# Communication Behavior of Farmers in Chatra District of Jharkhand

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### **ABSTRACT**

Effective communication from different source and channels are the essence of extension which provides agricultural information and knowledge to the farmers. A study was conducted on the communication behavior of farmers in Chatra district of Jharkhand in two blocks namely Prtappur and Gidhour selected randomly. Four villages selected purposively from these blocks and a total of 200 farmers were selected randomly from these 4 selected villages. Data collected through personal interview, group meeting, and structured schedule showed that among wall writing (51%) in mass communication Krishak Mitra (81%) in individual communication and Mobile message (81%) in group communication were the important sources available in a farmer's field situation. It was found that majority of the farmers used wall writing, progressive farmers, and mobile message for accessing information. It was also found that KVK scientist was the most credible source of information followed by FLDs conducted by KVK scientist.

Keywords: Communication, Credibility, Group, Individual, Mass, Source

# INTRODUCTION

Several past studies have pointed out that there is a tremendous gap between knowledge generation and knowledge utilization. In Chatra district of Jharkhand about 75 per cent of the population depends on agriculture. Productivity and profitability of different crops and vegetables are very low compare to state and countrylevel because district farmers are still traditional concerning communication behavior. Personal localite channels are mainly used by them. Agriculture, Horticulture, ATMA, KVKs, NGOs and other government agencies using so may communication tools and channels to provide access and refine technologies which are suitable in micro-farming and socio-economic condition of Chatra district on real-time but still not reaching on a satisfactory level. It is observed that for acquiring improved agricultural technologies and their knowledge, communication behavior of individuals and their groups

plays an important role in this process. Keeping this fact under consideration present study conducted to know the communication behavior of farmers concerning agriculture development.

# **METHODOLOGY**

The study was conducted in the Chatra district of Jharkhand. Out of 12 Blocks in the district namely, Gidhour and Pratappur were selected randomly for the study. Two villages selected from each block, Gidhour and Barisakhi, Pratappur and Sidiki were chosen on the consideration that one is nearer to the headquarter while another is far away from the headquarter thus a total of four villages selected for the study. As it was planned to study communication behavior of the farmers of the vegetable farmers, only those farmers were selected who had at least one hectare of land. Such farmers were listed with the help of Block Technology Manager (BTM) and

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Assistant Technology Manager (ATM) of the four selected villages. 50 farmers selected from each village randomly from the list which was provided by BTM and ATM i.e. total of 200 farmers used as respondents of the study. Data were collected from individual farmers through a personal interview with the help of constructed interview schedules, group meeting, and non-formal discussion with the farmers in the presence of block agriculture officer, BTM, and ATM. Respondents were asked to indicate the extent of use of communication source, for quantifying data 0 for never use 1 for some time and 2 for always response was assigned. Communication behavior in terms of use of different communication sources and the credibility of different communication sources was analyzed by applying simple statistical techniques like frequency, percentage, weighted mean score, and rank order.

# RESULTS AND DISCUSSION

Communication is an important factor for flow of new technology from extension scientists to formal extension officers / workers to the end-users i.e. farmers. In this process the all source divided into three categories according to number of users mass communication, individual communication, and group communication were considered. Communication variables such as availability and use of various communication channels and credibility of different communication channels were studied.

Availability of mass communication source among farmers presented in Table 1 shows that majority of farmers (51%) received message through wall writing followed by TV (45.5%) and radio (40%) respectively. Newspaper (36.0%), farm magazine (35.0%) and Kisan

Table 1: Availability of communication sources among farmers (N=200)

S.No.	Source	Frequency	Percentage	Rank
A	Mass			
1	Radio	80	40.0	III
2	TV	91	45.5	II
3	Wall writing	102	51.0	I
4	Farm Magazine	70	35.0	V
5	News Paper	72	36.0	<b>IV</b>
6	Kisan Mela	69	34.5	VI
В	Individual			
1	Progressive farmer	80	40.0	V
2	Farm School	41	20.5	VII
3	BTM/ATM	122	61.0	II
4	KVK Scientists	92	46.0	Ш
5	Block Agriculture officers	42	21.0	VI
6	Village level workers (VLW)	91	45.5	IV
7	Krishak Mitra	162	81.0	I
C	Group			
1	Field day organizes by KVK	80	40.0	V
2	Group meeting organized by ATMA	122	61.0	П
3	Training programme organized by KVK	91	45.5	<b>IV</b>
4	FLD Conducted by KVK	69	34.5	VI
5	Demonstration conducted by ATMA	64	32.0	VII
6	WhatsApp Group	110	55.0	Ш
7	Mobile message group	162	81.0	I

Mela (34.5%) were also available to access knowledge upto some extent. Sharma et al. (2012), reported that the other important sources of information and helpline telephone number was least preferred source among the farmers. However, the perceived quality and relevance of the information provided by these sources was highly variable. Availability of individual level communication source among farmers shows that out of 200 farmers 81 per cent of farmers reported that Kisan Mitra is available at door steps followed by BTM/ATM (61%), KVK scientist (46%), village level workers (VLW) (45.5%) respectively. Upto some extent progressive farmers (40%), block agriculture officer (21%), farm school (20.5%) was also available as a source of communication for seeking knowledge in the field situation. Further, 81 per cent farmers had mobile sets and able to access messages like a mobile message, 61 per cent were able to participate in a group meeting organized by ATMA, 55 per cent farmers had android mobile and able to received WhatsApp message whereas 40 per cent farmers were able to participate in field day organized by KVK. Only 34.5 per cent farmers were able to establish communication through field days organized by KVK on the CFLD plot followed by demonstration conducted by ATMA (32%) respectively.

# Extend of use of different communication sources: The use of different types of available communication sources i.e. mass, group, and individual farmers were studied and the result is given in different heads.

*Use of mass communication source:* Mass communication source used by farmers given in Table 3.

Table 2: Distribution of the farmers based on the use of communication sources

S.No.	Source	Always	Sometimes	Never	Weighted mean score	Rank
A	Mass				mean score	
1	Radio	70	92	38	1.16	П
2	TV	64	78	58	1.03	IV
3	Wall writing	94	62	44	1.25	I
4	Farm Magazine	24	48	128	0.48	V
5	News Paper	68	72	60	1.04	VI
6	Kisan Mela	78	84	38	1.2	III
В	Individual					
1	Progressive farm	142	28	30	1.56	I
2	Farm School	42	60	98	0.72	V
3	BTM/ATM	109	60	31	1.39	II
4	KVK Scientist	64	102	34	1.15	IV
5	Block Agriculture officer	15	26	159	0.28	VI
6	Village level worker (VLW)	42	61	97	0.72	V
7	Krishak Mitra	79	81	40	1.19	III
C	Group					
1	Field day organizes by KVK	60	64	76	0.92	VII
2	Group meeting organized by ATMA	79	82	39	1.2	III
3	Trainign programme organized by KVK	68	49	83	0.92	VI
4	FLD Conducted by KVK	52	69	79	0.86	IV
5	Demonstration conducted by ATMA	48	78	74	0.87	V
6	WhatsApp	98	74	28	1.35	II
7	Mobile message	102	68	30	1.36	I

Table 2 clearly shows the extent of the use of different communication sources by the farmers. The weighted mean score of different sources shows that as a communication source wall writing was used up to the greatest extent (1.25) followed by Radio (1.16), Kisan Mela (1.2), News Paper (1.04) respectively. However, television (TV) was found to be the least useful source by the farmers (1.03) because only a few farmers had television sets in rural areas and electricity supply was also a great problem so the farmers were unable to assess information through Television in the rural area of Chatra district. Further, progressive farmers of the village was used up to a greater extent (1.56) followed by BTM/ ATM (1.39), *Krishak Mitra* (1.19), KVK scientist (1.15) Village Level workers (6.72) and Block agriculture officer (0.72) respectively. It happened due to the reason that progressive farmers always interact and participate in all scientific activities conducted by KVK or ATMA at the district level and acquire more knowledge. BTM and ATM working under the ATMA project were also available at the local level. Block agriculture office was found to be least used by farmers because they were engaged in other development activities at block level so they could not spare time for agriculture extension work. Among group sources, mobile message (1.36) was the most used source, followed by WhatsApp (1.35), group meeting organized by ATMA (1.2), field day organized by KVK (0.92), training program organized by KVK (0.92), CFLD conducted by KVK, demonstration conducted by ATMA (0.87) and (0.86) respectively. It happened because under demonstration and CFLD program only targeted farmers were acquiring knowledge through participation in every field operation during the demonstration. But through mobile and WhatsApp message communication was established among large numbers of farmers due to easy access of message without wasting money and time as now a day mobile message and WhatsApp becomes more popular source among farmers. A similar finding was also reported by Badaya et al. (2018) found that mobile phone-based information and communication technologies help to reduce the risks and uncertainties, emerging challenges

Table 3: Source credibility pattern operating in farmers' setting

S.No.	Source	No of responding expressed their first choice	Percentage	Rank	
1	Radio	30	15.0	VX	
2	TV	55	27.5	XI	
3	Whatsapp message	17	8.5	XVII	
4	Mobile voice call	22	11.0	XVI	
5	News paper	61	30.5	IX	
6	Kisan Mela	59	29.5	X	
7	Progressive farm	74	37.0	V	
8	Farm School	22	11.0	XVI	
9	BTM/ATM	65	32.5	VIII	
10	KVK Scientist	98	49.0	I	
11	Block agriculture officer	26	13.0	XV	
12	Villege Level Worker (VLW)	42	21.0	XII	
13	Krishak Mitra	26	13.0	XV	
14	Field day organized by KVK	79	39.5	III	
15	Group meeting organized by ATMA	69	34.5	VI	
16	Training programme organized by KVK	68	34.0	VII	
17	FLD conducted by KVK	94	47.0	${ m II}$	
18	Demonstration conducted by ATMA	78	39.0	IV	
19	Mobile message	36	18.0	XIII	

in agriculture and provide instant solution, timely market information and improve livelihood and also help to overcome information asymmetry existing among the group of farmers. According to Islam and Gronlund (2011), Digital information and communication technologies (ICT) play a major role in sustainable agricultural development by bridging the gap between farmers and experts in agriculture innovation systems.

Effectiveness of communication source depends upon its credibility perceived by the end-users. Source credibility pattern of the farming community studied and presented in table-3 shows that KVK scientist as a source of communication had the highest level of credibility (49.0%) followed by FLD conducted by KVK, field days organized by KVK (39.5%), demonstration conducted by ATMA (34.0%), progressive farmers (37%), group meeting organized by ATMA (34.5%), training program organized by KVK (34%), BTM and ATM working under ATMA project (32.5%), newspaper (30.5%), kisan mela (29.5%), TV (27.5%), village level worker (21%), mobile message (18%) and radio (15%), respectively. However, block agriculture officer (15%), Krishak Mitra (15%), mobile voice call (11%), WhatsApp message (8.5%) were the least credible source of information because farmers generally believed on seeing is believing concept so that frontline demonstration conducted by KVK and demonstration conducted by ATMA were considered more credible than the formal source of information similar finding was also reported by Singh et al. (2001); Slathia et al. (2012) and Kumar et al. (2018).

### **CONCLUSION**

On the basic findings, it may be concluded that wall writing, TV, radio were highly accessible by farmers as a mass communication source. Krishak Mitra, BTM/ATM and KVK scientists were available as individual sources whereas mobile message, group meeting organized by ATMA, WhatsApp group, and FLD conducted by KVK were the available important source among the farming

community of Chatra district. As for as the credibility of the source is concerned KVK scientist, FLD conducted by KVK were the most creditable source among the farming community of Chatra district. Hence, it may be suggested that KVK scientists to start regular visits among farmers and conduct more CFLD and FLD on gap-filling mode. It is also advocated that extension scientist/officer need to work as a passion for the benefit of the farming community.

Paper received on : April 20, 2020 Accepted on : May 05, 2020

### REFERENCES

Badaya, A.K., Gathiye, G.S., Kirad, K.S., Chauhan, S.S., Jaypoot, J.S. and Swati, B. (2018). Assessment of Mobile advisory services for improving agricultural livelihood farmers in Tribal dominated district of Madhya Pradesh, *Journal of Krishi Vigyan*, **6**(2), 1-6.

Islam, S.M. and Gronlund, A.K. (2011). Factors influencing the adoption of mobile phones among the farmers in Bangladesh: Theories and practices, *International Journal of Advances in ICT for Emerging Regions*, **4**(1), 4-14.

Kumar, J. and Lal, B. (2018). Use of information and communication technologies by the farmers of hilly areas of Jammu and Kashmir, *Journal of Krishi Vigyan*, **6**(2), 244-246.

Sharma, A. and Kumar, B. (2010). Audience profile of women community radio listeners, *Journal of Communication Studies*, **28**(3), 50-55.

Singh, A.K. (1992). Dairy farming system and communicated pattern in tribal setting. Unpublished Ph.D. thesis, Dr. B.R. Ambedkar University, Agra.

**Singh, A.K.** and Mishra, O.P. (2001). Communication Behaviour of tribal dairy farmers, *Indian Journal of Extension Education*, **37**(1& 2), 81-86.

Slathia, P.S., Paul, N., Nain M.S., Nanda R. and Peshin, R. (2012). Credibility crisis among Agriculture Extension Functionaries in Jammu & Kashmir, *Indian Journal of Extension Education*, **48**(1&2), 68-73.