Biological Forum – An International Journal **14(1): 1303-1307(2022)**

ISSN No. (Print): 0975-1130
ISSN No. (Online): 2249-3239

Communicational Behaviour of Farmers of Jabalpur District

Chandrika Sharma[1*], N.K. Khare[2], Seema Naberia[3] and Ajay Raut[4]
[1]Ph.D. Research Scholar, Department of Extension Education, J.N.K.V.V. Jabalpur, India.
[2]Professor & Head, Department of Extension Education, J.N.K.V.V. Jabalpur, India.
[3]Assistant Professor, Department of Extension Education, J.N.K.V.V. Jabalpur, India.
[4]ARS, ATARI Zone IX, J.N.K.V.V. Jabalpur, India.

(Corresponding author: Chandrika Sharma[*])
(Received 16 November 2021, Accepted 01 February, 2022)
(Published by Research Trend, Website: www.researchtrend.net)

ABSTRACT: Communication plays a vital role in seeking information regarding cultivation, plant protection, market and price for farmers when it comes to producing and disposing the produce. The study was done to investigate the communicational behaviour of organic and conventional farmers through measuring their mass media and information source utilization. The research was carried out in 2021-22 in Jabalpur district of Madhya Pradesh with 120 organic and 120 conventional farmers from four different blocks. Selection of only four blocks for study proved as a challenge but with the help of agricultural department of the district, blocks with running cluster of organic farming was sorted. The results of the study pictured the facts that both the categories of the farmers had medium level of mass media exposure and information source utilization. Mobile and social media was the most frequently used medium of mass media among both category of farmers and friends and relatives were the most frequently used information sources for organic farmers whereas input dealers were the most frequently used sources of information for the conventional farmers.

Keywords: Communication, conventional, mass media exposure, organic, social media etc.

INTRODUCTION

The Father of our nation, Mahatma Gandhiji has well said, "Nature can provide for everyone's need but not for their greed". In order to achieve sustainable production, enough to feed the current population along with contributing the rural development through providing livelihood to farmers and without endangering the ecosystem simultaneously preserving for the future ones, we need more and sustained changes in our food production system. Such goals can be reached out with the current available and long run option named organic farming. Organic farming currently covers only a small area in developing countries but its extent is continuously growing as demand for organic products is increasing (Meena *et al.* 2020). The International Federation of Organic Agriculture Movements (IFOAM, 1998) has defined organic agriculture as a production system that sustains the heath of soil, ecosystem and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects (Barik, 2017). The four principles of organic farming suggested by IFOAM are the principle of health, ecology, fairness and care. The main principles and practices of organic food production are to inspire and enhance biological cycles in the the farming system, keep and enhance deep-rooted soil fertility, reduce all types of pollution, evade the application of pesticides and synthetic fertilizers, conserve genetic diversity in food, consider the vast socio-ecological impact of food production and produce high-quality food in sufficient quantity (Das *et al.* 2020). The demand for organic food products is growing due to high purchasing power and increase in health-conscious consumers. The organic food consumption in India is very low as compared to western markets. India's total area under organic certification is 4.72 million hectares in 2013-14 and its global rank is 10th. The CGR of cultivation of organic area of India is 11.52% of which wild collection is 12.57% and remaining area is 7.45% during (2005-2013). The co-efficient of variation is approx 0.5% during same period. Compound growth rate of export quantity of organic products of India is 51.50% and export value is 11.75% during 2002-03 to 2013-14. The prices of organic products are higher than the non-organic products in domestic markets. India exports around 135 organic products of which the share of oil crops in total organic export quantity was (26.74%) followed by cotton (24.48%) basmati rice (11.81%) in

2013-14. Organic food market in India is highly unorganized and fragmented, which offers immense growth opportunities for domestic as well as international players (Deshmukh and Babar 2015). Organic farming is the farming of 21st century. Even the pandemics of corona has taught us to rely on quality and healthy food rather than quantity. Many variables account in adoption of organic farming among farmers. Murlikrishnan *et al*. (2015) reported that educational status, risk orientation, training undergone, progressiveness, self-reliance, innovativeness and contact with extension agency were found to have positively contributed to the adoption of Eco-Friendly Conservation Practices. Whereas Damor and Khadayata (2017) stated that the knowledge is the cognitive behaviour of an individual. The body of knowledge is the product of learning process. Once the knowledge is acquired, it produces changes in the thinking process of an individual, which would lead to further changes in attitude and helps the farmers in making rational decisions. It is prerequisite for adoption of any agricultural innovation. Hence, knowledge is as important as any other variable in adopting organic farming. And this knowledge is acquired through information, communication and trainings from different sources on specialized need. The dream of a 'win-win-win' scenario - of achieving progress lies within the economic, social, and environmental pillars of sustainable development. The growing evidence of organic farming indicated that the practice resulted in a lot of environmental, social, and financial benefits (Gills *et al.,* 2021).

In order to achieve the aim of organic farming and promoting organic farming, communicational plays a vital role. Communication creates awareness among the consumers and producers regarding organic produce leading to increase in demand for organic produce and fetching good market and price for the producers. Hence, the study analyzes the communicational behaviour of farmers practicing organic and conventional farming through their mass media exposure and information source utilization.

MATERIALS AND METHODS

The research was conducted in the year (2021-22) in four Blocks of the Jabalpur district with 5 clusters of organic farmers. Through proportionate sampling 24 organic farmers and 24 conventional farmers from each cluster formed the sample for the study creating a total sample size of 120 organic and 120 conventional farmers. Direct interview was conducted for data collection via well-structured and pretested questionnaire. The communicational behaviour of the farmers was analyzed through measuring their mass media exposure and information source utilization with the procedure of self-scoring on three-point continuum of use with 2, 1 and 0 scores assigned for regular, occasional and never use of frequency and categorized by mean and standard deviation. The data was compiled and analyzed using basic statics such as frequency, percentage, mean, standard deviation, mean score and rank. Mass media exposure is the frequency of usage of various mass media like television, radio, newspaper and farm magazines by the farmers in their day-to-day life. Similarly, information source utilization is the degree of frequency of contacts by farmers with various information sources (Jallaraph, 2019).

RESULTS AND DISCUSSIONS

A. Mass media exposure of farmers

It was clear from the (Table 1) that 57.50 per cent of the organic farmers falls under medium category of mass media exposure followed by low category (29.17 %) and high category (13.33 %) whereas 64.17 per cent of the conventional farmers falls under medium mass media exposure category with 24.17 per cent under low category and 11.67 per cent under high category of mass media exposure. Borthakur (2011) and Jaganathan (2004) reported the similar results. The study was in line with the finding of Upadhyay *et al.* (2020), Jaganathan (2009) and Patel (2015). Even the study conducted by Sharma *et al*. (2016) and Verma (2019) exposed the same facts about the mass media exposure of the farmers. Table 2 explains the frequency of use of different mass medium by the farmers. Mobile/social media is the most frequently used medium by both the category of farmers. Whereas when it comes to second most used medium, television ranks second for organic farmers and other medium (like farmer fairs, expos etc.) for conventional farmers. Today from children to old age people all are fond of social media and mobile.

Table 1: Distribution of farmers according to their mass media exposure.

Sr. No.	Mass media exposure	Farmers practicing organic farming		Farmers practicing conventional farming	
		f	%	f	%
1.	Low	35	29.17	29	24.17
2.	Medium	69	57.50	77	64.17
3.	High	16	13.33	14	11.67
	Total	**120**	**100**	**120**	**100**

Mean= 1.55, SD=1.52 Mean=1.64, SD=1.53

Table 2: Distribution of farmers according to frequency of use of different mass medium.

Sr. no.	Different Medium	Farmers practicing organic farming						Farmers practicing conventional farming					
		Frequency of use			Total score	Mean score	Rank	Frequency of use			Total score	Mean score	Rank
		R	O	N				R	O	N			
1.	Television	5	29	86	39	0.325	**II**	0	27	93	27	0.225	III
2.	Radio	0	2	118	2	0.017	VI	0	11	109	11	0.092	V
3.	Newspaper	2	12	106	16	0.133	IV	0	18	102	18	0.150	IV
4.	Farm magazine	0	5	115	5	0.042	V	1	5	114	7	0.058	VI
5.	Mobile / social media	26	37	57	86	0.742	**I**	27	37	56	91	0.758	**I**
6.	Others	5	25	90	35	0.292	III	5	33	82	43	0.358	**II**
	Overall mean					**0.258**		**Overall mean**				**0.274**	

R-Regularly, O-Occasionally, N-Never

It has connected each and every from far to near and has even covered the rural areas. Hence, use of mobile and social media is the mostly used mass medium for both the categories of the farmers. Noorjehan (2004) also concluded her study with the similar results.

B. Information source utilization

When it comes to information source utilization for farming, it was found that 70 per cent of the organic farmers and around 76 per cent of the conventional farmers falls under medium category of information source utilization followed by high and low information source utilization (Table 3). Modem *et al.,* (2016); Rajesh, (2011) and Verma, (2019) obtained the same results, hence, the study finds support from them. Similar findings were found in the findings of Jaganathan, 2009. Among the frequency of use of different information sources utilized for farming information, friends/relatives/neighbors ranks first among organic farmers followed by progressive farmers, e-extension, agricultural scientists and demonstrations (Shams and Fard 2017; Curtis *et al.* 2019). Noorjehan (2004) stated the same outcomes in her research. It was because farmers usually seeks information regarding organic manures and their availability with relatives and neighbours, progressive farmers and goes to agricultural scientists for plant protection management issues in organic farming.

Table 3: Distribution of farmers according to their information source utilization.

Sr. No.	Information source utilization	Farmers practicing organic farming		Farmers practicing conventional farming	
		f	%	F	%
1.	Low	17	14.17	09	07.50
2.	Medium	84	70.00	91	75.83
3.	High	19	15.83	20	16.67
	Total	**120**	**100**	**120**	**100**

Mean=4.14, SD=2.72; Mean=2.67, SD=2.08

Table 4: Distribution of farmers according to frequency of use of their different information sources.

Sr. no.	Different Medium	Farmers practicing organic farming						Farmers practicing conventional farming					
		Frequency of use			Total score	Mean score	Rank	Frequency of use			Total score	Mean score	Rank
		R	O	N				R	O	N			
1.	Friends / relatives / neighbour	26	42	52	94	0.783	**I**	15	30	75	75	0.625	**II**
2.	Progressive farmer	32	25	65	89	0.742	**II**	10	23	87	53	0.442	**IV**
3.	Agril. Ext. Officers	04	08	108	16	0.133	IX	02	10	108	16	0.133	VIII
4.	Agril. Scientists	20	30	70	70	0.583	**IV**	10	20	90	50	0.417	**V**
5.	e-extension (internet / WhatsApp / KIOSKs)	21	35	64	77	0.642	**III**	06	36	78	54	0.450	**III**
6.	Newspaper	02	11	107	15	0.125	X	02	08	110	14	0.117	IX
7.	Farm magazine / Agril. Literature	00	06	114	06	0.050	XI	00	06	114	06	0.050	XI
8.	Radio	02	01	117	05	0.042	XII	00	03	117	03	0.025	XII
9.	Television	05	23	92	33	0.275	VIII	00	09	111	09	0.075	X
10.	Farmers fairs	07	51	62	65	0.542	VI	01	39	80	42	0.350	VII
11	Demonstrations	07	55	58	69	0.575	**V**	09	20	91	47	0.392	VI
12	Others	03	49	68	55	0.458	VII	25	12	83	87	0.725	**I**
	Overall mean					**0.413**		**Overall mean**				**0.248**	

Among conventional farmers, other information sources like input dealers etc. are the main sources of information. Similar results were seen in the studies of Sasidharan, (2015) and Oyesola *et al.*, (2011). Nowadays input dealers not only provides chemical inputs but also farm advisory as they are DAESI holders. Relatives, neighbours ranks second and e-extension ranks fourth among information sources utilization among conventional farmers (Table 4).

CONCLUSION

The communicational behaviour of the farmers practicing organic and conventional farming is found to be medium as both the categories of farmers falls under medium categories of mass media exposure and information source utilization. Mobile and social media is the most regularly used mass medium for both category of farmers as communication services like mobile and internet are cheaper and easily is available almost all in the nation. Organic farmers seek information mainly from friends, relatives, progressive farmers, e-extension and agricultural scientists regarding organic cultivation whereas convention farmers approaches input dealers and relatives for seeking information regarding cultivation and management. Since, organic farmers seek information firstly from the relatives and friends, scientific advisory should be made more approachable to them in the form of trainings, demonstrations, seminars, farmers fairs etc. Reliance of farmers on relatives and friends should be reduced to provide more authentic and scientific information regarding farming. The reliance of conventional farmers on input dealers should be diverted to more experienced and recommendable expertise like agricultural scientists and advisory clinics to avoid non useful information and delivery of quality and required information as per need.

FUTURE SCOPE

This study would lead the policy makers to identify the communicational and information needs of the farmers required especially during transitioning period from conventional to organic and to strengthen the extension system in information equipped updates to promote organic farming on larger scale in the future ahead.

Acknowledgement. As this study is a part of doctoral research, the author wishes to express thanks to Professor and Head, Dr. N.K. Khare and Assistant Professor, Dr. Seema Naberia Department of Extension Education College of Agriculture, J.N.K.V.V. Jabalpur and Agricultural Research Scientist, Dr. Ajay Raut ATARI Zone IX J.N.K.V.V. Jabalpur for worthfull guidance throughout the doctoral research programme. Also, the author appreciates the individual farmers of the selected villages for sharing their time and details during the research study.

Conflict of Interest. None.

REFERENCES

Barik, A. K. (2017). Organic farming in India: Present status, challenges and technological breakthrough. *Proceeding's book of Third International Conference on Bio-resource and Stress Management*, Pp-84-93.

Borthakur, B. (2011). Integrated organic farming in Mizoram: A multidimensional analysis. *Ph.D. Thesis.* Indian Veterinary Research Institute, Izatnagar U.P.

Curtis, K. R., Rice, E. and Quarnstrom, D. L. (2019). Characteristics of organic wheat growers. *Finance and Economics*. Extension Utah State University. Pp: 1-4.

Das, S., Chatterjee, A. and Pal, T. K. (2020). Organic farming in India: a vision towards a healthy nation. *Food Quality and Safety*, (4): 69-76.

Damor, K. C. and Khadayata, K. G. (2017). Knowledge and constraints of farmers about organic farming. *International Journal of Chemical Studies*. *5*(3): 522-524.

Deshmukh, M. S. and Babar, Nitin. (2015). Present Status and Prospects of Organic Farming in India. *European Academic Research*, *3*(4): 4271-4287.

Gills, R., Singh, R. and Nain, M. S. (2021). Sustainability Dimensions and Organic Farming – A Case Analysis of Organic Cardamom (*Elettaria cardamomum*) Growers in Kerala State of India. *Indian Journal of Extension Education*, *57*(1): 8-14.

International Federation of Organic Agriculture Movements (IFOAM). (1998). The IFOAM basic standards for organic production and processing. General Assembly, Argentina, November, IFOAM, Germany. Organic Food Production Act of 1990 (U.S.C) s. 2103.

Jaganathan, D. (2004). Analysis of organic farming practices in vegetable cultivation in Thiruvananthapuram district. *M.Sc. (Ag.) Thesis*. Kerala Agricultural University, Thrissur.

Jaganathan, D. (2009). A multidimensional analysis of organic farming in Tamil Nadu. *Ph.D. Thesis*. Indian Agricultural Research Institute, New Delhi.

Jallaraph, V. (2019). Perception and role performance of farmers friends under revitalized extension system in Jabalpur district of Madhya Pradesh. *Ph.D. Thesis*. Jawaharlal Nehru Krishi Vishwa Vidyalaya Jabalpur.

Meena, R. K., Meena R. S., Naik, B.S.S.S., Meena, B. L. and Meena, S. C. (2020). Organic farming – concepts, principles, goals & as a sustainable agriculture: a review. *International Journal of Chemical Studies*, SP-*8*(4): 24-32.

Modem, R., Reghunath, N. and Joseph, B. (2016). Attitude of banana growers towards organic farming: A critical analysis. *Research Journal of Agricultural Sciences*, Sp7: 79-82.

Murlikrishnan, L., Philip, H. Ravichandren, V. and Chinnadurai, M. (2015). Adoption and Impact of Eco-Friendly Conservation Practices in The Nilgiris District of Western Ghats. *Journal of Extension Education*, *27*(2): 5444-5450.

Noorjehan, A. K. A. Hanif. (2004). Organic farming in Tamil Nadu: A multidimensional analysis. *Ph.D. Thesis*. Tamil Nadu Agricultural University, Coimbatore.

Oyesola, O. B. and Obabire, I. E. (2011). Farmers' perceptions of organic farming in selected local

government areas of Ekiti state, Nigeria. *Journal of Organic Systems*, *6*(1): 20-26.

Patel, C. K. (2015). Awareness and attitude of organic farming followers of south Gujarat. *M.Sc. (Ag.) Thesis*. Navsari Agricultural University, Navsari.

Rajesh, T. V. (2011). A comparative study on organic and inorganic tomato growers in Kolar district of Karnataka. *M.Sc. (Ag.) Thesis*. University of Agricultural Sciences, Raichur.

Sasidharan, A. (2015). Adoption of organic farming technologies in banana and vegetable crops in Kasargod district. *M.Sc.(Ag.)Thesis*. Kerala Agricultural University.

Shams, A. and Fard, Z. H. M. (2017). Factors affecting wheat farmers' attitudes toward organic farming. *Pol. J. Environ. Stud*., *26*(5): 2207-2214.

Sharma, Chandrika, Pande, A.K. and Naberia, Seema (2016). Socio-economic, psychological and communicational attributes of the sesame growers of Jabalpur district of Madhya Pradesh. *International Journal of Agriculture Sciences*, *8*(50): 2173-2174.

Upadhyay, Varsha, Khare, N.K. and Naberia, Seema. (2020). Attributes of tribal paddy growers using eco-friendly practices in Mandla district, Madhya Pradesh. *The Pharma Innovation*, SP-*9(*4): 160-163.

Verma, D. (2019). Attitude of farmers towards organic farming in Jabalpur district of Madhya Pradesh. *M.Sc. (Ag.) Thesis*. Jawaharlal Nehru Krishi Vishwa Vidyalaya Jabalpur.

How to cite this article: Chandrika Sharma, N.K. Khare, Seema Naberia and Ajay Raut (2022). Communicational Behaviour of Farmers of Jabalpur District. *Biological Forum – An International Journal*, *14*(1): 1303-1307.