKVV, Jabalpur.

3. Kaur Grupreet and Gupta AK. (2007). Assessment of role effectiveness of farmers advisory committee (FAC) and organization functioning of 'ATMA' project in Gurdaspur district of Punjab- An overview. *J. Res. Punjab Agric Univ.* 44 (1) : 75-79.
4. Pal, P.P., Sundarambal, P., Bihari, B., Kumar, R., Prakash, N., and Kumar, R. (1999). Information seeking behaviour of the tribal farmers of Meghalaya. *Indian J. Hill farming.* 12 (1) : 124-125.
5. Prakash, Satya, De, Dipak and Kumar, Alok. (2009). Linkage between beneficiaries and ATMA. *JCS*, Vol. XXVII, 8-12.
6. Prakash, Satya, Nutan Kumari, Kumar Alok and De Dipak. (2010). To study the attitude of beneficiaries towards the technology dissemination programme of ATMA. *JCS*, Vol. XXVIII, 26-30.
7. Sahu, BP (2011). "Impact of agricultural technology management agency (ATMA) on socio-economic status of tribal farmers in surguja district of Chhattisgarh" M.Sc. (Ag.) Thesis (unpublished), IGKV, Raipur.
8. Singh, J.P. (2006). Agricultural extension reforms through agriculture technology management agency (ATMA). *Agricultural Ext. Review*, 25-27.
9. Yadav Mukesh. (2012). A study on watershed Development Programme in relation to techno- economic change among the Mahiae block of Satna district (M.P) M.Sc.(Ag.) Thesis, JNKVV, Jabalpur. p1-55.
10. Yadaw, D.S., Verma, Kuldeep, Singh, Anand and Singh, Amar (2008). Role of agricultural technology management agency (ATMA) in agriculture development. *Krishi Vistar Samiksha*, 19-23.